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Friday
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Briefing on How To Use the Federal Register
For information on a briefing in Atlanta, GA, see announcement on the inside cover of this issue.

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THE FEDERAL REGISTER
WHAT IT IS AND HOW TO USE IT

FOR: Any person who uses the Federal Register and Code of Federal Regulations.

WHO: The Office of the Federal Register.

WHAT: Free public briefings (approximately 3 hours) to present:
1. The regulatory process, with a focus on the Federal Register system and the public's role in the development of regulations.
2. The relationship between the Federal Register and Code of Federal Regulations.
3. The important elements of typical Federal Register documents.
4. An introduction to the finding aids of the FR/CFR system.

WHY: To provide the public with access to information necessary to research Federal agency regulations which directly affect them. There will be no discussion of specific agency regulations.

ATLANTA, GA

WHEN: January 11, at 9:00 a.m.
WHERE: Centers for Disease Control
1600 Clifton Rd., NE.
Auditorium A
Atlanta, GA (Parking available)
RESERVATIONS: 1-800-347-1997.

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Presidential Documents

Title 3—

The President

Executive Order 12736 of December 12, 1990

Adjustments of Certain Rates of Pay and Allowances

By the authority vested in me as President by the Constitution and laws of the United States of America, including sections 703 and 704 of Public Law 101–194; section 302 of the Federal Employees Pay Comparability Act of 1990, as incorporated in section 529 of Public Law 101–509; section 618 of Public Law 101–509; section 601 of Public Law 101–510; section 321 of Public Law 101–520; and section 5382 of title 5, United States Code, it is hereby ordered as follows:

Section 1. *Statutory pay systems.* The rates of basic pay or salaries of the following statutory pay systems are set forth on the schedules attached hereto and made a part hereof:

(a) The General Schedule (5 U.S.C. 5332(a)) at Schedule 1;

(b) The Foreign Service Schedule (22 U.S.C. 3963) at Schedule 2; and

(c) The schedules for the Veterans Health Services and Research Administration of the Department of Veterans Affairs (38 U.S.C. 4107) at Schedule 3.

Sec. 2. *Senior Executive Service.* Pursuant to section 5382 of title 5, United States Code, the rates of basic pay for members of the Senior Executive Service are set forth on Schedule 4 attached hereto and made a part hereof.

Sec. 3. *Executive salaries.* The rates of pay or salaries for the following offices and positions are set forth on the schedules attached hereto and made a part hereof:

(a) The Executive Schedule (5 U.S.C. 5312–5316) at Schedule 5;

(b) The Vice President (3 U.S.C. 104) and Congress (2 U.S.C. 31) at Schedule 6; and

(c) Justices and judges (28 U.S.C. 5, 44(d), 135, and 252) at Schedule 7.

Sec. 4. *Uniformed services.* Pursuant to section 601 of Public Law 101–510, the rates of monthly basic pay (37 U.S.C. 203(a)), the rates of basic allowances for subsistence (37 U.S.C. 402), and the rates of basic allowances for quarters (37 U.S.C. 403(a)) for members of the uniformed services are set forth at Schedule 8 attached hereto and made a part hereof.

Sec. 5. *Interim geographic adjustments.* (a) Pursuant to section 302 of the Federal Employees Pay Comparability Act of 1990, as incorporated in section 529 of Public Law 101–509, employees under the statutory pay systems covered under section 1 of this order who are assigned to a duty station located in one of the geographical areas listed in Schedule 9 shall be entitled, except as may be provided under subsection (b) of this section, to receive an interim geographic adjustment at the rate shown on Schedule 9, which schedule is attached hereto and made a part hereof.

(b)(1) The Office of Personnel Management shall prescribe regulations governing the application of interim geographic adjustments to General Schedule employees, including the determination of what, if any, geographic adjustment shall be payable in the case of employees receiving special pay rates.

(2) The Secretary of State shall prescribe regulations governing the application of interim geographic adjustments to employees under the Foreign Service Schedule, consistent with the regulations and determinations prescribed under paragraph (1) of this subsection.

(3) The Secretary of Veterans Affairs shall prescribe regulations governing the application of interim geographic adjustments to employees under the schedules for the Veterans Health Services and Research Administration of the Department of Veterans Affairs, consistent with the regulations and determinations prescribed under paragraph (1) of this subsection.

Sec. 6. *Effective dates.* The rates of monthly basic pay and allowances for subsistence and quarters for members of the uniformed services provided for at Schedule 8 are effective on January 1, 1991. The other schedules provided for herein are effective on the first day of the first applicable pay period beginning on or after January 1, 1991.

Sec. 7. Executive Order No. 12698 of December 23, 1989, is superseded.

George Bush

THE WHITE HOUSE,
December 12, 1990.

Billing code 3195-01-M

SCHEDULE 1--GENERAL SCHEDULE

(Effective on the first day of the first applicable pay period beginning on or after January 1, 1991)

	1	2	3	4	5	6	7	8	9	10
GS-1	$11,015	$11,383	$11,749	$12,114	$12,482	$12,697	$13,058	$13,422	$13,439	$13,776
2	12,385	12,679	13,090	13,439	13,590	13,990	14,390	14,790	15,190	15,590
3	13,515	13,966	14,417	14,868	15,319	15,770	16,221	16,672	17,123	17,574
4	15,171	15,677	16,183	16,689	17,195	17,701	18,207	18,713	19,219	19,725
5	16,973	17,539	18,105	18,671	19,237	19,803	20,369	20,935	21,501	22,067
6	18,919	19,550	20,181	20,812	21,443	22,074	22,705	23,336	23,967	24,598
7	21,023	21,724	22,425	23,126	23,827	24,528	25,229	25,930	26,631	27,332
8	23,284	24,060	24,836	25,612	26,388	27,164	27,940	28,716	29,492	30,268
9	25,717	26,574	27,431	28,288	29,145	30,002	30,859	31,716	32,573	33,430
10	28,322	29,266	30,210	31,154	32,098	33,042	33,986	34,930	35,874	36,818
11	31,116	32,153	33,190	34,227	35,264	36,301	37,338	38,375	39,412	40,449
12	37,294	38,537	39,780	41,023	42,266	43,509	44,752	45,995	47,238	48,481
13	44,348	45,826	47,304	48,782	50,260	51,738	53,216	54,694	56,172	57,650
14	52,406	54,153	55,900	57,647	59,394	61,141	62,888	64,635	66,382	68,129
15	61,643	63,698	65,753	67,808	69,863	71,918	73,973	76,028	78,083	80,138
16	72,298	74,708	77,118	79,528	81,396	82,697	85,060	87,424	89,787	
17	83,032	85,800	88,568	91,336	94,104					
18	97,317									

SCHEDULE 2--FOREIGN SERVICE SCHEDULE

(Effective on the first day of the first applicable pay period beginning on or after January 1, 1991)

Step	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9
1	$61,643	$49,949	$40,473	$32,795	$26,574	$23,756	$21,238	$18,986	$16,973
2	63,492	51,447	41,687	33,779	27,371	24,469	21,875	19,556	17,482
3	65,397	52,991	42,938	34,792	28,192	25,203	22,531	20,142	18,007
4	67,359	54,581	44,226	35,836	29,038	25,959	23,207	20,747	18,547
5	69,380	56,218	45,553	36,911	29,909	26,738	23,904	21,369	19,103
6	71,461	57,905	46,919	38,018	30,807	27,540	24,621	22,010	19,676
7	73,605	59,642	48,327	39,159	31,731	28,366	25,359	22,670	20,267
8	75,813	61,431	49,777	40,334	32,683	29,217	26,120	23,350	20,875
9	78,088	63,274	51,270	41,544	33,663	30,093	26,904	24,051	21,501
10	80,138	65,172	52,808	42,790	34,673	30,996	27,711	24,772	22,146
11	80,138	67,127	54,392	44,074	35,713	31,926	28,542	25,516	22,810
12	80,138	69,141	56,024	45,396	36,785	32,884	29,398	26,281	23,495
13	80,138	71,215	57,705	46,758	37,888	33,870	30,280	27,069	24,199
14	80,138	73,352	59,436	48,161	39,025	34,886	31,189	27,882	24,925

SCHEDULE 3--VETERANS HEALTH SERVICES AND RESEARCH ADMINISTRATION SCHEDULES, DEPARTMENT OF VETERANS AFFAIRS

(Effective on the first day of the first applicable pay period beginning on or after January 1, 1991)

Section 4103 Schedule

Deputy Chief Medical Director	$104,689
Associate Deputy Chief Medical Director	100,272
Assistant Chief Medical Director	97,317

	Minimum	Maximum
Medical Director	$83,032	$94,104
Director of Nursing Service	83,032	94,104
Director of Podiatric Service	72,298	89,787
Director of Chaplain Service	72,298	89,787
Director of Pharmacy Service	72,298	89,787
Director of Dietetic Service	72,298	89,787
Director of Optometric Service	72,298	89,787

Physician and Dentist Schedule

Director Grade	$72,298	$89,787
Executive Grade	66,758	85,082
Chief Grade	61,643	80,138
Senior Grade	52,406	68,129
Intermediate Grade	44,348	57,650
Full Grade	37,294	48,481
Associate Grade	31,116	40,449

Clinical Podiatrist and Optometrist Schedule

Chief Grade	$61,643	$80,138
Senior Grade	52,406	68,129
Intermediate Grade	44,348	57,650
Full Grade	37,294	48,481
Associate Grade	31,116	40,449

Nurse Schedule

Entry Grade	$18,919	$28,773
Intermediate Grade	25,717	40,449
Senior Grade	37,294	57,650
Director Grade	52,406	80,138

SCHEDULE 4--SENIOR EXECUTIVE SERVICE

(Effective on the first day of the first applicable pay period beginning on or after January 1, 1991)

ES-1	$87,000
ES-2	91,200
ES-3	95,300
ES-4	100,500
ES-5	104,600
ES-6	108,300

SCHEDULE 5--EXECUTIVE SCHEDULE

(Effective on the first day of the first applicable pay period beginning on or after January 1, 1991)

level I	$138,900
level II	125,100
level III	115,300
level IV	108,300
level V	101,300

SCHEDULE 6--VICE PRESIDENT AND MEMBERS OF CONGRESS

(Effective on the first day of the first applicable pay period beginning on or after January 1, 1991)

Vice President	$160,600
Senators	101,900
Members of the House of Representatives	125,100
Delegates to the House of Representatives	125,100
Resident Commissioner from Puerto Rico	125,100
President pro tempore of the Senate	113,400
Majority leader and minority leader of the Senate	113,400
Majority leader and minority leader of the House of Representatives	138,900
Speaker of the House of Representatives	160,600

SCHEDULE 7--JUDICIAL SALARIES

(Effective on the first day of the first applicable pay period beginning on or after January 1, 1991)

Chief Justice of the United States	$160,600
Associate Justices of the Supreme Court	153,600
Circuit Judges	132,700
District Judges	125,100
Judges of the Court of International Trade	125,100
Judges of the United States Claims Court	125,100

SCHEDULE 8—PAY AND ALLOWANCES OF THE UNIFORMED SERVICES

(Effective on January 1, 1991)

PART I—MONTHLY BASIC PAY

YEARS OF SERVICE (COMPUTED UNDER 37 U.S.C. 205)

PAY GRADE	2 or less	Over 2	Over 3	Over 4	Over 6	Over 8	Over 10	Over 12	Over 14	Over 16	Over 18	Over 20	Over 22	Over 26
COMMISSIONED OFFICERS														
O-10**	$6159.00	$6375.60	$6375.60	$6375.60	$6375.60	$6620.10	$6620.10	$6987.00	$6987.00	$7486.80	$7486.80	$7988.10	$7988.10	$8485.80*
O-9	5458.50	5601.30	5720.70	5720.70	5720.70	5866.20	5866.20	6110.40	6110.40	6620.10	6620.10	6987.00	6987.00	7486.80
O-8	4944.00	5092.20	5212.80	5212.80	5212.80	5601.30	5601.30	5866.20	5866.20	6110.40	6375.60	6620.10	6783.30	6783.30
O-7	4107.90	4387.20	4387.20	4387.20	4584.00	4584.00	4849.80	4849.80	5092.20	5601.30	5986.80	5986.80	5986.80	5986.80
O-6	3045.00	3345.30	3564.60	3564.60	3564.60	3564.60	3564.60	3564.60	3685.50	4268.10	4486.20	4584.00	4849.80	5259.90
O-5	2435.10	2859.30	3057.00	3057.00	3057.00	3057.00	3149.40	3318.90	3541.50	3806.70	4024.80	4146.60	4291.50	4291.50
O-4	2052.60	2499.60	2666.40	2666.40	2715.90	2835.60	3029.10	3199.20	3345.30	3492.00	3588.60	3588.60	3588.60	3588.60
O-3***	1907.40	2132.70	2280.00	2522.70	2643.30	2738.10	2886.30	3029.10	3103.50	3103.50	3103.50	3103.50	3103.50	3103.50
O-2***	1663.20	1816.50	2182.50	2255.70	2302.80	2302.80	2302.80	2302.80	2302.80	2302.80	2302.80	2302.80	2302.80	2302.80
O-1***	1444.20	1503.30	1816.50	1816.50	1816.50	1816.50	1816.50	1816.50	1816.50	1816.50	1816.50	1816.50	1816.50	1816.50
COMMISSIONED OFFICERS WITH OVER 4 YEARS' ACTIVE DUTY AS AN ENLISTED MEMBER OR WARRANT OFFICER														
O-3	-	-	-	$2522.70	$2643.30	$2738.10	$2886.30	$3029.10	$3149.40	$3149.40	$3149.40	$3149.40	$3149.40	$3149.40
O-2	-	-	-	2255.70	2302.80	2375.70	2499.60	2595.30	2666.40	2666.40	2666.40	2666.40	2666.40	2666.40
O-1	-	-	-	1816.50	1940.70	2012.10	2085.00	2157.60	2255.70	2255.70	2255.70	2255.70	2255.70	2255.70

* Basic pay is limited to the rate of basic pay for level V of Executive Schedule, which is $8,441.70 per month.

** While serving as Chairman or Vice Chairman of the Joint Chiefs of Staff, Chief of Staff of the Army, Chief of Naval Operations, Chief of Staff of the Air Force, Commandant of the Marine Corps, or Commandant of the Coast Guard, basic pay for this grade is $9,363.30*, regardless of cumulative years of service computed under section 205 of title 37, United States Code.

*** Does not apply to commissioned officers who have been credited with over 4 years' active service as an enlisted member or warrant officer.

SCHEDULE 8—PAY AND ALLOWANCES OF THE UNIFORMED SERVICES (PAGE 2)

YEARS OF SERVICE (COMPUTED UNDER 37 U.S.C. 205)

PAY GRADE	2 or less	Over 2	Over 3	Over 4	Over 6	Over 8	Over 10	Over 12	Over 14	Over 16	Over 18	Over 20	Over 22	Over 26
WARRANT OFFICERS														
W-4	$1943.40	$2085.00	$2085.00	$2132.70	$2229.60	$2328.00	$2425.50	$2595.30	$2715.90	$2811.00	$2886.30	$2979.60	$3079.20	$3318.90
W-3	1766.40	1916.10	1916.10	1940.70	1963.20	2106.90	2229.60	2302.80	2375.70	2446.50	2522.70	2620.80	2715.90	2811.00
W-2	1546.80	1673.70	1673.70	1722.60	1816.50	1916.10	1988.70	2061.60	2132.70	2207.70	2280.00	2352.00	2446.50	2446.50
W-1	1288.80	1477.80	1477.80	1601.10	1673.70	1745.70	1816.50	1891.50	1963.20	2036.40	2106.90	2182.50	2182.50	2182.50
ENLISTED MEMBERS														
E-9*	-	-	-	-	-	-	$2260.80	$2311.50	$2364.00	$2418.00	$2472.30	$2520.30	$2652.60	$2910.60
E-8	-	-	-	-	-	$1896.00	1950.00	2001.60	2053.50	2107.80	2156.10	2209.20	2338.80	2599.20
E-7	$1323.60	$1428.90	$1482.00	$1533.60	$1585.80	1636.50	1689.00	1741.50	1820.40	1872.00	1924.20	1949.10	2079.90	2338.80
E-6	1139.10	1241.10	1293.00	1347.90	1398.30	1448.70	1502.10	1579.50	1629.00	1681.80	1707.30	1707.30	1707.30	1707.30
E-5	999.30	1087.80	1140.60	1190.10	1268.40	1320.00	1372.50	1422.90	1448.70	1448.70	1448.70	1448.70	1448.70	1448.70
E-4	932.10	984.30	1042.20	1122.90	1167.30	1167.30	1167.30	1167.30	1167.30	1167.30	1167.30	1167.30	1167.30	1167.30
E-3	878.10	926.40	963.30	1001.40	1001.40	1001.40	1001.40	1001.40	1001.40	1001.40	1001.40	1001.40	1001.40	1001.40
E-2	845.10	845.10	845.10	845.10	845.10	845.10	845.10	845.10	845.10	845.10	845.10	845.10	845.10	845.10
E-1**	753.90	753.90	753.90	753.90	753.90	753.90	753.90	753.90	753.90	753.90	753.90	753.90	753.90	753.90
E-1***	697.20	-	-	-	-	-	-	-	-	-	-	-	-	-

* While serving as Sergeant Major of the Army, Master Chief Petty Officer of the Navy or Coast Guard, Chief Master Sergeant of the Air Force, or Sergeant Major of the Marine Corps, basic pay for this grade is $3,537.90, regardless of cumulative years of service computed under Section 205 of title 37, United States Code.

** Applies to personnel who have served 4 months or more on active duty.

*** Applies to personnel who have served less than 4 months on active duty.

SCHEDULE 8--PAY AND ALLOWANCES OF THE UNIFORMED SERVICES (PAGE 3)

PART II--BASIC ALLOWANCE FOR QUARTERS RATES

PAY GRADE	Without dependents Full rate*	Partial rate**	With dependents
COMMISSIONED OFFICERS			
O-10	$661.50	$50.70	$813.90
O-9	661.50	50.70	813.90
O-8	661.50	50.70	813.90
O-7	661.50	50.70	813.90
O-6	606.90	39.60	733.20
O-5	584.40	33.00	706.50
O-4	541.50	26.70	623.10
O-3	434.10	22.20	515.70
O-2	344.40	17.70	440.10
O-1	289.80	13.20	393.30
COMMISSIONED OFFICERS WITH OVER 4 YEARS' ACTIVE DUTY AS AN ENLISTED MEMBER OR WARRANT OFFICER			
O-3	$468.60	$22.20	$553.80
O-2	398.40	17.70	499.80
O-1	342.60	13.20	461.70
WARRANT OFFICERS			
W-4	$488.70	$25.20	$551.10
W-3	410.70	20.70	505.20
W-2	364.50	15.90	464.70
W-1	305.40	13.80	402.00
ENLISTED MEMBERS			
E-9	$401.40	$18.60	$528.90
E-8	368.70	15.30	487.50
E-7	314.70	12.00	453.00
E-6	284.70	9.90	418.50
E-5	262.50	8.70	376.20
E-4	228.60	8.10	327.30
E-3	224.40	7.80	304.50
E-2	182.40	7.20	289.80
E-1	162.00	6.90	289.80

* Payment of the full rate of basic allowance for quarters at these rates to members of the uniformed services without dependents is authorized by title 37, United States Code, and Part IV of Executive Order 11157, as amended.

** Payment of the partial rate of basic allowance for quarters at these rates to members of the uniformed services without dependents who, under 37 U.S.C. 403(b) or 403(c), are not entitled to the full rate of basic allowance for quarters, is authorized by 37 U.S.C. 1009(c)(2) and Part IV of Executive Order 11157, as amended.

SCHEDULE 8--PAY AND ALLOWANCES OF THE UNIFORMED SERVICES (PAGE 4)

PART III--BASIC ALLOWANCE FOR SUBSISTENCE RATES

Officers (per month) 129.00

Enlisted Members (per day):

	E-1 (less than 4 months' active duty)	All Other Enlisted
When on leave or authorized to mess separately	$5.68	$6.15
When rations in-kind are not available	6.41	6.94
When assigned to duty under emergency conditions where no messing facilities of the United States are available	8.50	9.20

Part IV--RATE OF MONTHLY CADET OR MIDSHIPMAN PAY

The rate of monthly cadet or midshipman pay authorized by section 203(c)(1) of title 37, United States Code, is $543.90.

SCHEDULE 9--INTERIM GEOGRAPHIC ADJUSTMENTS FOR CERTAIN EMPLOYEES IN SPECIFIED AREAS

(Effective on the first day of the first applicable pay period beginning on or after January 1, 1991)

AREA	ADJUSTMENT RATE
New York-Northern New Jersey-Long Island, NY-NJ-CT Consolidated Metropolitan Statistical Area	8%
San Francisco-Oakland-San Jose, CA Consolidated Metropolitan Statistical Area	8%
Los Angeles-Anaheim-Riverside, CA Consolidated Metropolitan Statistical Area	8%

[FR Doc. 90-29508
Filed 12-12-90; 4:33 pm]
Billing code 3195-01-C

Presidential Documents

Presidential Determination No. 90–39 of September 7, 1990

Determination Pursuant to Section 2(c)(1) of the Migration and Refugee Assistance Act of 1962, as Amended

Memorandum for the Secretary of State

Pursuant to section 2(c)(1) of the Migration and Refugee Assistance Act of 1962, as amended, 22 U.S.C. 2601(c)(1), in order to meet unexpected urgent refugee and migration needs, I hereby determine that it is important to the national interest that $10,000,000 be made available from the United States Emergency Refugee and Migration Assistance Fund (Emergency Fund) to respond to the appeals of international organizations engaged in assisting those persons displaced by the crisis in the Persian Gulf. Of this $10,000,000, $7,500,000 will be contributed to the International Organization for Migration to be used to transport those displaced persons stranded in Jordan and throughout the region to their home countries, and $2,500,000 will be contributed to other international organizations and private voluntary organizations working in the region to meet the urgent relief needs.

You are directed to inform the appropriate committees of the Congress of this determination and the obligation of funds under this authority, and to publish this determination in the **Federal Register**.

George Bush

THE WHITE HOUSE,
Washington, September 7, 1990.

[FR Doc. 90–29489
Filed 12–12–90; 2:53 pm]
Billing code 3195–01–M

Editorial note: For a statement by Press Secretary Fitzwater, dated Sept. 7, on emergency assistance for Persian Gulf refugees, see the *Weekly Compilation of Presidential Documents* (vol. 26, p. 1341).

Rules and Regulations

Federal Register
Vol. 55, No. 241
Friday, December 14, 1990

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.
The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 907

[Navel Orange Regulation 720, Amdt. 2]

Navel Oranges Grown in Arizona and Designated Part of California; Weekly Levels of Volume Regulation for the 1990-91 Season

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This final rule amends Navel Orange Regulation 720 (55 FR 50157) by revising the percentage allocation between districts regulated under the marketing order for California-Arizona navel oranges during the period from December 14 through December 20, 1990. Consistent with program objectives, such action is needed to maintain orderly marketing conditions for fresh California-Arizona navel oranges and to enhance producer returns. This action was recommended by the Navel Orange Administrative Committee (Committee) which locally administers the marketing order covering navel oranges grown in Arizona and a designated part of California.

EFFECTIVE DATE: Regulation 720, Amendment 2 (7 CFR part 907) is effective for the period from December 14 through December 20, 1990.

FOR FURTHER INFORMATION CONTACT: Maureen T. Pello, Marketing Specialist, Marketing Order Administration Branch, F&V, AMS, USDA, room 2524-S, P.O. Box 96456, Washington, DC 20090-6456; telephone: (202) 447-8139.

SUPPLEMENTARY INFORMATION: This amendment is issued under Marketing Order No. 907 (7 CFR part 907) as amended, regulating the handling of navel oranges grown in Arizona and a designated part of California, hereinafter referred to as the "order." The order is effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), hereinafter referred to as the "Act."

This final rule has been reviewed by the U.S. Department of Agriculture (Department) in accordance with Departmental Regulation 1512-1 and the criteria contained in Executive Order 12291 and has been determined to be a "non-major" rule.

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the Administrator of the Agricultural Marketing Service (AMS) has considered the economic impact of this action on small entities.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened. Marketing orders issued pursuant to the Act, and rules issued thereunder, are unique in that they are brought about through group action of essentially small entities acting on their own behalf. Thus, both statutes have small entity orientation and compatibility.

There are approximately 130 handlers of navel oranges who are subject to regulation under the marketing order and approximately 4,070 producers in the regulated area. Small agricultural producers have been defined by the Small Business Administration (SBA) (13 CFR 121.601) as those having annual receipts of less than $500,000, and small agricultural service firms are defined as those whose annual receipts are less than $3,500,000. The majority of producers and handlers of California-Arizona navel oranges may be classified as small entities.

The declaration of policy in the Act includes a provision concerning establishing and maintaining such orderly marketing conditions as will provide, in the interest of producers and consumers, an orderly flow of the supply of a commodity throughout the normal marketing season to avoid unreasonable fluctuations in supplies and prices. Limiting the quantity of California-Arizona navel oranges that each handler may handle on a weekly basis is expected to contribute to the Act's objectives of orderly marketing and improving producers' returns.

The Committee met publicly on December 11, 1990, in Visalia, California, to consider the current and prospective conditions of supply and demand and recommended, with seven members voting in favor, three opposing, and one abstaining, an amendment to Navel Orange Regulation 720 (55 FR 50157) which will revise the percentage allocation between districts for the week ending on December 20, 1990. The Committee recommended allotments of 1,687,000 cartons (93.7 percent) for District 1 and 113,000 cartons (6.3 percent) for District 3 for that week. The marketing information and data provided to the Committee and used in its deliberations was compiled by the Committee's staff or presented by Committee members at the meeting. This information included, but was not limited to, price data for the previous week from Department market news reports and other sources, preceding week's shipments and shipments to date, crop conditions, and weather and transportation conditions.

At the meeting, Committee members reported that the current demand for navel oranges is good, especially for the larger sizes. Bookings through next Monday (December 17) were reported as good while bookings for Tuesday and beyond were unknown at this time. The majority of Committee members were uncertain as to what the market would be like next week. Committee members discussed the pros and cons of implementing volume regulation at this time. Seven Committee members favored the scheduled 1,800,000 carton allotment level as contained in Navel Regulation 720; three members opposed, favoring a higher allotment level.

The Department reviewed the Committee's recommendation in light of the Committee's projections as set forth in its 1990-91 marketing policy and as previously established in Navel Orange Regulation 720. The recommended amount of 1,800,000 cartons is the same as that specified for all districts in Navel Orange Regulation 720. Handlers in Districts 2 and 4 are not regulated as they are not shipping a sufficient quantity of navel oranges to warrant volume regulation at this point in the season.

During the week ending on December 6, 1990, shipments of navel oranges to fresh domestic markets, including Canada, totaled 1,888,000 cartons

compared with 1,957,000 cartons shipped during the week ending on December 7, 1989. Export shipments totaled 227,000 cartons compared with 222,000 cartons shipped during the week ending on December 7, 1989. Processing and other uses accounted for 379,000 cartons compared with 437,000 cartons shipped during the week ending on December 7, 1989.

Fresh domestic shipments to date this season total 7,271,000 cartons compared with 8,704,000 cartons shipped by this time last season. Export shipments total 818,000 cartons compared with 1,197,000 cartons shipped by this time last season. Processing and other use shipments total 1,497,000 cartons compared with 2,173,000 cartons shipped by this time last season.

For the week ending on December 6, 1990, regulated shipments of navel oranges to fresh domestic markets were 1,858,000 cartons on an adjusted allotment of 1,749,000 cartons which resulted in net overshipments of 109,000 cartons. Regulated shipments for the current week (December 7 through December 13, 1990), are estimated at 2,255,000 cartons on an adjusted allotment of 1,993,000 cartons. Thus, overshipments of 262,000 cartons could be carried forward into the week ending on December 20, 1990.

The average f.o.b. shipping point price for the week ending on December 6, 1990, was $8.73 per carton based on a reported sales volume of 1,369,000 cartons compared with last week's average of $8.82 per carton on a reported sales volume of 1,277,000 cartons. The season average f.o.b. shipping point price to date is $9.43 per carton. The average f.o.b. shipping point prices for the week ending on December 7, 1989, was $7.45 per carton; the season average f.o.b. shipping point price at this time last year was $8.23.

The Department's Market News Service reported that, as of December 11, demand for California-Arizona navel oranges was good and the market was steady for all grades and sizes.

According to the National Agricultural Statistics Service, the 1989–90 season average fresh equivalent on-tree price for California-Arizona navel oranges was $4.05 per carton, 64 percent of the season average parity equivalent price of $6.34 per carton.

Based upon fresh utilization levels indicated by the Committee and an econometric model developed by the Department, the 1990–91 season average fresh on-tree price is estimated at $4.33 per carton, about 66 percent of the estimated fresh on-tree parity equivalent price of $6.56 per carton. It is currently estimated that there is a less than one percent probability that the 1990–91 season average fresh on-tree price will exceed the projected season average fresh on-tree parity equivalent price.

Limiting the quantity of navel oranges that may be shipped during the period from December 14 through December 20, 1990, to 1,800,000 cartons would be consistent with the provisions of the marketing order by tending to establish and maintain, in the interest of producers and consumers, an orderly flow of navel oranges to market.

Based on considerations of supply and market conditions, and the evaluation of alternatives to the implementation of this volume regulation, the Administrator of the AMS has determined that this final rule will not have a significant economic impact on a substantial number of small entities and that this action will tend to effectuate the declared policy of the Act.

A proposed rule regarding the implementation of volume regulation and a proposed shipping schedule for California-Arizona navel oranges for the 1990–91 season was published in the September 6, 1990, issue of the **Federal Register** (55 FR 36653). That rule provided interested persons the opportunity to comment until October 9, 1990, on the need for regulation during the 1990–91 season, the proposed shipping schedule, and other factors relevant to the implementation of such regulations. A final rule concerning this action was published in the **Federal Register** on December 5, 1990 (55 FR 50157) implementing the shipping schedule, as revised, for the season. Amendments may be warranted to that final rule throughout the season based on analysis of the prevailing marketing conditions and available data.

Accordingly, this final rule amends Navel Orange Regulation 720 (55 FR 50157) by revising the percentage allocation between districts regulated under the marketing order for California-Arizona navel oranges during the period from December 14 through December 20, 1990.

Moreover, pursuant to 5 U.S.C. 553, it is found and determined that it is impracticable, unnecessary, and contrary to the public interest to give preliminary notice on this action, engage in further public procedure with respect to this amendment and that good cause exists for not postponing the effective date of this action until 30 days after publication in the **Federal Register**. This is because there is insufficient time between the date when information became available upon which this regulation is based and the effective date necessary to effectuate the declared policy of the Act.

In addition, market information needed for the formulation of the basis for this action was not available until December 11, 1990, and this action needs to be effective for the regulatory week which begins on December 14, 1990. Further, interested persons were given an opportunity to submit information and views on the regulation at an open meeting, and handlers were apprised of its provisions and effective time. It is necessary, therefore, in order to effectuate the declared purposes of the Act, to make this regulatory provision effective as specified.

List of Subjects in 7 CFR Part 907

Marketing agreements, Oranges, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble, 7 CFR part 907 is amended as follows:

1. The authority citation for 7 CFR part 907 continues to read as follows:

Authority: Secs. 1–19, 48 Stat. 31, as amended; 7 U.S.C. 601–674.

2. Section 907.1020 is amended by republishing the introductory text and revising paragraph (b) to read as follows:

Note: This section will not appear in the Code of Federal Regulations.

§ 907.1020 Navel Orange Regulation 720, Amendment 2.

The shipping schedule below establishes the quantities of navel oranges grown in California and Arizona, by district, which may be handled during the specified weeks as follows:

Week Ending	District 1		District 2		District 3		District 4		Total cartons (000)
	Cartons (000)	Percent	Cartons (000)	Percent	Cartons (000)	Percent	Cartons (000)	Percent	
*	*	*	*	*	*	*	*	*	
(b) Dec. 20, 1990	1,687.0	93.7			113.0	6.3			1,800
*	*	*	*	*	*	*	*	*	

Dated: December 12, 1990.

Robert C. Keeney,

Deputy Director, Fruit and Vegetable Division.

[FR Doc. 90-29479 Filed 12-13-90; 8:45 am]

BILLING CODE 3410-02-M

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 2, 73, 110 and 171

Miscellaneous Amendments; Correction

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule; correction.

SUMMARY: This document makes minor corrections to the January 1, 1990, Code of Federal Regulations (CFR) volumes that comprise 10 CFR chapter I. This action is necessary to correct errors and omissions in the codification of 10 CFR parts 0-50 and 10 CFR parts 51-199.

FOR FURTHER INFORMATION CONTACT: Michael T. Lesar, Chief, Rules Review Section, Regulatory Publications Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone: 301-492-7758.

SUPPLEMENTARY INFORMATION: Make the following corrections to the January 1, 1990, Code of Federal Regulations volumes that comprise 10 CFR chapter I.

§ 2.1011 [Amended]

1. In the first line of § 2.1011(f)(1)(ii), "or" is corrected to read "on".

2. In § 73.2, paragraph (3) is reinserted in the definition of "Physical barrier" to read as follows:

§ 73.2 Definitions.

* * * * *

Physical Barriers

* * * * *

(3) Any other physical obstruction constructed in a manner and of materials suitable for the purpose for which the obstruction is intended.

* * * * *

§ 110.30 [Amended]

3. In § 110.30(a), "1717 H" is corrected to read "2120 L".

4. In § 171.15, paragraph (c) is reinserted to read as follows:

§ 171.15 Annual fee: Power Reactor Operating License.

* * * * *

(c) If the basis for the annual fee is greater than 45 percent of the NRC budget, less the sum of moneys estimated to be collected from the High Level Waste (HLW) fund administered by the Department of Energy and the total estimated fees chargeable under part 170 of this chapter, then the maximum annual fee for each nuclear power reactor that is licensed to operate shall be calculated as follows: (NRC FY Budget × .45) minus Sum of HLW moneys and estimated part 170 fees equals fees to be collected under part 171. Part 171 fees to be collected on a schedule based on the total from categories shown in the following table:

PART 171—FEES BY REACTOR CATEGORY-SUMMARY: WITH MINOR ADJUSTMENTS FOR PLANTS WEST OF ROCKIES OR WESTINGHOUSE PLANTS WITH ICE CONDENSERS THE FOLLOWING APPLY TO PLANT/CONTAINMENT

[Fees in millions]

Type	Number	Budget base × .84	Fee	Total collected
GE Mark I	(24)	$1.349	$1.133	$27.19
GE Mark II	(7)	1.443	1.212	8.48
GE Mark III	(4)	1.373	1.153	4.61
B&W	(8)	1.896	1.592	12.74
CE	(15)	1.391	1.168	17.52
Westinghouse	(48)	1.352	1.135	54.48
	(106)			$125.02

For the Nuclear Regulatory Commission.

Dated at Bethesda, Maryland, this 11th day of December 1990.

Donnie H. Grimsley,

Director, Division of Freedom of Information and Publications Services, Office of Administration.

[FR Doc. 90-29350 Filed 12-13-90; 8:45 am]

BILLING CODE 7590-01-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 90-NM-132-AD; Amdt. 39-6836]

Airworthiness Directives; Boeing Model 747 Series of Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Boeing Model 747 series airplanes, which currently requires a one-time external detailed visual and external high frequency eddy current inspection to detect cracks at certain stringer fastener locations; repair, if necessary; and reporting of cracks detected. This action requires repetitive inspections and a modification in certain areas where

reports indicate that cracking was prevalent. This amendment is prompted by reports of cracks submitted in response to the existing AD. This condition, if not corrected, could result in rapid decompression of the airplane.

EFFECTIVE DATE: January 22, 1991.

ADDRESSES: The applicable service information may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington, 98124. This information may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Mr. Steven C. Fox, Seattle Aircraft Certification Office, Airframe Branch, ANM-120S; telephone (206) 227-2777. Mailing address: FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98055-4056.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations by superseding AD 89-23-53, Amendment 39-6524 (55 FR 7696, March 5, 1990), applicable to Boeing Model 747 series airplanes, to require repetitive inspections for cracking of the fuselase skin panels; repair, if necessary, and modification, was published in the **Federal Register** on August 14, 1990 (55 FR 33123).

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

The manufacturer and members of the Air Transport Association (ATA) of American commented that the mandatory modification should be limited to airplanes with manufacturing line numbers 001 through 200, in order to be consistent with the recommendations of the Model 747 Working Group of the Airworthiness Assurance Task Force. The FAA concurs. Although the structure of airplanes with line numbers 201 through 430 is similar to the earlier-numbered airplanes, no cracks have been reported on this group of airplanes. The FAA has revised paragraph C. of the final rule to delete the modification requirements for this group of airplanes; the repetitive inspection requirement, however, is retained. The FAA may consider further rulemaking for airplanes with line numbers 201 through 430 to mandate the modification if inspection results show extensive cracking.

The manufacturer requested that the rule can be revised to shorten the initial inspection intervals for high cycles airplanes and lengthen the initial inspections for low cycles airplanes. The FAA does not concur. The initial inspections for airplanes that have accumulated more than 15,000 cycles were accomplished in accordance with the requirements of AD T89-23-53. The FAA has determined that the 1,000 cycle initial compliance is a reasonable period for airplanes that have accumulated less than 15,000 cycles and were not previously inspected.

The manufacturer further requested that the rule be revised to allow an alternate skin panel modification for those airplanes which has the frames modified in accordance with AD 86-23-06-R1. The FAA does not concur, since this alternate modification has not been defined. However, when such a modification becomes available, the FAA may consider it as an alternate means of compliance in accordance with paragraph G. of the final rule.

The manufacturer also requested that the inspections defined in proposed paragraph A. be revised to exclude the stringer (S)-6 and S-14 lap joints. The FAA concurs. The proposed inspections of these areas would be redundant to those required by other airworthiness directives (reference AD 90-15-06, AD 90-23-14, and AD 90-21-17). Paragraph A. of the final rule has been revised accordingly.

The manufacturer and one ATA member requested that the rule be revised to delete the inspection and modification requirements aft of body station (BS) 340 for airplanes which have new structure installed during the stretched upper deck modification, described in Boeing Master Change (MC) -42360 since the panels are identical (in so far as its bonding process) to those installed after line number 430. The FAA does not concur. The rule, as written, allows "credit" for previously installed skin panels which meet the requirements of paragraph C.

The manufacturer further requested that the rule be revised to delete the proposed modification requirements for the left side of the airplane aft of BS 340 for those airplanes that have been modified (after production) to install a left-hand crew door. The manufacturer stated that the skin panel at this location on those modified airplanes is identical (in so far as its bonding process) to that installed on airplanes with line numbers 201 through 430. The FAA does not concur that a revision to the rule is necessary. Since that modification is limited to a very small number of airplanes, the affected operators may apply for "relief" through an alternate means of compliance, as provided by paragraph G. of the final rule.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the rule.

There are approximately 430 Model 747 series airplanes of the affected design in the worldwide fleet. It is estimated that 174 airplanes of U.S. registry will be affected by this AD, that it will take approximately 800 manhours per airplane to accomplish the required actions, and that the average labor cost will be $40 per manhour. Required parts are estimated to cost $20,000 per airplane for airplanes specified in paragraph C. of the final rule. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $8,168,000.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—[AMENDED]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1421 and 1423; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by superseding AD 89-23-53, Amendment 39-6524 (55 FR 7696, March 5, 1990), with the following new airworthiness directive:

Boeing: Applies to Model 747 series airplanes, line numbers 001 through 430, certificated in any category. Compliance required as indicated, unless previously accomplished.

To prevent rapid decompression of the airplane, accomplish the following:

A. Prior to the accumulation of 12,000 flight cycles or within the next 1,000 flight cycles after the effective date of this AD, whichever occurs later, unless previously accomplished within the last 1,000 flight cycles, conduct an external detailed visual and external high frequency eddy current inspection for cracks of the fuselage skin from body station (BS) 220 to BS 520, left and right hand side of the airplane between stringers (S)-6 and S-14, excluding the skin lap joints, in accordance with Boeing Alert Service Bulletin 747-53A2321, dated October 31, 1989. Repeat the inspections thereafter at intervals not to exceed 2,000 flight cycles.

B. If cracks are detected, repair prior to further flight, in accordance with the Boeing Alert Service Bulletin 747-53A2321, dated October 31, 1989.

C. For airplanes line numbers 001 through 200, prior to the accumulation of 20,000 flight cycles, or within the next 4 years after the effective date of this AD, whichever occurs later, perform the terminating modification of the skin panel from BS 340 to BS 520, S-6 to S-14, in accordance with Boeing Alert Service Bulletin 747-53A2321, dated October 31, 1989. (The modification consists of replacing the skin panel with a new skin panel which was manufactured utilizing the improved hot phosphoric anodize bonding process.)

D. Replacement of the skin panel required by paragraph C. of this AD constitutes terminating action for the inspections from BS 340 to BS 520 required by paragraph A. of this AD. The inspections from BS 220 to BS 340 required by paragraph A. of this AD are to be continued.

E. Flight cycles conducted at 2.0 PSI or less cabin differential pressure need not be counted for the purpose of this airworthiness directive.

F. For Model 747SR airplanes only, the threshold and repetitive inspection intervals specified herein may be multiplied by the 1.2 adjustment factor based on continued mixed operation at lower cabin pressure differentials.

G. An alternate means of compliance or adjustment of the compliance time, which provides an acceptable level of safety, may be used when approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Note: The request should be submitted directly to the Manager, Seattle ACO, and a copy sent to the cognizant FAA Principal Inspector (PI). The PI will then forward comments or concurrent to the Seattle ACO.

H. Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate airplanes to a base in order to comply with the requirements of this AD.

All persons affected by this directive who have not already received the appropriate service documents from the manufacturer may obtain copies upon request to Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124. These documents may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

This amendment supersedes Amendment 39-6524, AD 89-23-53.

This amendment becomes effective January 22, 1991.

Issued in Seattle, Washington, on December 3, 1990.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR 90-29309 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 39

[Docket No. 90-NM-42-AD; Amdt. 39-6835]

Airworthiness Directives: Boeing Model 727 Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to Boeing Model 727 series airplanes, which requires inspection and repair, if necessary, of the fuselage skin circumferential joint bonded doubler at body station (BS) 259, 360, 441, 481, and 681. This amendment is prompted by reports of delamination, corrosion, and/or cracking. This condition, if not corrected, could result in loss of cabin pressure.

EFFECTIVE DATE: January 22, 1991.

ADDRESSES: The applicable service information may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124. This information may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Mr. Stanton R. Wood, Seattle Aircraft Certification Office, Airframe Branch, ANM-120S; telephone (206) 277-2772. Mailing address: FAA, Northwest Mountain Region, 1601 Lind Avenue SW., Renton, Washington 98055-4056.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive, applicable to Boeing Model 727 series airplanes, which requires inspection and repair, if necessary, of the fuselage skin circumferential joint bonded doubler at body station (BS) 259, 360, 441, 481, and 681, was published in the **Federal Register** on April 12, 1990 (55 FR 13801).

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

One commenter requested that the internal inspection at body station (BS) 259.5 be eliminated from the proposed rule. The commenter considered this request to be justified because a similar AD for the Boeing Model 737 airplane deleted inspection at this body station. The FAA does not concur with this comment. There have been reports of cracking at this body station. This service history indicates a need to inspect the area.

Another commenter requested that a temporary repair scheme be permitted if corrosion is found that does not exceed 10% of the material thickness. The FAA does not concur with this comment. The FAA does not consider that a temporary repair for corrosion less than 10% in these circumferential joints is acceptable.

Several comments were received which requested clarification as to when sealing of the circumferential joint must be accomplished. The FAA agrees that clarification is necessary. The circumferential joint only needs to be resealed when the existing sealant has deteriorated and if the joint is repaired or modified. The final rule has been changed to clarify when the sealing must be accomplished.

One commenter requested that the rule include an optional ultrasonic inspection to verify corrosion depth. Another commenter requested that the rule permit the use of blind protruding head fasteners with a life limit as a temporary repair. The FAA does not concur that it is necessary to include these unique requests as part of the final rule. These commenters may request an alternative means of compliance in accordance with paragraph F. of the AD, provided that they provide data demonstrating that such alternatives provide an acceptable level of safety.

Another commenter stated that the internal visual inspection is the most difficult, most time consuming, and

probably least effective circumferential joint inspection. The commenter suggested that the final rule be revised to permit resealing the inside of the circumferential joint as terminating action for the internal inspections. The FAA does not concur that sealing can be considered as terminating action for the internal visual inspection. The FAA concurs that the internal visual inspection is difficult and time consuming, but considers that it is effective in detecting corrosion. Based upon the requirement for on-going external visual and low frequency eddy current (LFEC) inspections, the FAA has determined that the internal visual inspection can be extended from 30 to 48 months without degrading safety. The final rule has been changed to incorporate this change.

Another commenter stated that the current service bulletin provides incorrect information concerning the areas to be inspected. The FAA has reviewed the service bulletin in response to this comment and considers the service bulletin to be correct. Therefore, no changes to the AD or service bulletin are warranted/relative to this comment.

The manufacturer commented that the latest revision to the Boeing Service Bulletin 727-53-0084, Revision 4, dated August 2, 1990, should be cited in the final rule. This revision clarifies the instructions for replacement of steel fasteners, and revises the recommended interval for the internal close visual inspection from 30 months to 48 months. The FAA has reviewed and approved this revision to the service bulletin, and concurs that it should be referenced as the appropriate service information source. The final rule has been revised accordingly.

Paragraph F. of the final rule has been revised to specify the current procedure for submitting requests for approval of alternate means of compliance.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the rule.

There are approximately 493 Model 727 series airplanes of the affected design in the worldwide fleet. It is estimated that 378 airplanes of U.S. registry will be affected by this AD, that it will take approximately 200 manhours per airplane to accomplish the required actions, and that the average labor cost will be $40 per manhour. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $3,024,000.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows;

PART 39—[AMENDED]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1421 and 1423; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

Boeing: Applies to Model 727 series airplanes, listed in Boeing Service Bulletin 727-53-0084, Revision 4, dated August 2, 1990, certified in any category. Compliance required as indicated, unless previously accomplished.

To prevent loss of cabin pressurization due to delamination, cracking, and/or corrosion of fuselage skin circumferential joints, accomplish the following:

A. Within the next 15 months after the effective date of this AD, accomplish an external visual inspection in accordance with part II.A. of the Accomplishment Instructions of Boeing Service Bulletin 727-53-0084, Revision 4, dated August 2, 1990, and a low frequency eddy current (LFEC) inspection in accordance with part II.B. in the Accomplishment Instructions of the service bulletin.

1. If no corrosion is detected:

a. Repeat the external visual inspection at intervals not to exceed 15 months; and

b. Repeat the LFEC inspection at intervals not to exceed 30 months; and

c. Within 48 months after the effective date of this AD, conduct an internal close visual inspection in accordance with part II.C. in the Accomplishment Instructions of the service bulletin. Repeat this inspection at intervals not to exceed 48 months.

2. If corrosion is detected, repair prior to further flight, in accordance with part III of the Accomplishment Instructions of the service bulletin.

B. Within the next 3,000 landings or 30 months after the effective date of this AD, whichever occurs first, accomplish a high frequency eddy current (HFEC) inspection in accordance with part II.D. of the Accomplishment Instructions of Boeing Service Bulletin 727-53-0084, Revision 4, dated August 2, 1990.

1. If no cracking is detected, repeat the inspection at intervals not to exceed 4,000 landings or 48 months, whichever occurs first.

2. If cracking is detected, repair before further flight, in accordance with part III in the Accomplishment Instructions of the service bulletin.

C. If the sealant has deteriorated but no cracking or corrosion is detected as a result of the inspections required by paragraphs A. and B. of this AD, reseal in accordance with Figure 5 or 6, as applicable, of Boeing Service Bulletin 727-53-0084, Revision 4, dated August 2, 1990.

D. Modification in accordance with part III in the Accomplishment Instructions if Boeing Service Bulletin 727-53-0084, Revision 4, dated August 2, 1990, constitutes terminating action for the inspections required by this AD for the area modified.

E. Modification in accordance with part IV in the Accomplishment Instructions of Boeing Service Bulletin 727-53-0084, Revision 4, dated August 2, 1990, constitutes terminating action for the inspections required by paragraph B. of this AD.

F. An alternate means of compliance or adjustment of the compliance time, which provides an acceptable level of safety, may be used when approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Note: The request should be submitted directly to the Manager, Seattle ACO, and a copy sent to the cognizant FAA Principal Inspector (PI). The PI will then forward comments or concurrence to the Seattle ACO.

G. Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate airplanes to a base in order to comply with the requirements of this AD.

All persons affected by this directive who have not already received the appropriate service documents from the manufacturer may obtain copies upon request to Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124. These documents may be examined at the FAA,

Northwest Mountain Region Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

This amendment becomes effective January 22, 1991.

Issued in Renton, Washington, on December 3, 1990.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 90-29310 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 39

[Docket No. 90-NM-252-AD; Amdt. 39-6831]

Airworthiness Directives; Boeing Model 747-400 Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 747-400 series airplanes, which requires wiring modifications to correct the suppression of the aural and master warning indication systems of the fire detection system. This amendment is prompted by a report which indicated that, with certain Integrated Display System (IDS) software installed, the aural and master systems of the fire detection system are not operative. This condition, if not corrected, could result in the failure of these systems to annunciate a fire in the auxiliary power unit (APU), engines, wheel wells, or cargo compartments.

EFFECTIVE DATE: December 26, 1990.

ADDRESSES: The applicable service information may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124. This information may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Ms. Susan Letcher, Seattle Aircraft Certification Office, Systems and Equipment Branch, ANM-130S; telephone (206) 227-2670. Mailing address: FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington, 98055-4056.

SUPPLEMENTARY INFORMATION: The manufacturer has reported that certain Boeing Model 747-400 series airplanes that incorporate certain IDS software updates have a latent failure mode which renders the aural and master warning systems of the fire detection system inoperative. This failure cannot be identified during normal system checks. If this condition exists and is not identified and repaired, a fire in the auxiliary power unit (APU), engine, wheel well, or cargo compartment will not be annunciated to the crew by the aural or master caution systems. Other indicators may annunciate the fire; however, the aural and master caution systems provide the primary warning of a fire to the flight crew. If these systems are inoperative, the crew may not be immediately alerted to a fire and, as a result, may delay required procedures.

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-26A2171, dated October 4, 1990, which describes procedures to accomplish certain wiring modifications to correct the operation of the fire detection system.

Since this condition is likely to exist on other airplanes of the same type design, this AD requires modification of the wiring of the aural and master warning indication systems of the fire detection system, in accordance with the service bulletin previously described.

Since a situation exists that requires immediate adoption of this regulation, it is found that notice and public procedure hereon are impracticable, and good cause exists for making this amendment effective in less than 30 days.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation and that it is not considered to be major under Executive Order 12291. It is impracticable for the agency to follow the procedures of Executive Order 12291 with respect to this rule since the rule must be issued immediately to correct an unsafe condition in aircraft. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket (otherwise, an evaluation is not required). A copy of it, if filled, may be obtained from the Rules Docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—[AMENDED]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1421 and 1423; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

Boeing: Applies to Model 747-400 series airplanes, listed in Boeing Alert Service Bulletin 747-26A2171, dated October 4, 1990, certificated in any category. Compliance is require within 45 days after the effective date of this airworthiness directive, unless previously accomplished.

To prevent the failure of the fire detection warning system to annunciate a fire, accomplish the following:

A. Modify the wiring of the aural and master warning indication systems of the fire detection system, in accordance with Boeing Alert Service Bulletin 747-26A2171, dated October 4, 1990.

B. An alternative means of compliance or adjustment of the compliance time, which provides an acceptable level of safety, may be used when approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Note: The request should be submitted directly to the Manager, Seattle ACO, and a copy sent to the cognizant FAA Principal Inspector (PI). The PI will then forward comments or concurrence to the Seattle ACO.

C. Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate airplanes to a base in order to comply with the requirements of this AD.

All persons affected by this directive who have not already received the appropriate service information from the manufacturer may obtain copies upon request to Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington, 98124. This information may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

This amendment becomes effective December 26, 1990.

Issued in Renton, Washington, on November 30, 1990.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 90-29312 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 39

[Docket No. 90-ASW-15; Amdt. 39-6840]

Airworthiness Directives; Bell Helicopter Textron, Inc. (BHTI), Model 212 Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) which requires repetitive inspections of the main rotor drag brace assembly on BHTI Model 212 helicopters. The AD is needed to detect a crack in the drag brace assembly which could result in failure of the main rotor system and, as a result, loss of control of the helicopter.

EFFECTIVE DATE: January 18, 1991.

ADDRESSES: The applicable AD-related material may be obtained from Bell Helicopter, Inc., P.O. Box 482, Fort Worth, TX 76101, or may be examined at the Rules Docket, Office of the Assistant Chief Counsel, FAA, 4400 Blue Mound Road, Bldg. 3B, Fort Worth, TX.

FOR FURTHER INFORMATION CONTACT: Mr. Tom Henry, Rotorcraft Certification Office, ASW-170, Federal Aviation Administration, Fort Worth, Texas 76193-0170, telephone (817) 624-5168.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an AD requiring inspection of certain main rotor drag brace assemblies at intervals of 1,200 hours' time in service on Model 212 helicopters was published in the **Federal Register** on July 3, 1990, (55FR 27470)..

The proposal was prompted by eight reports of cracked drag brace assemblies on certain BHTI Model 212 helicopters. The cracks are attributed to high cycle, low stress fatigue with slow progression. The cracks had gone undetected during the daily visual inspections and were not actually detected until after hub assembly overhaul. Consequently, the notice proposed mandatory repetitive inspections.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received. Accordingly, the proposal is adopted without change.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation involves 770 helicopters at an added cost of $70 per aircraft per year, for a total estimated fleet cost of $53,900 for the inspections. Therefore, I certify that this action: (1) Is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal; and (4) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—[AMENDED]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1421 and 1423; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new AD:

Bell Helicopter Textron, Inc. (BHTI): Amendment 39-6840. Docket No. 90-ASW-15.

Applicability: All Bell Model 212 helicopters, certificated in any category.

Compliance: Required as indicated, unless already accomplished.

To prevent fatigue failure of the main rotor drag brace assembly which could result in loss of control of the helicopter, accomplish the following:

(a) Within the next 100 hours' time in service after the effective date of this AD, determine if drag brace assemblies, part numbers (P/N) 204-011-140-003 or -005, are installed in the main rotor hub assembly, P/N 204-012-101-009. For helicopters equipped with drag brace assembly, P/N 204-011-140-003 or -005, comply with the requirements of paragraph (b).

(b) For main rotor hub assembles, P/N 204-012-101-009, with 1,200 or more hours' time in service, since new or since the last overhaul, comply with the following within the next 100 hours' time in service after the effective date of this AD. Thereafter, comply at intervals of 1,200 hours' time in service from the last inspection—

(1) Remove the main rotor drag brace assemblies, P/N 204-011-140-003 or -005. Inspect for corrosion and mechanical damage. Magnetic particle inspect all parts (as specified in BHTI Component Repair and Overhaul Manual, BHT-212-CR&O-1);

(2) If cracks are found, or if corrosion or mechanical damage is present which cannot be removed within the rework limits of BHT-212-CR&O-1, replace with serviceable parts; and

(3) Assemble the drag brace assemblies as specified in BHTI Component Repair and Overhaul Manual, BHT-212-CR&O-1, with the following additions:

(i) Apply a soft film corrosion preventive compound to the barrel threads prior to assembly.

(ii) Install the drag brace assemblies and torque the locking nuts to 275-325 foot pounds.

(iii) After first flight confirm the torque of 275-325 floor pounds and apply a hard film corrosion preventive compound to the exposed threads.

(c) An alternative method of compliance, or adjustment of compliance times, which provides an equivalent level of safety, may be used when approved by the Manager, Rotorcraft Certification Office, ASW-170, Federal Aviation Administration, Fort Worth, Texas 76193-0170.

(d) Bell Helicopter, Inc., Alert Service Bulletin 212-90-59, dated February 5, 1990, provides an acceptable means of compliance with this AD.

Amendment 39-6840 becomes effective on January 18, 1991.

Issued in Fort Worth, Texas, on December 6, 1990.

Henry A. Armstrong,

Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 90-29313 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 39

[Docket No. 90-ASW-27; Amdt. 39-6841]

Airworthiness Directives; Sikorsky Aircraft Model S-64E Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) which requires frequent checks of main rotor blades to detect possible spar cracks on

Sikorsky Model S-64E helicopters. The AD is needed to detect fatigue cracks in the main rotor blade spar which could result in separation of the main rotor blade and loss of the helicopter.

EFFECTIVE DATE: January 18, 1991.

ADDRESSES: The applicable service bulletin may be obtained from Sikorsky Aircraft, 600 Main Street, Stratford, Connecticut 06601-1381, or may be examined in the Rules Docket, Office of the Assistant Chief Counsel, FAA, 4400 Blue Mound Road, Bldg. 3B, room 158, Fort Worth, Texas.

FOR FURTHER INFORMATION CONTACT: Richard B. Noll, Boston Aircraft Certification Office, Engine and Propeller Directorate, Aircraft Certification Service, FAA, 12 New England Executive Park, Burlington, Massachusetts 01803, telephone (617) 273-7111.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations to include an AD requiring frequent checks of main rotor blades to detect possible spar cracks on Sikorsky Model S-64E helicopters was published in the **Federal Register** on July 3, 1990 (55 FR 27473).

There have been six reports of cracks in main rotor blade spars on the Sikorsky Model S-64E helicopter, which could lead to blade failure and separation. Since this condition is likely to exist or develop on other helicopters of the same type design, the FAA is issuing this AD which requires checks of the blade inspection method (BIM) systems on Sikorsky Model S-64E helicopters. The interval between the checks depends on the primary operational use of the helicopter.

Interested persons have been afforded an opportunity to participate in the making of this amendment. One comment was received in response to the Notice of Proposed Rulemaking (NPRM). The commenter agrees with the proposed AD but recommends that the applicability statement be expanded to include Sikorsky Model S-64A and S-64F helicopters. While the main rotor blades of these models are similar to the Model S-64E blades, there are no U.S. registered Model S-64A or S-64F helicopters. Further, there is no adverse service history for the Model S-64A or F helicopter blades. The FAA, therefore, does not concur with the comment and it is not adopted.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation involves seven aircraft at an approximate cost of $1,750 per aircraft for every 100 hours' time in service, for a total fleet cost of $12,250. Therefore, I certify that this action: (1) Is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal; and (4) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—[AMENDED]

1. The authority citation for part 39 continues to read as follows:

Authority 49 U.S.C. 1354(a), 1421 and 1423; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new AD:

Sikorsky Aircraft: Amendment 39-6841. Docket No. 90-ASW-27.

Applicability: All Model S-64E helicopters, certificated in any category.

Compliance: Required as indicated, unless already accomplished.

To prevent operation with a crack in the main rotor blade spar, which could result in possible loss of the helicopter, accomplish the following:

(a) Within the next 3 hours' time in service after the effective date of this AD, visually check the BIM pressure indicators of the main rotor blades for black or red color indication.

(b) Before further flight, replace any blade with black or red indication visible in the BIM pressure indicator with an airworthy part of the same part number unless the black or red indication is found to be the result of BIM system malfunction.

Note: Sikorsky Service Bulletin 64B15-4C pertains to operation, maintenance, and check of the main rotor blade with BIM.

(c) The checks required by this AD may be performed by the pilot and must be recorded in accordance with FAR section 43.9. The record must be maintained as required by FAR sections 91.173, 121.380, or 135.439.

(d) Repeat the check required by paragraph (a) of this AD prior to the first flight of each day and thereafter at intervals not to exceed either—

(1) Three hours' time in service from the last check for helicopters engaged in seven or more external lifts per hour; or

(2) Five hours' time in service from the last check for helicopters engaged in either less than seven external lifts per hour or operation without external cargo.

(e) Prior to the first flight of each day, check the BIM pressure indicator for proper functioning as follows:

(1) Press in and hold the manual test lever (grenade-type handle) on the raised area of the handle over the pin-type actuation plunger.

Note: The indicator glass bulb should not be handled since the heat of the hand may change the internal reference pressure and result in an erroneous indicator reading.

(2) Depress the actuation plunger fully to shut off the pressure completely from the blade into the indicator. If necessary, press with the thumbs of both hands to overcome the plunger spring force.

Note: If pressure is applied to the end of the lever on the flat area, the actuation plunger will not fully depress.

(3) Verify proper operation of the indicator by observing that a full-black or full-red (unsafe) indication appears in not less than 10 or more than 30 seconds after depressing the plunger for a temperature of −6.7 degrees C (20 degrees F) or above. At lower temperatures, extend the upper limit to the corresponding time listed below:

Temperature	Time
−7.2 to −17.8 degrees C (19 to 0 degrees F)	[1] 35
−18.3 to −28.9 degrees C (−1 to −20 degrees F)	[1] 40
−29.4 to −40.0 degrees C (−21 to −40 degrees F)	[1] 50
−40.5 to −51.1 degrees C (−41 to −60 degrees F)	[1] 60

[1] Seconds.

(4) Release the lever and observe that the black or red indication snaps back immediately, leaving an all-white or all-yellow (safe) indication.

(5) If the indicator does not meet the specified requirements, then either identify and correct the malfunction or replace the suspect main rotor blade with an airworthy blade of the same part number prior to further flight.

(f) Upon submission of substantiating data by an owner or operator through an FAA Airworthiness inspector, an alternate method of compliance with the requirements of this AD or adjustments to the compliance (schedule) times specified in this AD may be approved by the Manager, Boston Aircraft Certification Office, Engine and Propeller Directorate, Aircraft Certification Service, Federal Aviation Administration, 12 New

England Executive Park, Burlington, Massachusetts 01803.

Amendment 39-6841 becomes effective on January 18, 1991.

Issued in Fort Worth, Texas, on December 6, 1990.

Henry A. Armstrong,

Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 90-29311 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 73

[Airspace Docket No. 90-AEA-19]

Change to Controlling Agency for Restricted Area R-5206; West Point, NY

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action changes the controlling agency for Restricted Area R-5206 West Point, NY, to FAA, New York Approach Control. This change is required because instrument flight rules (IFR) airspace in the vicinity has been redelegated to the New York Terminal Radar Approach Control.

EFFECTIVE DATE: 0901 U.T.C., February 7, 1991.

FOR FURTHER INFORMATION CONTACT: Linda Ullom, Military Operations Program Office (ATM-420), Office of Air Traffic System Management, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267-7683.

The Rule

This amendment to part 73 of the Federal Aviation Regulations changes the controlling agency for R-5206, West Point, NY, from FAA, New York Air Route Traffic Control Center (ARTCC) to FAA New York Approach Control. IFR airspace in the vicinity has been redelegated from New York ARTCC to New York Terminal Radar Approach Control. New York Approach Control is now the controlling agency for the restricted area. I find that notice and public procedure under 5 U.S.C. 553(b) are unnecessary because this action is a minor technical amendment in which the public would not be particularly interested. Section 73.52 of part 73 of the Federal Aviation Regulations was republished in Handbook 7400.6G dated September 4, 1990.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule, when promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 73

Aviation safety, Restricted areas.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, part 73 of the Federal Aviation Regulations (14 CFR part 73) is amended, as follows:

PART 73—SPECIAL USE AIRSPACE

1. The authority citation for part 73 continues to read as follows:

Authority: 49 U.S.C. 1348(a), 1354(a), 1510, 1522; Executive Order 10854; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); 14 CFR 11.69.

2. Section 73.52 is amended as follows:

R-5206 West Point, NY [Amended]

By removing the existing Controlling agency and substituting the following: Controlling agency. FAA, New York Approach Control.

Issued in Washington, DC, on December 10, 1990.

William C. Davis,

Acting Manager, Airspace-Rules and Aeronautical Information Division.

[FR Doc. 90-29314 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 75

[Airspace Docket No. 90-ANM-6]

Establishment of Jet Route J-240

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment establishes new Jet Route J-240 located between Myton, UT, and Blue Mesa, CO. This jet route will improve the flow of traffic arriving the Salt Lake City terminal area. This new jet route will provide a more precise means of navigation and reduce controller workload.

EFFECTIVE DATE: 0901 utc, February 7, 1991.

FOR FURTHER INFORMATION CONTACT: Alton D. Scott, Airspace and Obstruction Evaluation Branch (ATP-240), Airspace-Rules and Aeronautical Information Division, Air Traffic Rules and Procedures Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267-9252.

SUPPLEMENTARY INFORMATION:

History

On August 31, 1990, the FAA proposed to amend part 75 of the Federal Aviation Regulations (14 CFR part 75) to establish Jet Route J-240 located between Myton, UT, and Blue Mesa, CO (55 FR 35651). Interested parties were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the FAA. No comments objecting to the proposal were received. Except for editorial changes, this amendment is the same as that proposed in the notice. Section 75.100 of part 75 of the Federal Aviation Regulations was republished in Handbook 7400.6G dated September 4, 1990.

The Rule

This amendment to part 75 of the Federal Aviation Regulations designates new Jet Route J-240 located between Myton, UT, and Blue Mesa, CO. This jet route will improve the flow of traffic arriving the Salt Lake City terminal area. A future standard terminal arrival route (STAR) into Salt Lake City is planned as a result of this route. This route is designed to establish the optimum use of the airspace and reduce controller workload.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 75

Aviation safety, Jet routes.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, part 75 of the Federal Aviation Regulations (14 CFR part 75) is amended, as follows:

PART 75—ESTABLISHMENT OF JET ROUTES AND AREA HIGH ROUTES

1. The authority citation for part 75 continues to read as follows:

Authority: 49 U.S.C. 1348(a), 1354(a), 1510; Executive Order 10854; 49 U.S.C. 106(g) (Revised Pub. L. 97–449, January 12, 1983); 14 CFR 11.69.

§ 75.100 [Amended]

2. Section 75.100 is amended as follows:

J–240 [New]

From Myton, UT, to Blue Mesa, CO.

Issued in Washington, DC, on December 3, 1990

William C. Davis,

Manager, Airspace-Rules and Aeronautical Information Division.

[FR Doc. 90–29315 Filed 12–13–90; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 133

[Docket No. 85P-0584]

Cheeses: Amendment of Standards of Identity To Permit Use of Antimycotics on the Exterior of Bulk Cheeses During Curing and Aging and To Update the Formats of Several Standards; Amendment

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is correcting a final rule that amended standards of identity for several cheeses to permit the use of antimycotics on the exterior of bulk cheeses during curing and aging and on the exterior of those cheeses for manufacturing (August 4, 1989; 54 FR 32050). In publishing the amendment to § 133.127(a)(1) (21 CFR 133.127(a)(1)), "60 percent by weight," rather than the correct "80 percent by weight," was published. This document corrects that error.

EFFECTIVE DATE: October 3, 1989.

FOR FURTHER INFORMATION CONTACT: Karen L. Carson, Center for Food Safety and Applied Nutrition (HFF–414), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–485–0110.

SUPPLEMENTARY INFORMATION: In the Federal Register of August 4, 1989 (54 FR 32050), FDA published a final rule that amended the standards of identity for several cheeses to permit the use of antimycotics on the exterior of bulk cheeses during curing and aging and on the exterior of those cheeses for manufacturing. In amending § 133.127 (21 CFR 133.127) the maximum moisture content was inadvertently given as "60" instead of "80". This document is amending § 133.127 by removing "60" and replacing it with "80" as determined by the method described in 21 CFR 133.5.

Notice and public procedure on this correction is unnecessary because FDA is merely correcting a typographical error.

List of Subjects in 21 CFR Part 133

Cheese, Food grades and standards, Food labeling.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 133 is amended as follows:

PART 133—CHEESES AND RELATED CHEESE PRODUCTS

1. The authority citation for 21 CFR part 133 continues to read as follows:

Authority: Secs. 201, 401, 403, 409, 701, 706 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321, 341, 343, 348, 371, 376).

§ 133.127 [Amended]

2. Section 133.127 is amended in paragraph (a) by removing "60" and replacing it with "80".

Dated: December 10, 1990.

Alan L. Hoeting,

Acting Associate Commissioner for Regulatory Affairs.

[FR Doc. 90–29305 Filed 12–13–90; 8:45 am]

BILLING CODE 4160-01-M

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21 CFR Part 510

Animal Drugs, Feeds, and Related Products; Change of Sponsor Name

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect the change of sponsor name from Anaquest, a Division of BOC, Inc., to Anaquest, Inc.

EFFECTIVE DATE: December 14, 1990.

FOR FURTHER INFORMATION CONTACT: Benjamin A. Puyot, Center for Veterinary Medicine (HFV–130), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–443–1414.

SUPPLEMENTARY INFORMATION: Anaquest, a Division of BOC, Inc., has advised FDA of a change of sponsor name from Anaquest, a Division of BOC, Inc., to Anaquest, Inc. The agency is amending the regulations in 21 CFR 510.600(c)(1) and (c)(2) to reflect this change.

List of Subjects in 21 CFR Part 510

Administrative practice and procedure; Animal drugs; Labeling; Reporting and recordkeeping requirements.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, 21 CFR part 510 is amended as follows:

PART 510—NEW ANIMAL DRUGS

1. The authority citation for 21 CFR part 510 continues to read as follows:

Authority: Secs. 201, 301, 501, 502, 503, 512, 701, 706 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321, 331, 351, 352, 353, 360b, 371, 376).

§ 510.600 [Amended]

2. Section 510.600 *Names, addresses, and drug labeler codes of sponsors of approved applications* is amended in the table in paragraph (c)(1) in the entry for "Anaquest, a Division of BOC, Inc.," and in the table in paragraph (c)(2) in the entry for "010019" by removing "Anaquest, a Division of BOC, Inc.," and replacing it with "Anaquest, Inc."

Dated: November 27, 1990.

Robert C. Livingston,

Director, Office of New Animal Drug Evaluation, Center for Veterinary Medicine.

[FR Doc. 90–29306 Filed 12–13–90; 8:45 am]

BILLING CODE 4160-01-M

PENSION BENEFIT GUARANTY CORPORATION

29 CFR Part 2619

Valuation of Plan Benefit in Single-Employer Plans; Amendment Adopting Additional PBGC Rates

AGENCY: Pension Benefit Guaranty Corporation.

ACTION: Final rule.

SUMMARY: This amendment to the regulation of Valuation of Plan Benefits in Single-Employer Plans contains the interest rates and factors for the period beginning January 1, 1991. The use of these interest rates and factors to value benefits is mandatory for some terminating single-employer pension plans and optional for others. The Pension Benefit Guaranty Corporation adjusts the interest rates and factors periodically to reflect changes in financial and annuity markets. This amendment adopts the rates and factors applicable to plans that terminate on or after January 1, 1991 and will remain in effect until the PBGC issues new interest rates and factors.

EFFECTIVE DATE: January 1, 1991.

FOR FURTHER INFORMATION CONTACT: J. Ronald Goldstein, Senior Counsel, Office of the General Counsel, Code 22500, Pension Benefit Guaranty Corporation, 2020 K Street, NW., Washington, DC 20006, 202-778-8850 (202-778-8859 for TTY and TDD only). These are not toll-free numbers.

SUPPLEMENTARY INFORMATION: The Pension Benefit Guaranty Corporation's ("PBGC's") regulation on Valuation of Plan Benefits in Single-Employer Plans (29 CFR part 2619) sets forth the methods for valuing plan benefits of terminating single-employer plans covered under title IV of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). Under ERISA section 4041(c), all plans wishing to terminate in a distress termination must value guaranteed benefits and "benefit liabilities", i.e., all benefits provided under the plan as of the plan termination date, using the formulas set forth in part 2619, subpart C. (Plans terminating in a standard termination may, for purposes of the Standard Termination Notice filed with PBGC, use these formulas to value benefit liabilities, although this is not required.) In addition, when the PBGC terminates an underfunded plan involuntarily pursuant to ERISA section 4042(a), it uses the subpart C formulas to determine the amount of the plan's underfunding.

Appendix B in part 2619 sets forth the interest rates and factors that are to be used in the formulas contained in the regulation. Because these rates and factors are intended to reflect current conditions in the financial and annuity markets, it is necessary to update the rates and factors periodically.

The rates and factors currently in use have been in effect since December 1, 1990. This amendment adds to appendix B a new set of interest rates and factors for valuing benefits in plans that terminate on or after January 1, 1991, which set reflects a decrease of ¼ percent in the immediate interest rate from 7½ to 7¼ percent.

Generally, the interest rates and factors will be in effect for at least one month. However, any published rates and factors will remain in effect until such time as the PBGC publishes another amendment changing them. Any change in the rates normally will be published in the **Federal Register** by the 15th of the month preceding the effective date of the new rates or as close to that date as circumstances permit.

The PBGC has determined that notice and public comment on this amendment are impracticable and contrary to the public interest. This finding is based on the need to determine and issue new interest rates and factors promptly so that the rates can reflect, as accurately as possible, current market conditions.

Because of the need to provide immediate guidance for the valuation of benefits in plans that will terminate on or after January 1, 1991, and because no adjustment by ongoing plans is required by this amendment, the PBGC finds that good cause exists for making the rates set forth in this amendment effective less than 30 days after publication.

The PBGC has determined that this is not a "major rule" under the criteria set forth in Executive Order 12291, because it will not result in an annual effect on the economy of $100 million or more, a major increase in costs for consumers or individual industries, or significant adverse effects on competition, employment, investment, productivity, or innovation.

List of Subjects in 29 CFR Part 2619

Employee benefit plans, Pension insurance, Pensions.

In consideration of the foregoing, part 2619 of chapter XXVI, title 29, Code of Federal Regulations, is hereby amended as follows:

1. The authority citation for part 2619 continues to read as follows:

Authority: 29 U.S.C. 1301(a), 1302(b)(3), 1341, 1344, and 1362 (1988).

2. Rate Set 89 of appendix B is revised and Rate Set 90 of appendix B is added to read as follows. The introductory text is republished for the convenience of the reader and remains unchanged.

Appendix B—Interest Rates and Quantities Used to Value Immediate and Deferred Annuities

In the table that follows, the immediate annuity rate is used to value immediate annuities, to compute the quantity "Gy" for deferred annuities and to value both portions of a refund annuity. An interest rate of 5% shall be used to value death benefits other than the decreasing term insurance portion of a refund annuity. For deferred annuities, k_1, k_2, k_3, n_1, and n_2 are defined in § 2619.45.

Rate set	For plans with a valuation date		Immediate annuity rate (percent)	Deferred annuities				
	On or after	Before		k_1	k_2	k_3	n_1	n_2
*	*	*	*	*	*			
89	Dec. 1, 1990	Dec. 31, 1990	7.50	1.0675	1.0550	1.0400	7	8
90	Jan. 1, 1991		7.25	1.0650	1.0525	1.0400	7	8

James B. Lockhart III,

Executive Director, Pension Benefit Guaranty Corporation.

[FR Doc. 90-29416 Filed 12-13-90; 8:45 am]

BILLING CODE 7708-01M

29 CFR Part 2619

Valuation of Plan Benefits in Single-Employer Plans; Expected Retirement Age

AGENCY: Pension Benefit Guaranty Corporation.

ACTION: Final rule.

SUMMARY: This rule amends the Pension Benefit Guaranty Corporation's regulation on Valuation of Plan Benefits in Single-Employer Plans (29 CFR part 2619) by adding a new Table I-91 to appendix D. Table I-91 applies to any plan being terminated either in a distress termination or involuntarily by

the PBGC, with a valuation date falling in 1991, and is used to determine expected retirement ages for plan participants. This Table is needed in order to compute the value of early retirement benefits and, thus, the total value of benefits under the plan.

EFFECTIVE DATE: January 1, 1991.

FOR FURTHER INFORMATION CONTACT: Renae R. Hubbard, Special Counsel, Office of the General Counsel (22500), Pension Benefit Guaranty Corporation, 2020 K Street NW., Washington, DC 20006; 202-778-8850 (202-778-8859 for TTY and TDD). (These are not toll-free numbers.)

SUPPLEMENTARY INFORMATION: The regulation of the Pension Benefit Guaranty Corporation ("PBGC") on Valuation of Plan Benefits in Single-Employer Plans (29 CFR part 2619) sets forth the methods for valuing plan benefits of terminating single-employer plans covered under title IV of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). Although the amendments of title IV effected by the Single-Employer Pension Plan Amendments Act of 1986 and the Pension Protection Act (part II of subtitle D of title IX of the Omnibus Budget Reconciliation Act of 1987) change significantly the rules for terminating single-employer plans, the rules for valuing benefits in such plans are much the same. Under ERISA section 4041(c), plans wishing to terminate in a distress termination generally must value guaranteed benefits and benefit liabilities under the plan using formulas set forth in part 2619, subpart C. (Plans terminating in a standard termination may, for purposes of the Standard Termination Notice filed with PBGC, use these formulas to value benefit liabilities, although this is not required.) In addition, when the PBGC terminates an underfunded plan involuntarily pursuant to ERISA section 4042(a), it uses the subpart C formulas to determine the amount of the plan's underfunding.

Under § 2619.46, early retirement benefits are valued based on the annuity starting date, if a retirement date has been selected, or the expected retirement age, if the annuity starting date is not known on the valuation date. Subpart D of part 2619 sets forth rules for determining the expected retirement ages for plan participants entitled to early retirement benefits. Appendices D and E of part 2619 contain tables and examples to be used in determining the expected early retirement ages.

There are two sets of tables in appendix D. The first set, Selection of Retirement Rate Category (I-79 through I-90), is used to determine whether a participant has a low, medium, or high probability of retiring early. The second set of tables, Expected Retirement Ages for Individuals in the Low/Medium/High Categories (II-A, II-B, and II-C), is used to determine the expected retirement age after the probability of early retirement has been determined.

The first set of tables determines the probability of early retirement based on the year a participant would reach normal retirement age and the participant's monthly benefit at normal retirement age. The second set of tables establishes, by probability category, the expected retirement age based on both the earliest age a participant could retire under the plan and the normal retirement age under the plan. This expected retirement age is used to compute the value of the early retirement benefit and, thus, the total value of benefits under the plan.

Tables I-79 through I-90 in appendix D establish retirement rate categories for the calendar years 1979 through 1990. The table for each year applies only to plans with valuation dates in that year. This document amends appendix D to add Table I-91 in order to provide an updated correlation, appropriate for calendar year 1991, between the amount of a participant's benefit and the probability that the participant will elect early retirement. Table I-91 will be used to value benefits in plans with valuation dates that occur during calendar year 1991.

The PBGC has determined that notice of and public comment on this rule are impracticable and contrary to the public interest.

Plan administrators need to be able to estimate accurately the value of plan benefits as early as possible before initiating the termination process. For that purpose, if a plan has a valuation date in 1991, the plan administrator needs the updated table being promulgated in this rule. Accordingly, the public interest is best served by issuing this table expeditiously, without an opportunity for notice and comment, to allow as much time as possible to estimate the value of plan benefits with the proper table for plans with valuation dates in early 1991. Moreover, because of the need to provide immediate guidance for the valuation of benefits under such plans, and because no adjustment by ongoing plans is required by this amendment, the PBGC finds that good cause exists for making this amendment to the regulation effective less than 30 days after publication.

The PBGC has determined that this is not a "major rule" under the criteria set forth in Executive Order 12291 because it will not result in an annual effect on the company of $100 million or more, a major increase in costs for consumers or individual industries, or significant adverse effects on competition, employment, investment, productivity or innovation.

Because no general notice of proposed rulemaking is required for this regulation, the Regulatory Flexibility Act of 1980 does not apply (5 U.S.C. 601(2)).

List of Subjects in 29 CFR Part 2619

Employee benefit plans, Pension insurance, Pensions.

In consideration of the foregoing, appendix D to part 2619 of subchapter C of chapter XXVI of title 29, Code of Federal Regulations, is hereby amended as follows:

1. The authority citation for part 2619 continues to read as follows:

Authority: 29 U.S.C. 1301(a), 1302(b)(3), 1341, 1344, and 1362.

2. Appendix D to part 2619 is amended by adding Table I-91 as follows:

Appendix D—Tables Used to Determine Expected Retirement Age

* * * * *

TABLE I-91—SELECTION OF RETIREMENT RATE CATEGORY [FOR PLANS WITH VALUATION DATES AFTER DECEMBER 31, 1990, AND BEFORE JANUARY 1, 1992]

Participant reaches NRA in year	Participant's retirement rate category is			
	Low [1] if monthly benefit at NRA is less than	Medium [2] if monthly benefit at NRA is		High [3] if monthly benefit at NRA is greater than
		From	To	
1992	343	343	1,444	1,444
1993	356	356	1,499	1,499
1994	368	368	1,551	1,551
1995	380	380	1,601	1,601
1996	391	391	1,648	1,648
1997	402	402	1,695	1,695
1998	414	414	1,745	1,745
1999	426	426	1,795	1,795
2000	438	438	1,847	1,847
2001 or later	451	451	1,901	1,901

[1] Table II-A.
[2] Table II-B.
[3] Table II-C.

Issued at Washington, DC, this 7th day of December, 1990.

James B. Lockhart III,

Executive Director, Pension Benefit Guaranty Corporation.

[FR Doc. 90-29415 Filed 12-13-90; 8:45 am]

BILLING CODE 7708-01-M

29 CFR Part 2621

Limitation on Guaranteed Benefits in Single-Employer Plans

AGENCY: Pension Benefit Guaranty Corporation.

ACTION: Final rule.

SUMMARY: This rule amends appendix A of the limitation on Guaranteed Benefits regulation of the Pension Benefit Guaranty Corporation ("PBGC") by adding the maximum guaranteeable pension benefit that may be paid by the PBGC with respect to a plan participant in a single-employer pension plan that terminates in 1991. The maximum guaranteeable benefit is computed in accordance with the formula in section 4022(b)(3) of the Employee Retirement Income Security Act of 1974, which provides that the maximum guaranteeable benefit is based on the contribution and benefit base determined under section 230 of the Social Security Act. The latter number is adjusted annually, and that adjustment automatically changes the dollar amount of the maximum guaranteeable benefit paid by PBGC. The effect of this amendment is to advise plan participants and beneficiaries of the increased maximum paranteeable benefit for 1991.

EFFECTIVE DATE: January 1, 1991.

FOR FURTHER INFORMATION CONTACT: Renae R. Hubbard, Special Counsel, Office of the General Counsel, Code 22500, Pension Benefit Guaranty Corporation, 2020 K Street, NW., Washington, DC 20006, 202-778-8823 (202-778-8859 for TTY and TTD). These are not toll-free numbers.

SUPPLEMENTARY INFORMATION: Section 4022(b) of the Employee Retirement Income Security Act of 1974, as amended, ("ERISA") provides for certain limitations on benefits guaranteed by the Pension Benefit Guaranty Corporation ("PBGC") in terminating single-employer pension plans covered under title IV of ERISA. One of the limitations set forth in section 4022(b)(3) is a dollar ceiling on the amount of the monthly benefit that may be paid to a plan participant by the PBGC. Subparagraph (B) of section 4022(b)(3) provides that the amount of monthly benefit payable in the form of a life annuity beginning at age 65 shall not exceed "$750 multiplied by a fraction, the numerator of which is the contribution and benefit base (determined under section 230 of the Social Security Act) in effect at the time the plan terminates and the denominator of which is such contribution and benefit base in effect in calendar year 1974 [$13,200]". This formula is also set forth in § 2621.3(a)(2) of the PBGC's regulation entitled Limitation on Guaranteed Benefits in Single-Employer Plans (29 CFR part 2621).

The Social Security Amendments of 1977 added special increases to the contribution and benefit base. However, the amended Social Security Act specifically states that, for the purpose of section 4022(b)(3)(B) of ERISA, the contribution and benefit base for each year after 1976 will be the base that would have been determined for each year if the law in effect immediately before the amendment had remained in effect without change (the "old-law contribution and benefit base"). 42 U.S.C. 430(d) (1982). Section 10208 of the Omnibus Budget Reconciliation Act of 1989 (Public Law 101-239, enacted December 19, 1989) ("OBRA '89") amended section 230 of the Social Security Act to provide for the inclusion of certain deferred compensation in the determination of the contribution and benefit base for 1990 and future years. Each year the Social Security Administration determines, and notifies the PBGC of, the old-law contribution and benefit base to be used by the PBGC under these provisions.

The PBGC has been notified by the Social Security Administration that, under section 230 of the Social Security Act as amended by OBRA '89, $39,600 is the old-law contribution and benefit base that is to be used to calculate the PBGC maximum guaranteeable benefit for 1991. Accordingly, the formula under section 4022(b)(3)(B) of ERISA and 29 CFR 2621.3(a)(2) is: $750 multiplied by $39,600/$13,200. Thus, the maximum monthly benefit guaranteeable by the PBGC in 1991 is $2,250.00 per month in the form of a life annuity beginning at age 65. If a benefit is payable in a different form or begins at a different age, the maximum guaranteeable amount will be the actuarial equivalent of $2,250.00 per month.

Appendix A to part 2621 lists the maximum guaranteeable benefit payable by the PBGC to participants in single-employer plans that have terminated in each year from 1974 through 1990. This amendment updates appendix A for plans that terminate in 1991.

Because the maximum guaranteeable benefit is determined according to the formula in section 4022(b)(3)(B) of ERISA, and this amendment makes no change in its method of calculation but simply lists the 1991 maximum guaranteeable benefit amount for the public's knowledge, general notice of proposed rulemaking is not required. Moreover, because the 1991 maximum guaranteeable benefit is effective, under the statute, at the time that the Social Security contribution and benefit base is effective, *i.e.*, January 1, 1991, and is not dependent on the issuance of this regulation, the PBGC finds that good cause exists for making this amendment effective less than 30 days after publication (5 U.S.C. 553).

The PBGC has determined that this is not a "major rule" under the criteria set forth in Executive Order 12291, because it will not result in an annual effect on the economy of $100 million or more, a major increase in costs for consumers or individual industries, or significant adverse effects on competition, employment, investment, productivity, or innovation.

Because no general notice of proposed rulemaking is required for this regulation, the Regulatory Flexibility Act of 1980 does not apply (5 U.S.C. 601(2)).

List of Subjects in 29 CFR Part 2621

Employee benefit plans, Pension insurance, and Pensions.

PART 2621—LIMITATION ON GUARANTEED BENEFITS IN SINGLE-EMPLOYER PLANS

1. The authority citation for part 2621 continues to read as follows:

Authority: 29 U.S.C. 1302, 1322, 1322b.

2. Appendix A to part 2621 is amended by adding a new entry to read as follows. The introductory text is reproduced for the convenience of the reader and remains unchanged.

Appendix A to Part 2621—Maximum Guaranteeable Monthly Benefit

The following table lists by year the maximum guaranteeable monthly benefit payable in the form of a life annuity commencing at age 65 as described by § 2621.3(a)(2) to a participant in a plan that terminated in that year:

Year	Maximum guaranteeable monthly benefit
* * * * *	
1991	$2,250.00

Issued at Washington, DC this 7th day of December, 1990.

James B. Lockhart III,

Executive Director, Pension Benefit Guaranty Corporation.

[FR Doc. 90-29417 Filed 12-13-90; 8:45 am]

BILLING CODE 7708-01-M

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29 CFR Part 2676

Valuation of Plan Benefits and Plan Assets Following Mass Withdrawal—Interest Rates

AGENCY: Pension Benefit Guaranty Corporation.

ACTION: Final rule.

SUMMARY: This is an amendment to the Pension Benefit Guaranty Corporation's regulation on Valuation of Plan Benefits and Plan Assets Following Mass Withdrawal (29 CFR part 2676). The regulation prescribes rules for valuing benefits and certain assets of multiemployer plans under sections 4219(c)(1)(D) and 4281(b) of the Employee Retirement Income Security Act of 1974. Section 2676.15(c) of the regulation contains a table setting forth, for each calendar month, a series of interest rates to be used in any valuation performed as of a valuation date within that calendar month. On or about the fifteenth of each month, the PBGC publishes a new entry in the table for the following month, whether or not the rates are changing. This amendment adds to the table the rate series for the month of January 1991.

EFFECTIVE DATE: January 1, 1991.

FOR FURTHER INFORMATION CONTACT: Deborah C. Murphy, Attorney, Office of the General Counsel (22500), Pension Benefit Guaranty Corporation, 2020 K Street, NW., Washington, DC 20006; 202-778-8820 (202-778-8859 for TTY and TDD). (These are not toll-free numbers.)

SUPPLEMENTARY INFORMATION:

The PBGC finds that notice of and public comment on this amendment would be impracticable and contrary to the public interest, and that there is good cause for making this amendment effective immediately. These findings are based on the need to have the interest rates in this amendment reflect market conditions that are as nearly current as possible and the need to issue the interest rates promptly so that they are available to the public before beginning of the period to which they apply. (*See* 5 U.S.C. 533 (b) and (d).) Because no general notice of proposed rulemaking is required for this amendment, the Regulatory Flexibility Act of 1980 does not apply (5 U.S.C. 601(2)).

The PBGC has also determined that this amendment is not a "major rule" within the meaning of Executive Order 12291 because it will not have an annual effect on the Economy of $100 million or more; or create a major increase in costs or prices for consumers, individual industries, or geographic regions; or have significant adverse effects on competition, employment, investment or innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

List of Subjects in 29 CFR Part 2676

Employee benefit plans and Pensions.

In consideration of the foregoing, part 2676 of subchapter H of chapter XXVI of title 29, Code of Federal Regulations, is amended as follows:

PART 2676—VALUATION OF PLAN BENEFITS AND PLAN ASSETS FOLLOWING MASS WITHDRAWAL

1. The authority citation of part 2676 continues to read as follows:

Authority: 29 U.S.C. 1302(b)(3), 1399(c)(1)(D), and 1441(b)(1).

2. In § 2676.15, paragraph (c) is amended by adding to the end of the table of interest rates therein the following new entry:

§ 2676.15 Interest.

* * * * *

(c) *Interest rates.*

For valuation dates occurring in the month:	The values for i_k are:															
	i_1	i_2	i_3	i_4	i_5	i_6	i_7	i_8	i_9	i_{10}	i_{11}	i_{12}	i_{13}	i_{14}	i_{15}	i_u
	*		*		*			*			*			*		
January 1991	.0825	.08	.0775	.075	.0725	.07	.07	.07	.07	.07	.065	.065	.065	.065	.065	.05875

Issued at Washington, DC, on this 7th day of December 1990.

James B. Lockhart III,

Executive Director, Pension Benefit Guaranty Corporation.

[FR Doc. 90-29414 Filed 12-13-90; 8:45 am]

BILLING CODE 7708-01-M

DEPARTMENT OF THE INTERIOR

Minerals Management Service

30 CFR Parts 202, 203, and 206

Oil and Gas Product Valuation Regulations

December 5, 1990.

AGENCY: Minerals Management Service (MMS), Interior.

ACTION: Notice of training seminars.

SUMMARY: The Minerals Management Service (MMS) hereby gives notice that it will present training seminars at the locations and on the dates identified below, on oil and gas transportation and gas processing allowance regulations that were published in the **Federal Register** on January 15, 1988 (53 FR 1184 and FR 1230, respectively). The seminars will address specific issues regarding transportation and processing allowances and the reporting problems encountered since the regulations became effective March 1, 1988.

DATES: Seminars will be held on January 23, 1991; January 30, 1991; and February 5, 1991 See Supplementary Information.

ADDRESSES: Seminars will be held in Denver, CO; New Orleans, LA; and Dallas, TX. See Supplementary Information.

FOR FURTHER INFORMATION CONTACT: Mr. James P. Morris, Chief, Allowance Accounting Section, Transportation and Processing Valuation Branch, Royalty Valuation and Standards Division (303) 231-3729, or (FTS) 326-3729, or Mr. Stanley J. Brown, Chief, Transportation and Processing Valuation Branch, Royalty Valuation and Standards Division (303) 231-3063 or (FTS) 326-3063.

SUPPLEMENTARY INFORMATION: The oil and gas product valuation regulations that were published in the **Federal Register** on January 15, 1988, amended and clarified existing regulations governing the valuation of oil and gas for royalty computation purposes. The regulations govern the methods by which value is determined when computing oil or gas royalties under Federal (onshore or Outer Continental

Shelf) and Indian (tribal and allotted) oil and gas leases (except leases on the Osage Indian Reservation, Osage County, Oklahoma).

The training seminars will include discussions on the following topics:

- Specific issues contained in the transportation and processing allowance regulations.
- The reporting problems encountered.
- Systems development and billing procedures.
- Information collection requirements and reporting forms (MMS-4109, "Gas Processing Allowance Summary Report;" MMS-4110, "Oil Transportation Allowance Report;" and MMS-4295 "Gas Transportation Allowance Report") required to support oil and gas transportation and processing allowance deductions from royalties due. Assistance will be provided on how to properly complete the forms.

Location and Dates

The seminars will be held from 8:30 a.m. to 4 p.m. each day on the dates and at the locations shown below:

Dates	Locations
January 23, 1991	Embassy Suites, 7525 East Hampden Avenue, Denver, Colorado 80231, (303) 696-6644.
January 30, 1991	Holiday Inn Crown Plaza, 333 Poydras, New Orleans, Louisiana 70130, (504) 525-9444.
February 5, 1991	Richardson Hilton Tower, 81 North Central Expressway, Dallas, Texas 75080, (214) 644-4000.

Registration and Reservations

Persons interested in attending one of these seminars should contact Ms. LuCinda Rood of our office at (303) 231-3396 or (FTS) 326-3396 on or before January 16, 1991. Due to space limitations, the number of attendees may be limited at each seminar location and will be provided on a first-come-first-served basis. Persons interested in hotel reservations should contact the hotel directly at the telephone number(s) identified above.

If insufficient interest is shown in attending any of the individual training sessions, such sessions may be cancelled and alternate arrangements will be made for those who expressed interest.

Dated: December 10, 1990.

Jerry D. Hill,

Associate Director for Royalty Management.

[FR Doc. 90-29356 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-MR-M

30 CFR Part 250

RIN 1010-AB51

Oil and Gas and Sulphur Operations in the Outer Continental Shelf

AGENCY: Minerals Management Service, Interior.

ACTION: Final rule.

SUMMARY: This notice of final rulemaking modifies 30 CFR part 250, subpart A—General, to reference later editions of two documents previously incorporated by reference into the regulatory program of the Minerals Management Service (MMS). In addition, a correction to MMS regulations is made to reflect a reorganization within one of these documents. This action serves as a notice to the public of the changes MMS is making to its regulatory program. Comments from the public based on the proposed rule and the agency's responses are also contained within the notice.

EFFECTIVE DATES: January 14, 1991. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 14, 1991.

FOR FURTHER INFORMATION CONTACT: Gerald D. Rhodes; Chief, Branch of Rules, Orders, and Standards; Minerals Management Service; Mail Stop 4700; 381 Elden Street; Herndon, Virginia 22070-4817, telephone (703) 787-1600 or (FTS) 393-1600.

SUPPLEMENTARY INFORMATION: The MMS regulatory program incorporates by reference at 30 CFR 250.1 a number of documents published by various industry standard setting institutes. New editions of two of these documents have been published. The MMS, in accordance with 1 CFR part 51, is issuing this rulemaking to incorporate both of these later editions.

The MMS published a notice of proposed rulemaking (NPR) on August 2, 1990 (55 FR 31405). That notice proposed updating references within the MMS regulatory program to American Petroleum Institute (API) Recommended Practices (RP) 2A—Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms (18th Edition), and 500B—Recommended Practice for Classification of Locations for Electrical Installations at Drilling Rigs and Production Facilities on Land and on Marine Fixed and Mobile Platforms (3rd Edition).

The MMS received one response to the NPR. The response expressed no concerns with the updating of the two documents that were the subjects of the rulemaking.

The response did, however, raise one specific and several general concerns. These concerns and MMS's responses to them are discussed in detail in the following sections.

General Concerns

Comment—One comment received in response to the proposed rule expressed concern that the two documents proposed for incorporation by reference were merely recommended practices and that incorporation, in effect, converts them to requirements. Further, the comment suggested the procedure of incorporation by reference would not comply with the Administrative Procedure Act because the documents themselves could not be modified in response to comments received under the proposed rule.

Response—The MMS does not agree with this argument. Procedures have been developed by the Office of the Federal Register (1 CFR part 51) that clearly identify the process to be used by Federal agencies to incorporate documents by reference into their regulatory programs. This rulemaking fully complies with those procedures. It is true that the proposed rulemaking is unlikely to directly result in modification to the documents proposed for incorporation. However, if substantive comments received in response to the proposed rulemaking warranted it, MMS retains the right to: (1) Not incorporate the subject documents, (2) incorporate only portions of the subject documents, or (3) excerpt portions of the documents directly into its regulatory program. Lastly, MMS has membership on many of the committees that develop these industry standards, and concerns with standards can be addressed in those forums by MMS, as well as by those affected by them.

Comment—One comment notes that there are many small entities that can be indirectly affected economically by any rules governing Outer Continental Shelf (OCS) operations. The comment indirectly appears to disagree with the assertion by MMS that this rulemaking does not qualify as a "major rule" as defined by Executive Order (E.O.) 12291.

Response—The MMS asserts that this rulemaking does not exceed the three criteria identified in E.O. 12291 that define a major rule: (1) It will not have an annual effect on the economy of $100 million or more; (2) it will not result in a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; and (3)

it will not result in significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The MMS also asserts that the majority of its rulemakings, including this particular one, do not directly affect small business entities because offshore activities by their nature are so complex and expensive as to exclude them. We recognize that a major rule potentially could indirectly affect small business entities and would therefore have to be carefully scrutinized. This rulemaking, however, merely updates existing requirements and does not qualify as a major rule.

Section-Specific Comments

Section 250.142 Periodic Inspection and Maintenance

Comment—Paragraph (a) establishes a minimum requirement of 5 years for the interval between inspections conducted in accordance with API RP 2A. The comment asserts that this minimum interval is arbitrary.

Response—The minimum inspection requirement of § 250.142(a) is not the subject of this rulemaking. This rule merely corrects the citation within API RP 2A under which inspections are conducted because of a reorganization of that document. Section 250.142(a) does allow for variance from the minimum inspection interval where an operator or lessee can show the Regional Supervisor that there is good cause.

Author

The principal author of this final rule is Jeff Wiese, Offshore Rules and Operations Division, MMS.

E.O. 12291

The Department of the Interior (DOI) has determined that this document does not constitute a major rule under E.O. 12291 because: (1) It will not have an annual effect on the economy of $100 million or more; (2) it will not result in a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; and (3) it will not result in significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets. The decision to incorporate selected industry standards was part of the decision to restructure and consolidate all OCS oil and gas and sulphur operating rules into 30 CFR part 250 and was analyzed fully at that point. Most of the provisions of this rulemaking were contained in previous editions and do not represent new or added requirements. Those new or added requirements are generally considered to be incremental improvements.

Regulatory Flexibility Act

The DOI has determined that this final rule will not have a significant economic effect on a substantial number of small entities. Any direct effects of this rulemaking will primarily affect OCS lessees and operators; entities that are not considered small due to the technical complexities and financial resources necessary to conduct OCS activities. The indirect effects of this rulemaking on small entities that provide support for offshore activities have also been determined to be small.

Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.*

(OMB approval No. 1010-0030).

Takings Implication Assessment

The DOI certifies that this final rule does not represent a governmental action capable of interference with constitutionality protected property rights. A Takings Implication Assessment prepared pursuant to E.O. 12630, Government Action and Interference with Constitutionality Protected Property Rights, is not required.

National Environmental Policy Act

The MMS has determined that this action does not constitute a major Federal action significantly affecting the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

List of Subjects in 30 CFR Part 250

Continental shelf, Environmental impact statements, Environmental protection, Government contracts, Incorporation by reference, Investigations, Mineral royalties, Oil and gas development and production, Oil and gas exploration, Oil and gas reserves, Penalties, Pipelines, Public lands-mineral resources, Public lands-rights-of-way, Reporting and recordkeeping requirements, Sulphur development and production, Sulphur exploration, Surety bonds.

Dated: November 1, 1990.

Barry Williamson,

Director, Minerals Management Service.

For the reasons set forth in the preamble, 30 CFR part 250 is amended as follows:

PART 250—OIL AND GAS AND SULPHUR OPERATIONS IN THE OUTER CONTINENTAL SHELF

1. The authority citation for part 250 continues to read as follows:

Authority: Sec. 204, Pub. L. 95-372, 92 Stat. 629 (43 U.S.C. 1334).

2. Section 250.1 is amended by revising paragraphs (d)(2) and (d)(15) to read as follows:

§ 250.1 Documents incorporated by reference.

* * * * *

(d) * * *

(2) API RP 2A, Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms, 18th Edition, September 1, 1989, API Stock No. 811-00200, Incorporated by Reference at: §§ 250.130(g) and 250.142(a).

* * * * *

(15) API RP 500B, Recommended Practice for Classification of Locations for Electrical Installations at Drilling Rigs and Production Facilities on Land and on Marine Fixed and Mobile Platforms, Third Edition, October 1, 1987, API Stock No. 811-06000, Incorporated by Reference at: §§ 250.53(b), 250.122(e)(4)(i), and 250.123(b)(9)(i).

* * * * *

3. Section 250.142 is amended by revising paragraph (a) to read as follows:

§ 250.142 Periodic inspection and maintenance.

(a) All platforms installed in the OCS shall be inspected periodically in accordance with the provisions of API RP 2A, section 14, Surveys. However, use of an inspection interval which exceeds 5 years shall require prior approval by the Regional Supervisor. Proper maintenance shall be performed to assure the structural integrity of the platform as a workbase for oil and gas operations.

* * * * *

[FR Doc. 90-29016 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-MR-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 271

[FRL-3869-3]

State of Florida; Final Authorization of Revisions to State Hazardous Waste Management Program

AGENCY: Environmental Protection Agency.

ACTION: Immediate final rule.

SUMMARY: Florida has applied for final authorization of revisions to its hazardous waste program under the Resource Conservation and Recovery Act (RCRA). The Environmental Protection Agency (EPA) has reviewed Florida's application and has made a decision, subject to public review and comment, that Florida's hazardous waste program revision satisfies all of the requirements necessary to qualify for final authorization. Thus, EPA intends to approve Florida's hazardous waste program revision. Florida's application for program revision is available for public review and comment.

DATES: Final authorization for Florida's program revision shall be effective February 12, 1991, unless EPA publishes a prior **Federal Register** action withdrawing this immediate final rule. All comments on Florida's program revision application must be received by the close of business January 14, 1991.

ADDRESSES: Copies of Florida's program revision application are available during normal business hours at the following addresses for inspection and copying: Florida Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, Phone 904/488-0300; U.S. EPA Headquarters Library, PM 211A, 401 M Street SW., Washington, DC 20460, Phone: 202/382-5926; U.S. EPA Region IV, Library, 345 Courtland Street NE., Atlanta, Georgia 30365, Phone 404/347-4216, Pricilla Pride, Librarian. Written comments should be sent to Narindar Kumar at the address listed below.

FOR FURTHER INFORMATION CONTACT: Narindar Kumar, Chief, State Programs Section, Waste Programs Branch, Waste Management Division, U.S. EPA, 345 Courtland Street NE., Atlanta, Georgia 30365, Phone (404) 347-2234.

SUPPLEMENTARY INFORMATION:

A. Background

States with final authorization under section 3006(b) of the Resource Conservation and Recovery Act ("RCRA" or "the Act"), 42 U.S.C. 6926(b), have a continuing obligation to maintain a hazardous waste program that is equivalent to, consistent with, and no less stringent than the Federal hazardous waste program. In addition, as an interim measure, the Hazardous and Solid Waste Amendments of 1984 (Pub. L. 98-616, November 8, 1984, hereinafter -"HSWA") allows States to revise their programs to become substantially equivalent instead of equivalent to RCRA requirements promulgated under HSWA authority. States exercising the latter option receive "interim authorization" for the HSWA requirements under section 3006(g) of RCRA, 42 U.S.C. 6926(g), and later apply for final authorization for the HSWA requirements.

Revisions to State hazardous waste programs are necessary when Federal or State statutory or regulatory authority is modified or when certain other changes occur. Most commonly, State program revisions are necessitated by changes to EPA's regulations in 40 CFR parts 260-268 and 124 and 270.

B. Florida

Florida initially received final authorization for its base RCRA program on February 12, 1985 (50 FR 3908, January 29, 1985). On July 31, 1990, Florida submitted a program revision application for additional program approval. Today, Florida is seeking approval of its program revision in accordance with 40 CFR 271.21(b)(3).

EPA has reviewed Florida's application and has made an immediate final decision that Florida's hazardous waste program revision satisfies all of the requirements necessary to qualify for final authorization. Consequently, EPA intends to grant final authorization for the additional program modification to Florida. The public may submit written comments on EPA's immediate final decision until January 14, 1991. Florida's application for program revision is available for inspection and copying at the locations indicated in the "Addresses" section of this notice.

Approval of Florida's program revision shall become effective in 60 days unless an adverse comment pertaining to the State's revision discussed in this notice is received by the end of the comment period. If an adverse comment is received EPA will publish either (1) a withdrawal of the immediate final decision or (2) a notice containing a response to comments which either affirms that the immediate final decision takes effect or reverses the decision.

In order to obtain final authorization for radioactive mixed waste, the State of Florida has demonstrated and certified that its authority to regulate the hazardous components of radioactive mixed wastes, as specified at §§ 403.703(13), 403.703(23), 403.7045(1)(a) and 404.031(13), F.S. (1989) and at FAC Rule 17-730.030 as amended through January 25, 1989, is equivalent to the federal requirements of the RCRA at 40 CFR 261.4(a)(4) and section 1004(27) of RCRA.

On the effective date of final authorization, Florida will be authorized to carry out, in lieu of the Federal program, those provisions of the State's program which are analogous to the Federal program.

EPA shall administer any RCRA hazardous waste permits, or portions of permits, that contain conditions based upon the Federal program provisions for which the State is applying for authorization and which were issued by EPA prior to the effective date of this authorization. EPA will suspend issuance of any further permits under the provisions for which the State is being authorized on the effective date of this authorization.

Florida is not authorized to operate the Federal program on Indian lands. This authority remains with EPA unless provided otherwise in a future statute or regulation.

c. Decision

I conclude that Florida's application for program revision meets all of the statutory and regulatory requirements established by RCRA. Accordingly, Florida is granted final authorization to operate its hazardous waste program as revised.

Florida now has responsibility for permitting treatment, storage, and disposal facilities within its borders and carrying out other aspects of the RCRA-program, subject to the limitations of its program revision application and previously approved authorities. Florida also has primary enforcement responsibilities, although EPA retains the right to conduct inspections under section 3007 of RCRA and to take enforcement actions under section 3008, 3013 and 7003 of RCRA.

Compliance With Executive Order 12291

The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291.

Certification Under the Regulatory Flexibility Act

Pursuant to the provisions of 5 U.S.C. 604(b), I hereby certify that this authorization will not have a significant economic impact on a substantial

number of small entities. This authorization effectively suspends the applicability of certain Federal regulations in favor of Florida's program, thereby eliminating duplicative requirements for handlers of hazardous waste in the State. It does not impose any new burdens on small entities. This rule, therefore, does not require a regulatory flexibility analysis.

List of Subjects in 40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Authority: This notice is issued under the authority of sections 2002(a), 3006 and 7004(b) of the Solid Waste Disposal Act as amended (42 U.S.C. 6912(a), 6926, 6974(b)).

Patrick M. Tobin,

Acting Regional Administrator.

[FR Doc. 90-29211 Filed 12-13-90; 8:45 am]

BILLING CODE 6560-50-M

FEDERAL EMERGENCY MANAGEMENT AGENCY

44 CFR Part 64

[Docket No. FEMA 6897]

List of Communities Eligible for the Sale of Flood Insurance

AGENCY: Federal Emergency Management Agency.

ACTION: Final rule.

SUMMARY: This rule lists communities participating in the National Flood Insurance Program (NFIP). These communities have applied to the program and have agreed to enact certain floodplain management measures. The communities' participation in the program authorizes the sale of flood insurance to owners of property located in the communities listed.

EFFECTIVE DATES: The dates listed in the fourth column of the table.

ADDRESSES: Flood insurance policies for property located in the communities listed can be obtained from any licensed property insurance agent or broker serving the eligible community, or from the National Flood Insurance Program (NFIP) at: Post Office Box 457, Lanham, Maryland 20706, Phone: (800) 638-7418.

FOR FURTHER INFORMATION CONTACT: Frank H. Thomas, Assistant Administrator, Office of Loss Reduction, Federal Insurance Administration, (202) 646-2717, Federal Center Plaza, 500 C Street SW., room 417, Washington, DC 20472.

SUPPLEMENTARY INFORMATION: The National Flood Insurance Program (NFIP), enables property owners to purchase flood insurance at rates made reasonable through a Federal subsidy. In return, communities agree to adopt and administer local floodplain management measures aimed at protecting lives and new construction from future flooding. Since the communities on the attached list have recently entered the NFIP, subsidized flood insurance is now available for property in the community.

In addition, the Director of the Federal Emergency Management Agency has identified the special flood hazard areas in some of these communities by publishing a Flood Hazard Boundary Map. The date of the flood map, if one has been published, is indicated in the fifth column of the table. In the communities listed where a flood map has been published, section 102 of the Flood Disaster Protection Act of 1973, as amended, requires the purchase of flood insurance as a condition of Federal or federally related financial assistance for acquisition or construction of buildings in the special flood hazard area shown on the map.

The Director finds that the delayed effective dates would be contrary to the public interest. The Director also finds that notice and public procedure under 5 U.S.C. 553(b) are impracticable and unnecessary.

The Catalog of Domestic Assistance Number for this program is 83.100 "Flood Insurance."

Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator, Federal Insurance Administration, to whom authority has been delegated by the Director, Federal Emergency Management Agency, hereby certifies that this rule, if promulgated will not have a significant economic impact on a substantial number of small entities. This rule provides routine legal notice stating the community's status in the NFIP and imposes no new requirements or regulations on participating communities.

List of Subjects in 44 CFR Part 64

Flood insurance and floodplains.

PART 64—[AMENDED]

1. The authority citation for part 64 continues to read as follows:

Authority: 42 U.S.C. 4001 et. seq., Reorganization Plan No. 3 of 1978, E.O. 12127.

2. Section 64.6 is amended by adding in alphabetical sequence new entries to the table.

In each entry, a complete chronology of effective dates appears for each listed community. The entry reads as follows:

§ 64.6 List of Eligible Communities.

State	Location	Community no.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date
New Eligibles—Emergency Program:				
New Mexico	Rio Rancho, City of, Sandoval County	350146	Nov. 14, 1990	—
Iowa	Warren County, Unincorporated Areas	190912	Nov. 19, 1990	2-7-78
South Carolina	[1] Lee County, Unincorporated Areas	450126	Nov. 19, 1990, Emerg.	3-3-78
Iowa	Sheffield, City of, Franklin County	190132	Nov. 21, 1990	6-28-74
Do.	Fayette County, Unincorporated Areas	190866	Nov. 27, 1990	8-16-77
Reinstatements—Regular Program:				
Pennsylvania	Woodcock, Township of, Crawford County	421578	July 9, 1975 Emerg. June 18, 1990 Reg. June 18, 1990 Susp. Nov. 14, 1990 Rein.	6-18-90
Do.	Croyle, Township of, Cambria County	421439	Dec. 22, 1975 Emerg. Aug. 15, 1990 Reg. Aug. 15, 1990 Susp. Nov. 14, 1990 Rein.	8-15-90
Alaska	Juneau, City and Borough of, Juneau Division	020009	May 22, 1970 Emerg. Feb. 4, 1981 Reg. Sept. 28, 1990 Susp. Nov. 16, 1990 Rein.	9-28-90

State	Location	Community no.	Effective date authorization/cancellation of sale of flood insurance in community	Current effective map date
North Carolina	Gatesville, Town of, Gates County	370104	July 8, 1975 Emerg. May 13, 1977 Reg. Feb. 4, 1988 Susp. Nov. 20, 1990 Rein.	5-13-77
Ohio	Huron County, Unincorporated Areas	390770	Aug. 3, 1979 Emerg. Aug. 1, 1987 Reg. Aug. 1, 1987 Susp. Nov. 23, 1990 Rein.	8-1-87
Region I:				
Connecticut	Goshen, Town of, Litchfield County	090177	Nov. 16, 1990 Suspension Withdrawn.	11-16-90
Region III:				
Pennsylvania	Bigler, Township of, Clearfield County	421514	do	11-16-90
Do.	Butler, Township of, Schuylkill County	421999	do	11-16-90
Do.	Decatur, Township of, Clearfield County	421189	do	11-16-90
Do.	Everett, Borough of, Bedford County	420119	do	11-16-90
Do.	Gulich, Township of, Clearfield County	421524	do	11-16-90
Do.	Osceola Mills, Borough of, Clearfield County	420313	do	11-16-90
Do.	Rush, Township of, Centre County	421468	do	11-16-90
Virginia	Suffolk, City of, Independent City	510156	do	11-16-90
Region V:				
Michigan	Adrian, Township of, Lenawee County	260635	do	11-16-90
Do.	Northfield, Township of, Washtenaw County	260732	do	11-16-90
Wisconsin	Adams County, Unincorporated Areas	550001	do	11-16-90
Do.	Blair, City of, Trempealeau County	550440	do	11-16-90
Do.	Friendship, Village of, Adams County	550003	do	11-16-90
Do.	La Farge, Village of, Vernon County	550456	do	11-16-90
Do.	Montello, City of, Marquette County	550266	do	11-16-90
Do.	Whitehall, City of, Trempealeau County	550449	do	11-16-90
Do.	Readstown, Village of, Vernon County	550458	do	11-16-90
Do.	Vernon County, Unincorporated Areas	550450	do	11-16-90
Region VI:				
Texas	Alpine, City of, Brewster County	480085	do	11-16-90
Do.	Burnet County, Unincorporated Areas	481209	do	11-16-90
Do.	Granite Shoals, City of, Burnet County	481149	do	11-16-90
Do.	Marble Falls, City of, Burnet County	480093	do	11-16-90
Do.	Meadowlakes, City of, Burnet County	481613	do	11-16-90
Region VIII:				
Nebraska	Indianola, City of, Red Willow County	310382	do	11-16-90
All Zone D Conversions:				
Region VIII:				
Utah	Tooele County, Unincorporated Areas	490140	do	11-16-90

[1] Lee County, South Carolina will be converted to the Regular Program effective *December 15, 1990* the date of the effective FIRM.
Code for reading fourth column: Emerg.—Emergency; Reg.—Regular; Susp.—Suspension; Rein.—Reinstatement.

Issued: November 30, 1990.

C. M. "Bud" Schauerte,

Administrator, Federal Insurance Administration.

[FR Doc. 90-29346 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-21-M

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44 CFR Part 64

[Docket No. FEMA 6898]

List of Communities Eligible for the Sale of Flood Insurance

AGENCY: Federal Emergency Management Agency, FEMA.

ACTION: Final rule.

SUMMARY: This rule lists communities participating in the National Flood Insurance Program (NFIP). These communities were required to adopt floodplain management measures compliant with the NFIP revised regulations that became effective on October 1, 1986. If the communities did not do so by the specified date, they would be suspended from participation in the NFIP. The communities are now in compliance. This rule withdraws the suspension. The communities' continued participation in the program authorizes the sale of flood insurance.

EFFECTIVE DATE: As shown in fifth column.

ADDRESSES: Flood insurance policies for property located in the communities listed can be obtained from any licensed property insurance agent or broker serving the eligible community, or from the NFIP at: P.O. Box 457, Lanham, Maryland 20706, Phone: (800) 638-7418.

FOR FURTHER INFORMATION CONTACT: Frank H. Thomas, Assistant Administrator, Office of Loss Reduction, Federal Insurance Administration, (202) 646-2717, Federal Center Plaza, 500 C Street Southwest, room 416, Washington, DC 20472.

SUPPLEMENTARY INFORMATION: The NFIP enables property owners to purchase flood insurance at rates made reasonable through a Federal subsidy. In return, communities agree to adopt and administer local floodplain management measures aimed at protecting lives and new construction from future flooding.

In addition, the Director of the Federal Emergency Management Agency has identified the Special Flood Hazard Areas in these communities by publishing a Flood Insurance Rate Map. In the communities listed where a flood map has been published, section 102 of the Flood Disaster Protection Act of 1973, as amended, requires the purchase of flood insurance as a condition of Federal or federally related financial assistance for acquisition or construction of buildings in the Special Flood Hazard Area shown on the map.

The Director finds that the delayed effective dates would be contrary to the public interest. The Director also finds that notice and public procedure under 5 U.S.C. 553(b) are impracticable and unnecessary.

The Catalog of Domestic Assistance Number for this program is 83.100 "Flood Insurance."

Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator, Federal Insurance Administration, to whom authority has been delegated by the Director, Federal Emergency Management Agency, hereby certifies that this rule, if promulgated will not have a significant economic impact on a substantial number of small entities. This rule provides routine legal notice stating the community's status in the NFIP and imposes no new requirements or regulations on these participating communities.

List of Subjects in 44 CFR Part 64

Flood insurance and floodplains.

PART 64—[AMENDED]

1. The authority citation for part 64 continues to reads as follows:

Authority: 42 U.S.C. 4001 et seq., Reorganization Plan No. 3 of 1978, E.O. 12127.

2. Section 64.6 is amended by adding in alphabetical sequence new entries to the table.

In each entry, the suspension for each listed community has been withdrawn. The entry reads as follows:

§ 64.6 List of Eligible Communities.

State and community name	County	Community No.	Effective date	
Regular Program Communities				
Colorado:				
Archuleta County	Unincorporated Areas	080273	Nov. 2, 1990	Suspension withdrawn
Bayfield, Town of	La Plata	080098	Do.	
Brush, City of	Morgan	080130	Do.	
Craig, City of	Moffat	080119	Do.	
Gunnison, City of	Gunnison	080080	Do.	
Hayden, Town of	Routt	080157	Do.	
Limon, Town of	Lincoln	080109	Nov. 16, 1990	
Manitou Springs, City of	El Paso	080063	Do.	
Pierce, Town of	Weld	080189	Do.	
Wellington, Town of	Larimer	080104	Do.	
Montana: Miles City, City of	Custer	300014	Do.	
North Dakota: Grand Forks, City of	Grand Forks	385365	Do.	
West Virginia:				
Paw Paw, Town of	Morgan	540252	Do.	
Pratt, Town of	Kanawha	540082	Do.	
Quinwood, Town of	Greenbrier	540244	Do.	
Reedy, Town of	Roane	540184	Do.	

Issued: November 30, 1990.

C.M. "Bud" Schauerte,

Administrator, Federal Insurance Administration.

[FR Doc. 90-29347 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-21-M

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44 CFR Part 65

[Docket No. FEMA-7009]

Changes in Flood Elevation Determinations

AGENCY: Federal Emergency Management Agency.

ACTION: Interim rule.

SUMMARY: This rule lists those communities where modification of the base (100-year) flood elevations is appropriate because of new scientific or technical data. New flood insurance premium rates will be calculated from the modified base (100-year) elevations for new buildings and their contents and for second layer insurance on existing buildings and their contents.

DATES: These modified elevations are currently in effect and amend the Flood Insurance Rate Map (FIRM) in effect prior to this determination.

From the date of the second publication of notice of these changes in a prominent local newspaper, any person has ninety (90) days in which he can request through the community that the Administrator, reconsider the changes. These modified elevations may be changed during the 90-day period.

ADDRESSES: The modified base (100-year) flood elevation determinations are available for inspection at the office of the Chief Executive Officer of the community, listed in the fifth column of the table. Send comments to that address also.

FOR FURTHER INFORMATION CONTACT: Mr. John L. Matticks, Chief, Risk Studies Division, Federal Insurance Administration, Federal Emergency Management Agency, Washington, DC 20472, (202) 646-2767.

SUPPLEMENTARY INFORMATION: The numerous changes made in the base (100-year) flood elevations on the FIRM(s) make it administratively infeasible to publish in this notice all of the modified base (100-year) flood elevations contained on the map. However, this rule includes the address of the Chief Executive Officer of the community where the modified base (100-year) flood elevation determinations are available for inspection.

Any request for reconsideration must be based on knowledge of changed conditions, or new scientific or technical data.

These modifications are made pursuant to section 206 of the Flood Disaster Protection Act of 1973 (Pub. L. 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended, (title XIII of the Housing and Urban Development Act of 1968 (Pub. L. 90-448)), 42 U.S.C. 4001-4128, and 44 CFR part 65.4.

For rating purposes, the revised community number is listed and must be used for all new policies and renewals.

These base (100-year) flood elevations are the basis for the floodplain management measures that the community is required to either adopt or show evidence of being already in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program.

These elevations, together with the floodplain management measures required by § 60.3 of the program regulations are the minimum that are required. They should not be construed to mean the community must change

any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time, enact stricter requirements on its own, or pursuant to policies established by other Federal, State or regional entities.

The changes in the base (100-year) flood elevations, listed below are in accordance with 44 CFR 65.4.

Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator, to whom authority has been delegated by the Director, Federal Emergency Management Agency, hereby certifies that this rule if promulgated will not have a significant economic impact on a substantial number of small entities. This rule provides routine legal notice of technical amendments made to designated special flood hazard areas on the basis of updated information and imposes no new requirements or regulations on participating communities.

List of Subjects in 44 CFR Part 65

Flood insurance and floodplains.

PART 65—[AMENDED]

1. The authority citation for part 65 continues to read as follows:

Authority: 42 U.S.C. 4001 et seq., Reorganization Plan No. 3 of 1978, E.O. 12127.

§ 65.4 [Amended]

2. Section 65.4 is amended by adding in alphabetical sequence new entries to the table.

State and County	Location	Date and Name of Newspaper Where Notice Was Published	Chief Executive Officer of Community	Effective Date of Modification	Community Number
Florida: Orange	Unincorporated areas	November 16, 1990 November 23, 1990 The Orlando Sentinel	The Honorable Hal Marston, Chairman, Orange County Board of Commissioners, 201 Rosalind Avenue, P.O. Box 1393, Orlando, Florida 32809.	October 31, 1990	120179
Illinois: DuPage	Village of Lisle	November 8, 1990 November 15, 1990 Lisle Sun	The Honorable Ronald Ghilardi, Mayor, Village of Lisle, 1040 Burlington Avenue, Lisle, Illinois 60532.	October 26, 1990	170211
Nebraska: Unincorporated areas.	Dakota County	December 6, 1990 December 13, 1990 South Sioux City Star	The Honorable James Huggenberger, Chairman, Dakota County Board of Commissioners, P.O. Box 38, Dakota City, Nebraska 68731.	November 21, 1990	310429
Ohio: Licking	City of Heath	November 28, 1990 December 5, 1990 The Ace News	The Honorable John C. Geller, Mayor, City of Heath, 1287 Hebron Road, Heath, Ohio 43056.	November 15, 1990	390332
South Carolina: Lexington	City of Cayce	November 23, 1990 November 30, 1990 The State-Record Company	The Honorable Archie G. Moore, Mayor, City of Cayce, 1800 Twelfth Street, P.O. Box 2004, Cayce, South Carolina 29171.	November 9, 1990	450131
Tennessee: Shelby	Unincorporated areas	November 8, 1990 November 15, 1990 Memphis Daily News	The Honorable Phillip Wittenberg, Chief Administrative Officer, Shelby County, 160 North Mid-America Mall, Suite 850, Memphis, Tennessee 38103.	October 26, 1990	470214
Texas: Fort Bend	Unincorporated areas	October 22, 1990 October 29, 1990 The Herald Coaster	The Honorable Jodie E. Stavinoha, Fort Bend County Judge, P.O. Box 368, Richmond, Texas 77469.	October 16, 1990	480228 B
Texas: Tarrant and Denton.	City of Fort Worth	November 21, 1990 November 28, 1990 The Fort Worth Star-Telegram	The Honorable Bob Bolen, Mayor of the City of Fort Worth, 1000 Throckmorton, Fort Worth, Texas 76102.	November 14, 1990	480596 D
Washington: Clallam	City of Port Angeles	November 16, 1990 November 23, 1990 Peninsula Daily News	The Honorable Joan Sargent, Mayor, City of Port Angeles, City Hall, 321 East Fifth Street, Port Angeles, Washington 98362.	November 9, 1990	530023

Issued: December 3, 1990.

C.M. "Bud" Schauerte,

Administrator, Federal Insurance Administration.

[FR Doc. 90-29345 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-03-M

44 CFR Part 65

Changes in Flood Elevation Determinations

AGENCY: Federal Emergency Management Agency.

ACTION: Final rule.

SUMMARY: Modified base (100-year) flood elevations are finalized for the communities listed below.

These modified elevations will be used in calculating flood insurance premium rates for new buildings and their contents and for second layer coverage on existing buildings and their contents.

DATES: The effective dates for these modified base flood elevations are indicated on the following table and amend the Flood Insurance Rate Map(s) (FIRM) in effect for each listed community prior to this date.

ADDRESSES: The modified base flood elevations for each community are available for inspection at the office of the Chief Executive Officer of each community. The respective addresses are listed on the following table.

FOR FURTHER INFORMATION CONTACT: Mr. John L. Matticks, Chief, Risk Studies Division, Federal Insurance Administration, Federal Emergency Management Agency, Washington, DC 20472, (202) 646-2767.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency gives notice of the final determinations of modified flood elevations for each community listed. These modified elevations have been published in newspaper(s) of local circulation and ninety (90) days have elapsed since that publication. The Administrator has resolved any appeals resulting from this notification.

Numerous changes made in the base (100-year) flood elevation on the FIRMs for each community make it administratively infeasible to publish in this notice all of the changes contained on the maps. However, this rule includes the address of the Chief Executive Officer of the community, where the modified base flood elevation determinations are available for inspection.

The modifications are made pursuant to section 206 of the Flood Disaster Protection Act of 1973 (Pub. L. 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (title XIII of the Housing and Urban Development Act of 1968, (Pub. L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR part 65.

For rating purposes, the revised community number is shown and must be used for all new policies and renewals.

The modified base (100-year) flood elevations are the basis for the floodplain management measures that the community is required to either adopt or show evidence of being already in effect in order to qualify or to remain qualified for participating in the National Flood Insurance Program.

These modified elevations, together with the floodplain management measures required by § 60.3 of the program regulations, are the minimum that are required. They should not be construed to mean that the community must change requirements. The community may at any time enact stricter requirements of its own, or pursuant to policies established by other Federal, State or regional entities.

These modified base flood elevations shall be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for second layer coverage on existing buildings and their contents.

The changes in the base flood elevations are in accordance with 44 CFR 65.4.

Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator, to whom authority has been delegated by the Director, Federal Emergency Management Agency, hereby certifies that this rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. This rule provides routine legal notice of technical amendments made to designated special flood hazard areas on the basis of updated information and imposes no new requirements or regulations on participating communities.

List of Subjects in 44 CFR Part 65

Flood insurance, Floodplains.

PART 65—[AMENDED]

1. The authority citation for part 65 continues to read as follows:

Authority: 42 U.S.C. 4001 et seq., Reorganization Plan No. 3 of 1978, E.O. 12127.

§ 65.4 [Amended]

2. Section 65.4 is amended by adding in alphabetical sequence new entries to the table.

State and county	Location	Date and name of newspaper where notice was published	Chief executive officer of community	Effective date of modification	Community No.
Illinois, Cook (Docket No. FEMA-6995).	Unincorporated Areas	July 19, 1990, July 26, 1990, *Chicago Tribune*.	The Honorable George W. Dunne, President, Cook County Board of Commissioners, County Building, 118 N. Clark Street, Chicago, Illinois 60602.	July 10, 1990	170054
Tennessee, Shelby (Docket No. FEMA-6999).	City of Memphis	July 27, 1990, August 3, 1990, *The Daily News*.	The Honorable Richard C. Hackett, Mayor, City of Memphis, 125 N. Mid-American Mall, Memphis, Tennessee 38103.	July 16, 1990	470177

Issued: December 3, 1990.

C.M. "Bud" Schauerte,

Administrator, Federal Insurance Administration.

[FR Doc. 90-29341 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-03-M

44 CFR Part 67

Final Flood Elevation Determinations

AGENCY: Federal Emergency Management Agency.

ACTION: Final rule.

SUMMARY: Modified base (100-year) flood elevations are finalized for the communities listed below.

These modified elevations are the basis for the floodplain management measures that the community is required to either adopt or show evidence of being already in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program.

EFFECTIVE DATE: The date of issuance of the Flood Insurance Rate Map (FIRM) showing modified base flood elevations, for the community. This date may be obtained by contacting the office where the maps are available for inspection indicated on the table below:

ADDRESSES: See table below:

FOR FURTHER INFORMATION CONTACT: Mr. John L. Matticks, Chief, Risk Studies Division, Federal Insurance Administration, Federal Emergency Management Agency, Washington, DC 20472 (202) 646-2767.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency gives notice of the final determinations of flood elevation for each community listed. Proposed base flood elevations or proposed modified base flood elevations have been published in the **Federal Register** for each community listed.

This final rule is issued in accordance with section 110 of the Flood Disaster Protection Action 1968 (Title XIII of the Housing and Urban Development Act of 1968 (Pub. L. 90-448)), 42 U.S.C. 4001-4128, and 44 CFR part 67. An opportunity for the community or individuals to appeal the proposed determination to or through the community for a period of ninety (90) days has been provided.

The Agency has developed criteria for floodplain management in flood-prone areas in accordance with 44 CFR part 60. Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator, to whom authority has been delegated by the Director, Federal Emergency Management Agency, hereby certifies for reasons set out in the proposed rule that the final flood elevation determinations, if promulgated, will not have a significant economic impact on a substantial number of small entities. Also, this rule is not a major rule under terms of Executive Order 12291, so no regulatory analyses have been proposed. It does not involve any collection of information for purposes of The Paperwork Reduction Act.

List of Subjects in 44 CFR Part 67

Flood insurance, Floodplains.

PART 67—[AMENDED]

1. The authority citation for part 67 continues to read as follows:

Authority: 42 U.S.C. 4001 et seq., Reorganization Plan No. 3 of 1978, E.O. 12127.

Interested lessees and owners of real property are encouraged to review the proof Flood Insurance Study and FIRM available at the address cited below for each community.

The modified base flood elevations are finalized in the communities listed below. Elevations at selected locations in each community are shown. Any appeals of the proposed base flood elevations which were received have been resolved by the Agency.

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS

State, city/town/county, source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD). Modified
COLORADO	
Pagosa Springs (town), Archuleta County (FEMA Docket No. 6996)	
McCabe Creek:	
Below bicycle path to San Juan River	*7,059
Approximately 260 feet downstream of San Juan Street	*7,070
Just upstream of 6th Street	*7,079
Approximately 240 feet upstream of Florida Street	*7,090
Approximately 80 feet upstream of Junita Street	*7,105
West Fork McCabe Creek:	
Approximately 225 feet downstream of 7th Street	*7,078
At downstream edge of 7th Street	*7,085
Approximately 130 feet upstream of Frontage Road	*7,095
Approximately 910 feet upstream of the intersection of San Juan Street and 8th Street	*7,122
Approximately 250 feet upstream of the upstream crossing of San Juan Street	*7,135

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

State, city/town/county, source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD). Modified
Maps available for review at Town Hall, 486 San Juan Street, Pagosa Springs, Colorado.	
CONNECTICUT	
Lebanon (town), New London County (FEMA Docket No. 6998)	
Amston Lake: Entire length within the community	*527
Maps available for inspection at the Town Hall, 579 Exeter Road, Lebanon, Connecticut.	
IOWA	
Rock Rapids (city), Lyon County (FEMA Docket No. 6996)	
Rock River:	
About 1 mile downstream of Illinois Central Railroad	*1,330
About 3,000 feet upstream of Oklahoma, Kansas and Texas Railroad	*1,347
Maps available for inspection at the City Office, 310 South Third Avenue, Rock Rapids, Iowa.	
MONTANA	
Yellowstone County (unincorporated areas) (FEMA Docket No. 6996)	
Clarks Fork Yellowstone River:	
Just downstream of Thiel Road	*3,247
At confluence of Davis Creek	*3,265
Approximately 1 mile downstream of Byam Road	*3,270
At Byam Road	*3,284
Approximately 5,000 feet upstream of Byam Road	*3,298
Maps available for review at the Yellowstone County Courthouse, Surveyor's Office, 217 North 27th Avenue, Room 312, Billings, Montana.	
NEW YORK	
Barton (town), Tioga County (FEMA Docket No. 6998)	
Susquehanna River: At upstream corporate limits	*783
Cayuta Creek:	
At downstream corporate limits	*800
Approximately 1,080 feet upstream of upstream corporate limits	*806
Chemung River:	
At downstream corporate limits	*781
At upstream corporate limits	*782
Maps available for inspection at the Town Hall, Waverly, New York.	
OKLAHOMA	
Newcastle (city), McClain County (FEMA Docket No. 6996)	
Canadian River:	
Interstate Highway 35	*1,105
Approximately 1.2 miles upstream of confluence of Tributary D of the Canadian River	*1,172
Tributary A of Canadian River:	
At confluence with Canadian River	*1,120
Approximately 0.5 mile upstream of confluence	*1,125
Tributary B of Canadian River:	
At confluence with Canadian River	*1,127
Approximately .2 mile upstream of confluence with Canadian River	*1,138
Pond Creek:	
At confluence with Canadian River	*1,131
Approximately 0.5 mile upstream of confluence	*1,132
Tributary D of Canadian River:	
At confluence with Canadian River	*1,168
Approximately 50 feet downstream of State Route 37	*1,181
Tributary No. 8 of Pond Creek:	

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

State, city/town/county, source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD). Modified
Approximately 550 feet upstream of its confluence with Pond Creek	*1,183
Approximately 0.4 mile upstream of its confluence with Pond Creek	*1,190
Tributary A.1 of Canadian River:	
Approximately 200 feet upstream of the confluence of Tributary A.1.1 of the Canadian River	*1,154
Approximately 0.5 mile upstream of the confluence of Tributary A.1.1 of the Canadian River	*1,175
Tributary A.1.1 of the Canadian River:	
Approximately 450 feet upstream of its confluence with Tributary A.1 of the Canadian River	*1,156
Approximately 0.5 mile upstream of its confluence with Tributary A.1 of the Canadian River	*1,181
Maps available for inspection at the Map Room, City Hall, 5 North Main, Newcastle, Oklahoma.	
PENNSYLVANIA	
Bryn Athyn (borough), Montgomery County (FEMA Docket No. 6992)	
Pennypack Creek:	
Approximately 1,850 feet downstream of the downstream corporate limits	*126
At the confluence of Southampton Creek	*177
Huntingdon Valley Creek:	
Approximately 1.7 miles upstream of the confluence with Pennypack Creek	*155
Approximately 1.8 miles upstream of the confluence with Pennypack Creek	*159
Maps available for inspection at the Borough President's Residence, 2738 Alnwick Road, Bryn Athyn, Pennsylvania.	
TEXAS	
Killeen (city), Bell County (FEMA Docket No. 6998)	
Site Tributary 7:	
Upstream side of Dam No. 7	*797
Approximately 4,660 feet upstream of Westcliff Road	*854
Tributary of Site Tributary 7:	
At the confluence with Site Tributary 7	*837
Approximately 1,540 feet upstream of its confluence	*852
Maps available for inspection at the City Hall, 200 East Avenue D, Killeen, Texas.	
New Braunfels (city), Comal and Guadalupe Counties (FEMA Docket No. 6998)	
North Guadalupe Tributary:	
Immediately upstream of Kuehler Avenue	*594
Approximately 150 feet upstream of FM 1044	*679
South Guadalupe Tributary:	
Approximately 40 feet upstream of confluence with North Guadalupe Tributary	*596
Upstream corporate limits	*655
Dry Comal Creek:	
Approximately 160 feet downstream of State Loop 337	*638
Approximately .5 mile downstream of the Missouri-Kansas—Texas Railroad	*643
Maps available for inspection at the City Engineer's Office, 424 S. Castell, New Braunfels, Texas.	
VIRGINIA	
Alexandria (city) (FEMA Docket No. 6996)	
Holmes Run:	
Confluence with Backlick Run and Cameron Run	*49
Upstream side of Duke Street	*59
Backlick Run:	
Confluence with Holmes Run and Cameron Run	*49

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

State, city/town/county, source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD). Modified
Approximately 1,600 feet downstream of South Van Dorn Street	*84
Cameron Run:	
Confluence with Potomac River	*11
Approximately 300 feet downstream of South Patrick Street	*11
Upstream side of Richmond Fredericksburg Potomac Railroad	*49
Confluence of Holmes Run and Backlick Run	*49
Potomac River:	
Approximately 0.4 mile downstream of I-95 (Woodrow Wilson Bridge)	*11
Approximately 2.3 miles upstream of I-95 (Woodrow Wilson Bridge)	*11
Maps available for inspection at the City Hall, Room 2300, 301 King Street, Alexandria, Virginia.	
WASHINGTON	
Clark County (unincorporated areas) (FEMA Docket No. 6996)	
Lacamas Creek:	
About 500 feet downstream of NE Goodwin Road	*187
Just upstream of NE Goodwin Road	*193
At confluence of Spring Branch	*196
At confluence of Big Ditch	*198
Just downstream of Fourth Plain Road	*212
About 500 feet upstream of Fourth Plain Road	*216
Maps available for review at the Clark County Assessor's Office, Clark County Courthouse, 1200 Franklin Street, Vancouver, Washington.	
WEST VIRGINIA	
Hancock County (unincorporated areas) (FEMA Docket No. 6996)	
Harmon Creek:	
At downstream corporate limits	*681
At upstream corporate limits	*701
Maps available for inspection at the County Courthouse, Court Street, New Cumberland, West Virginia.	

Issued: December 3, 1990.

C.M. "Bud" Schauerte,

Administrator, Federal Insurance Administration.

[FR Doc. 90-29342 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-03-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 65

[Common Carrier Docket No. 89-624; FCC 90-315]

Representing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers

AGENCY: Federal Communications Commission.

ACTION: Final rule; prescription of authorized rate of return for interstate access services of local exchange carriers.

SUMMARY: This action was undertaken in accordance with part 65 of the Commission's Rules, which requires that the Commission shall periodically determine the cost of capital for interstate access service and prescribe an authorized overall rate of return for the interstate access services of local exchange carriers. The action prescribes an authorized overall rate of return of 11.25% for the interstate access services of local exchange carriers. Carriers subject to rate base, rate of return regulation use the prescribed rate of return to calculate the cost of capital component of the interstate access revenue requirement. They are allowed to earn a maximum return that is .25% higher than the prescribed rate. Carriers that will be subject to price cap regulation beginning January 1, 1991, are required to target their initial price caps rates so as to earn the prescribed rate of return. The previously authorized rate of return was 12%. All local exchange carriers will be required to reduce their interstate access rates in order to comply with the action.

DATES: The rate of return prescription takes effect January 1, 1991. It continues in effect until replaced or superseded.

ADDRESSES: Federal Communications Commission, 1919 M Street, NW., Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Jane Jackson, Telephone (202) 632-7500.

SUPPLEMENTARY INFORMATION:

Background

Refinement of Procedures and Methodologies for Representing Interstate Rates of Return for AT&T and Local Exchange Carriers, CC No. Docket 87-463, and Representing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers, CC Docket No. 89-624, 5 FCC Rcd 197 (1989), 55 FR 4820 (1990).

Refinement of Procedures and Methodologies for Representing Interstate Rates of Return for AT&T and Local Exchange Carriers, CC No. Docket 87-463, and Representing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers, CC Docket No. 89-624, 55 FR 10788 (1990). Policy and Rules Concerning Rates for Dominant Carriers, CC Docket No. 87-313, Second Report and Order, 55 FR 42375 (October 19, 1990).

Summary of Order

This is a summary of the Commission's Order in Representing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers, CC Docket No. 89-624, FCC No. 90-315, adopted September 19, 1990.

The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Dockets Branch (room 230), 1919 M Street NW., Washington, DC. The complete text of this decision will be published in the FCC Record and may also be purchased from the Commission's copy contractor, International Transcription Services, (202) 857-3800, 2100 M Street, NW., suite 140, Washington, DC 20037.

By this Order we prescribe for the interstate access services of local exchange carriers an authorized, overall rate of return on investment of 11.25%. Since January 1, 1987, local exchange carriers (LECs) have been authorized to earn a 12% rate of return. The new prescription will take effect January 1, 1991, and will remain in effect until it is replaced or superseded. All LECs, including those subject to price cap regulation, will be required to file revised access service tariffs reflecting this represcription.

The rulemaking record in this proceeding is extensive. Of 40 parties who filed Notices of Appearance, 31 have submitted one or more pleadings. The seven Regional Holding Companies (RHCs) and the United States Telephone Association (USTA) filed Initial Submissions on February 16, 1990. Nineteen parties filed Responsive Submissions March 27, 1990; the RHCs, USTA, and four other parties filed Rebuttals April 17, 1990. Proposed Findings, filed July 2, 1990, were offered by 18 parties, and Reply Findings were filed on July 16, 1990, by 13 parties. In addition to these pleadings, the record includes carrier responses to a Common Carrier Bureau (Bureau) data request; six monthly updates to those responses; a massive amount of material submitted in response to three discovery requests; several written ex parte presentations; and notices describing numerous oral ex parte presentations.

Part 65 of the Commission's Rules establishes procedures and data requirements for LEC rate of return represcription proceedings. The rules provide a framework for determining a single, or unitary, rate of return for the entire LEC industry based on data supplied by the Regional Bell Holding Companies (RHCs). Each RHC is required to file an initial rate of return submission containing three kinds of evidence of its cost of capital for interstate access service: (1) State public utility commission determinations of the cost of capital for the RHC's intrastate operations; (2) weighted average cost of capital calculations for the RHC, with the cost of equity components estimated

using each of several "historical" discounted cash flow (DCF) formulas and (3) weighted average cost of capital calculations for firms having risk characteristics comparable to those of interstate access service ("comparable firms"), with the cost of equity components calculated using the "historical" DCF formulas. The rules also allow RHCs and other parties to submit other relevant evidence; in addition, the Common Carrier Bureau may require parties to submit any data or studies needed for a full and fair record.

In previous proceedings the Commission had concluded that the methods specified in part 65 for choosing comparable firms and for calculating the weighted average costs of capital of such firms were not likely to produce useful estimates of the interstate access cost of capital, and that a "classic" DCF formula would in many circumstances produce more accurate results for both RHCs and comparable firms than the "historical" versions of the formula. Therefore, at the time that we initiated this docket, we took the following two steps to assure creation of a full, fair, and useful record: First, we waived the rules governing the required comparable firms showing and invited parties to propose alternative comparable firms studies. Second, acting through the Bureau, we required the RHCs to submit with their initial rate of return submissions a series of "classic" DCF cost of equity calculations for the RHCs, for the Standard & Poors Industrials firms (the S&P 400), and for a large group of electric utilities. These data were to be updated monthly during the pendency of the proceeding.

The RHCs submitted all of the required evidence with their initial submissions. However, they, along with the other LEC parties to the proceeding, took the position that none of the required evidence should be relied on in reaching a decision in this representation proceeding. They argued that state cost of capital determinations are irrelevant; that our DCF formulas are all incorrect; that the DCF method cannot be used to determine the cost of equity of the RHCs; and that the RHCs are not proper surrogates for the interstate access business. They also contended that the cost of debt and capital structure components of the RHC weighted average cost of capital calculations should not be used in determining an overall cost of capital for the LEC industry. Instead, they proposed that we use the cost of debt and capital structure of the Bell Operating Companies (BOCs). They offered a variety of alternative studies of the interstate access cost of equity. Their cost of equity estimates ranged from 14.75% to 18.25%. Their final recommendations for the overall unitary rate of return ranged from 12.25%–14.3%.

Non-LEC parties supported use of the required evidentiary submissions as the bases for our decision. They generally took the position that the average of the weighted average costs of capital of the RHCs, calculated using the classic DCF formula, should be considered to be the highest reasonable estimate of the cost of capital for interstate access service. Most of these parties recommended cost of equity findings in the range 11.1%–12.5% and overall unitary rates of return between 10.25%–10.6%.

In this Order we analyze the cost of debt and capital structure issues separately from the cost of equity issues. From these analyses we determine an embedded cost of debt, a debt/equity ratio, and a range of reasonable estimates of the cost of equity. We combine these components to determine a range of reasonable estimates of the overall weighted average cost of capital for interstate access service. After identifying this "zone of reasonableness," we then decide, based on policy considerations, where within that zone to prescribe the unitary rate of return.

Cost of debt and capital structure. We find that the capital structure of the BOCs should not be used in determining the overall interstate access cost of capital because the capital structure of those entities is subject to manipulation by the holding companies. We therefore adopt for this represcription proceeding the approach, embodied in the part 65 rules, of using the composite cost of debt and capital structure of the RHCs in calculating the overall unitary rate of return. We find that the embedded cost of debt is 8.8% and the capital structure is 44.2% debt/55.8% equity.

Cost of equity. We examine the LECs' objections to the part 65 cost of equity methodologies and conclude that we must reject their core contention that DCF estimates of the RHC cost of equity cannot be used as estimates of the cost of capital for interstate access service. We accord the most weight to a series of monthly classic DCF estimates of the RHCs' costs of equity for the period January 1990–July 1990. We examine the range and variability of those estimates, both among companies and across time, and conclude that a fair estimate of the industry-wide cost of equity is somewhat above the average of the RHC estimates. We also conclude that (1) our DCF formula might somewhat understate the RHC cost of equity due to the influence of investor expectations about cellular telephone, but (2) the RHC cost of equity is probably higher than the cost of equity for interstate access service due to the participation of RHCs in riskier nonregulated activities. Taking all these factors into consideration, we conclude that the range of reasonable estimates of the LEC interstate access cost of equity is 12.5%–13.5%.

This finding of a range of reasonable estimates based on the DCF-estimated costs of equity of the RHCs is corroborated by the cost of equity findings contained in recent rate of return determinations by state public utility commissions. It is also corroborated by a series of equity market benchmarks derived from the DCF estimates for the S&P Industrial and for electric utilities.

We examine each of the comparable firms studies offered by the LECs and conclude that no weight can be given to these studies. We also accord no weight to RHC cost of equity estimates made using the capital assets pricing model (CAPM), although we do not in principle reject that methodology. We reject the contention that increases in certain interest rates since the time of our last represcription proceeding require that we increase the authorized rate of return.

Overall cost of capital. Based on our cost of debt, cost of equity, and capital structure findings, we calculate a range of reasonable estimates of the interstate access cost of capital of 10.85%–11.4%.

Prescription of the unitary rate of return. After finding the "zone of reasonableness," we address the arguments of the parties concerning the relationship between the prescribed rate of return and such factors as telecommunications infrastructure development, and competition and bypass. We conclude that, because of our concerns about infrastructure development, we should exercise our judgment to select a unitary rate of return that is toward the upper end of the zone of reasonableness. Accordingly, we prescribe an authorized rate of return for the interstate services of local exchange carriers of 11.25 percent.

Accordingly, *It is ordered,* pursuant to sections 1, 4(i), 4(j), and 201–205 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 154(j),

and 201–205, that the authorized rate of return for the interstate access services of the local exchange carriers is prescribed to be at an annual rate of 11.25 percent.

List of Subjects in 47 CFR Part 65

Communications common carriers, rate of return.

Federal Communications Commission.

Donna Searcy,

Secretary.

[FR Doc. 90–29374 Filed 12–13–90; 8:45 am]

BILLING CODE 6712-01-M

Proposed Rules

Federal Register
Vol. 55, No. 241
Friday, December 14, 1990

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 90-NM-240-AD]

Airworthiness Directives; Boeing Model 747 Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This notice proposes to adopt a new airworthiness directive (AD), applicable to certain Model 747 series airplanes, which would require the installation of shields to prevent entry of unwanted materials into the internal space of the mid and aft drain mast assemblies. This proposal is prompted by two reports of fires which may have been caused by the contact of foreign material with drain mast heater elements. This condition, if not corrected, could result in structural damage to the fuselage skin, frame, and stringers, and possible uncontrolled fire.

DATES: Comments must be received no later than February 4, 1991.

ADDRESSES: Send comments on the proposal in duplicate to the Federal Aviation Administration, Northwest Mountain Region, Transport Airplane Directorate, ANM-103, Attention: Airworthiness Rules Docket No. 90-NM-240-AD, 1601 Lind Avenue SW., Renton, Washington 98055-4056. The applicable service information may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124. This information may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Ms. Susan Letcher, Seattle Aircraft Certification Office, Systems and Equipment Branch, ANM-130S; telephone (206) 227-2670. Mailing address: FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98055-4056.

SUPPLEMENTARY INFORMATION: Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments specified above will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this Notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA/public contact, concerned with the substance of this proposal, will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this Notice must submit a self-addressed, stamped post card on which the following statement is made: "Comments to Docket Number 90-NM-240-AD." The post card will be date/time stamped and returned to the commenter.

Discussion

Two operators have reported incidents of fires occurring in the drain mast areas on Boeing Model 747 airplanes. In the first incident, the operator reported detection of an in-flight fire that occurred in the aft lower lobe cargo compartment, near the mid drain mast. This fire caused structural damage to the fuselage skin, frames, and stringers, and also damaged the insulation blankets and the cargo ballmat. In the second incident, evidence of a fire was noticed in the mid drain mast area of the airplane fuselage by a ground mechanic during line check. Damage included a burned wire bundle, heater tape, and insulation blankets, and heat damage to a floor beam web. No fire or overheat condition had been previously reported by the flight or ground crews. In both incidents, ignition of foreign material by contact with the heating element in the drain mast inner space could have triggered the fires.

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-38A2077, dated August 30, 1990, which describes procedures for the installation of shield plates on the mid and aft drain masts to prevent foreign material from entering the drain mast inner space and contacting the heating element.

Since this condition is likely to exist or develop on other airplanes of this same type design, an AD is proposed which would require the installation of shields in accordance with the service bulletin previously described.

There are approximately 712 Model 747 series airplanes of the affected design in the worldwide fleet. It is estimated that 172 airplanes of U.S. registry would be affected by this AD, that it would take approximately 40 manhours per airplane to accomplish the required actions, and that the average labor cost would be $40 per manhour. Modification parts may be fabricated locally at a nominal cost. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $275,200.

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation: (1) Is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—[AMENDED]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1421 and 1423; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

Boeing: Applies to Model 747 series airplanes, as listed in Boeing Alert Service Bulletin 747-38A2077, dated August 30, 1990, certificated in any category. Compliance required within 12 months of the effective date of this AD, unless previously accomplished.

To prevent a fire caused by ignition of foreign material in the drain mast internal space, accomplish the following:

A. Install shields to protect the drain mast heater elements in accordance with Boeing Alert Service Bulletin 747-38A2077, dated August 30, 1990.

B. An alternate means of compliance or adjustment of the compliance time, which provides an acceptable level of safety, may be used when approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Note: The request should be submitted directly to the Manager, Seattle ACO, and a copy sent to the cognizant FAA Principal Inspector (PI). The PI will then forward comments or concurrence to the Seattle ACO.

C. Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate airplanes to a base in order to comply with the requirements of this AD.

All persons affected by this directive who have not already received the appropriate service documents from the manufacturer may obtain copies upon request to Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124. These documents may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington.

Issued in Renton, Washington, on December 3, 1990.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 90-29317 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

14 CFR Part 39

[Docket No. 90-NM-256-AD]

Airworthiness Directives; McDonnell Douglas Model DC-9-80 Series Airplanes and Model MD-88 Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This notice proposes to adopt a new airworthiness directive (AD), applicable to certain McDonnell Douglas Model DC-9-80 and MD-88 series airplanes, which would require inspections and modification of the electrical connectors containing sidewall fluorescent lighting wires to preclude overheating the connectors and damaging the associated wiring located above the forward cabin ceiling panel. This proposal is prompted by two reports of smoke emanating from the passenger forward cabin ceiling area. This condition, if not corrected, could result in damage to the associated systems wires and possible in-flight fire in the passenger forward cabin ceiling area.

DATES: Comments must be received no later than February 5, 1991.

ADDRESSES: Send comments on the proposal in duplicate to the Federal Aviation Administration, Northwest Mountain Region, Transport Airplane Directorate, ANM-103, Attention: Airworthiness Rules Docket No. 90-NM-256-AD, 1601 Lind Avenue SW., Renton, Washington 98055-4056. The applicable service information may be obtained from McDonnell Douglas Corporation, 3855 Lakewood Boulevard, Long Beach, California 90846, attention: Business Unit Manager, Technical Publications, C1-HCW (54-60). This information maybe examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington; or at the Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California.

FOR FURTHER INFORMATION CONTACT: Mr. Kirk Baker, Aerospace Engineer, FAA, Northwest Mountain Region, Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California 90806-2425; telephone (213) 988-5345.

SUPPLEMENTARY INFORMATION: Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments specified above will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this Notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA/public contact, concerned with the substance of this proposal, will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this Notice must submit a self-addressed, stamped post card on which the following statement is made: "Comments to Docket Number 90-NM-256-AD." The post card will be date/time stamped and returned to the commenter.

Discussion

An operator of a McDonnell Douglas Model DC-9-80 series airplane reported smoke emanating from the forward cabin ceiling panel in the passenger compartment. Some oxygen masks were deployed, and the sidewall lighting circuit breakers were tripped. The airplane returned to the gate, where passengers deplaned normally. Investigation revealed fire and smoke damage to connectors containing sidewall fluorescent lighting wires. Fire/heat destroyed the connector and burned through approximately 6 inches of the wiring. There was no reported damage to the airplane's structure or the airplane's exterior skin. The same operator inspected two other Model DC-9-80 airplanes in its fleet and both airplanes exhibited signs of arcing and melting in this same area. A similar occurrence of fire and smoke damage to these electrical connectors was reported by another operator of these airplanes. Further investigations have revealed that the connectors containing sidewall fluorescent lighting wires located above the forward passenger ceiling are overheating the causing "hot spots" within the connector. This is due to the high current on fluorescent lighting wires in close proximity to the connector, caused by voltage spikes during power switching. This condition,

if not corrected, could soften or deform the dielectric, cause burn-through of the connector shell, burn the sidewall lighting wires, damage the associated systems wires, and cause an in-flight fire.

The FAA has reviewed and approved McDonnell Douglas MD-80 Alert Service Bulletin A33-92, dated October 22, 1990, which describes procedures to inspect and modify the connector installations of the sidewall fluorescent lighting above the forward cabin ceiling panel.

Since this condition is likely to exist or develop on other airplanes of this same type design, an AD is proposed which would require inspections and modification of the connectors containing sidewall fluorescent lighting wires located above the forward cabin ceiling panel, in accordance with the service bulletin previously described.

There are approximately 845 McDonnell Douglas Model DC-9-81, -82, -83, and -87 series airplanes and Model MD-88 airplanes of the affected design in the worldwide fleet. It is estimated that 495 airplanes of U.S. registry would be affected by this AD, that it would take approximately 7.2 manhours per airplane to accomplish the required actions, and that the average labor cost would be $40 per manhour. Required parts are estimated to cost $70.10 per airplane. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $177,260.

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—[AMENDED]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1421 and 1423; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

McDonnell Douglas: Applies to McDonnell Douglas Model DC-9-81, -82, -83, and -87 series airplanes, and MD-88 airplanes; fuselage Numbers 909 through 1825; certificated in any category. Compliance required as indicated, unless previously accomplished.

To eliminate a potential fire ignition source in the forward cabin ceiling panel area, accomplish the following:

A. Within 90 days after the effective date of this AD, inspect the electrical connectors located above the forward cabin ceiling panel for damage, in accordance with paragraph B. of the "Accomplishment Instructions" of McDonnell Douglas Alert Service Bulletin A33-92, dated October 22, 1990 (hereinafter referred to as "the Service Bulletin").

1. If damage is found, prior to further flight, modify the connectors and wires in accordance with paragraph B, Condition I, of the "Accomplishment Instructions" of the Service Bulletin.

2. If no damage is found, reinstall the connectors and reinspect the connectors in accordance with paragraph A. of this AD at intervals not to exceed 6 months.

B. Within 2 years after the effective date of this AD, modify the connectors in accordance with paragraph B, Condition I or Condition II, Option 2, of the Service Bulletin. Accomplishment of these modifications constitutes terminating action for the repetitive inspections required by paragraph A. of this AD.

C. An alternative means of compliance or adjustment of the compliance time, which provides an acceptable level of safety, may be used when approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Note: This request should be submitted directly to the Manager, Los Angeles ACO, and a copy sent to cognizant FAA Principal Inspector (PI). The PI will then forward comments or concurrence to the Los Angeles ACO.

D. Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate airplanes to a base in order to comply with the requirements of this AD.

All persons affected by this directive who have not already received the appropriate service documents from the manufacturer may obtain copies upon request to McDonnell Douglas Corporation, 3855 Lakewood Boulevard, Long Beach, California 90846; ATTN: Business Unit Manager, Technical Publications C1-HCW (54-60). These documents may be examined at the FAA, Northwest Mountain Region, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington, or the Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California 90806-2425.

Issued in Renton, Washington, on December 4, 1990.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 90-29318 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 39

[Docket No. 90-ANE-29]

Airworthiness Directives; Pratt & Whitney Canada (PWC) PW100 Series Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This notice proposes to adopt a new airworthiness directive (AD), applicable to certain PW100 series engines, which would require rework of the high pressure turbine front cover, vane ring segments and cooling air nozzle housing, and rework of the low pressure turbine stator assembly. This proposal is prompted by two events where an engine failed to start following an inflight shutdown. This condition, if not corrected, could result in the inability to restart the engine in flight.

DATES: Comments must be received no later than February 1, 1991.

ADDRESSES: Send comments on the proposal in duplicate to the FAA, New England Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 90-ANE-29, room 311, 12 New England Executive Park, Burlington, Massachusetts 01803, or deliver in duplicate to room 311 at the above address.

Comments may be inspected at the above location in room 311, between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, except federal holidays.

The applicable service information may be obtained from Pratt & Whitney Canada, Technical Publications Department, 1000 Marie Victorian, Longueuil, Quebec J4G1A1, or may be

examined at the FAA, New England Region, Office of the Assistant Chief Counsel, room 311, 12 New England Executive Park, Burlington, Massachusetts 01803.

FOR FURTHER INFORMATION CONTACT: Marc J. Bouthillier, Engine Certification Office, ANE-140, Engine and Propeller Directorate, Aircraft Certification Service, FAA, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (617) 273-7085.

SUPPLEMENTARY INFORMATION: Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments specified above will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this Notice may be changed in light of comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact, concerned with the substance of this proposal will be filed in the Rules Docket.

Comments wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 90-ANE-29." The postcard will be date/time stamped and returned to the commenter.

Discussion

There have been two incidents where an engine failed to start following an inflight shutdown. The problem is caused by differential cooling (thermal) effects in the high pressure turbine region, which causes a temporary seizure between the high pressure rotor and the front or rear air seals. This condition, if not corrected, could result in the inability to restart the engine in flight.

The FAA has reviewed and approved the following Pratt & Whitney Canada Service Bulletins (SB): SB No. 20341, dated March 30, 1989; SB No. 20417, Revision 1, dated July 6, 1989; SB No. 20419, dated May 19, 1989; SB No. 20436, dated March 6, 1989; SB No. 20456, Revision 1, dated October 12, 1989; SB No. 20742, Revision 1, dated May 28, 1990; and SB No. 20886, dated June 25, 1990. These service bulletins describe the required turbine section rework.

Since this condition is likely to exist or develop in other engines of the same type design, and AD is proposed which would require rework of the high pressure turbine front cover, vane ring segments and cooling air nozzle housing, and rework of the low pressure turbine stator assembly, to ensure clearance and thus restore in flight restart capability.

There are approximately 558 PWC PW100 series engines of the affected design in the U.S. fleet. It is estimated that it would take approximately 6 manhours per engine to accomplish the required actions at next part exposure, and that the average labor cost would be $40 per manhour. It is also estimated that the cost of replacement parts would be approximately $24,000 per engine. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $13,525,920.

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "money rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration (FAA) proposes to amend 14 CFR part 39 of the Federal Aviation Regulations (FAR) as follows:

PART 39—[AMENDED]

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1421 and 1423; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive (AD):

Pratt & Whitney Canada: Applies to Pratt & Whitney Canada (PWC) PW115, PW118, PW118A, PW118A, PW120, PW120A, PW121, PW123, PW124, PW124A, PW124B, PW125B, and PW126A model turboprop engines with specific engine serial numbers noted in the applicable service bulletins (SB). Affected engines are installed in, but not limited to, the Aerospatiale ATR-42 and ATR-72, British Aerospace ATP, DeHavilland of Canada DHC-8, Embraer EMB-120, Canadair CL-215T, and Fokker 50 Aircraft.

Compliance is required within 18 months after the effective date of the AD, unless previously accomplished.

To prevent seizure of the high pressure rotor, and subsequent inability to start the engine following an inflight shutdown, accomplish the following:

(a) Rework the high pressure turbine front cover in accordance with PWC SB 20417, Revision 1, dated July 6, 1989.

(b) Rework the low pressure turbine stator vane assembly in accordance with PWC SB 20456, Revision 1, dated October 12, 1989.

(c) For engines incorporating the "triple segmented," high pressure vane ring segment assembly (Part Number (P/N) 3036871 for models PW115, PW118, PW118A, PW120, PW120A, and PW121; P/N 3037071 for models PW123, PW124A, PW125B and PW126A), rework or replace the cooling air nozzle housing assembly in accordance with either PWC SB 20341, dated March 30, 1989, or SB No. 20436, dated March 6, 1989, respectively.

(d) For engines incorporating the "triple segmented", high pressure vane ring segment assembly identified in paragraph (c) of this AD, rework or replace the high pressure vane segments in accordance with any of the following: SB No. 20419, dated May 19, 2989; SB No. 20742R1, dated May 28, 1990; *or* SB No. 20886, dated June 25, 1990.

(e) Aircraft may be ferried in accordance with the provisions of FAR 21.197 and 21.199 to a base where the AD can be accomplished.

(f) Upon submission of substantiating data by an owner or operator through an FAA Airworthiness Inspector, an alternate method of compliance with the requirements of this AD or adjustments to the compliance schedule specified in this AD may be approved by the Manager, Engine and Propeller Directorate, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, Massachusetts 01803.

All persons affected by this directive who have not already received the appropriate service documents from the

manufacturer may obtain copies upon request to Pratt & Whitney Canada, Technical Publications Department, 1000 Marie Victorian, Longueuil, Quebec J4G1A1. These documents may be examined at the FAA, New England Region, Office of the Assistant Chief Counsel, room 311, 12 New England Executive Park, Burlington, Massachusetts 01803.

Issued in Burlington, Massachusetts, on December 6, 1990.

Herschel C. Jones,

Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 90-29316 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 71

[Airspace Docket No. 90-ASW-51]

Proposed Establishment of Transition Area: Hugo, OK

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes to establish a transition area at Hugo, OK. The development of a new standard instrument approach procedure (SIAP) to the Stan Stamper Municipal Airport, utilizing the new Hugo Nondirectional Radio Beacon (NDB), has made this proposal necessary. The intended effect of this proposal is to provide adequate airspace for aircraft executing the new NDB RWY 35 SIAP. If adopted, this proposal would change the status of the Stan Stamper Municipal Airport from visual flight rules (VFR) to instrument flight rules (IFR)

DATES: Comments must be received on or before January 25, 1991.

ADDRESSES: Send comments on the proposal in triplicate to Manager, System Management Branch, Air Traffic Division, Southwest Region, Docket No. 90-ASW-51, Department of Transportation, Federal Aviation Administration, Fort Worth, TX 76193-0530.

The official docket may be examined in the office of the Assistant Chief Counsel, Southwest Region, Federal Aviation Administration, 4400 Blue Mound Road, Fort Worth, TX.

FOR FURTHER INFORMATION CONTACT: Mark F. Kennedy, System Management Branch, Department of Transportation, Federal Aviation Administration, Fort Worth, TX 76193-0530; telephone: (817) 624-5561.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested parties are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decision on the proposal. Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposal. Communications should identify the airspace docket and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Airspace Docket No. 90-ASW-51" The postcard will be date/time stamped and returned to the commenter. All communications received before the specified closing date for comments will be considered before taking action on the proposed rule. The proposal contained in this notice may be changed in the light of comments received.

All comments submitted will be available for examination in the office of the Assistant Chief Counsel, 4400 Blue Mound Road, Fort Worth, TX, both before and after the closing date for comments. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the docket.

Availability of NPRM'S

Any person may obtain a copy of this notice of proposed rulemaking (NPRM) by submitting a request to the Manager, System Management Branch, Department of Transportation, Federal Aviation Administration, Fort Worth, TX 76193-0530. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for future NPRM's should also request a copy of Advisory Circular No. 11-2A which describes the application procedure.

The Proposal

The FAA is considering an amendment to § 71.181 of the Federal Aviation Regulations (14 CFR part 71) to establish a transition area at Hugo, OK. The development of a new NDB RWY 35 SIAP to the Stan Stamper Municipal Airport, utilizing the new Hugo NDB, has made this proposal necessary. The intended effect of this proposal is to provide adequate controlled airspace for all aircraft executing the NDB RWY 35 SIAP. If this proposal is adopted, the status of the Stan Stamper Municipal Airport would change from VFR to IFR. Section 71.181 of part 71 of the Federal Aviation Regulations was republished in Handbook 7400.6G dated September 4, 1990.

The FAA has determined that this proposed regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule, when promulgated, will not have a significant impact on a susbstantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 71

Aviation safety, transition areas.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me, the FAA proposes to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) as follows:

PART 71—DESIGNATION OF FEDERAL AIRWAYS, AREA LOW ROUTES, CONTROLLED AIRSPACE, AND REPORTING POINTS

1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 1348(a), 1354(a), 1510; Executive order 10854; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); 14 CFR 11.69.

§ 71.181 [Amended]

2. Section 71.181 is amended as follows:

Hugo, OK [New]

That airspace extending upward from 700 feet above the surface within a 6.5-mile radius of the Stan Stamper Municipal Airport (Latitude 34°02'05" N., longitude 95°32'30" W.,) and within 1.5 miles each side of the 187° bearing of the Hugo NDB (latitude 34°02'27" N., longitude 95°32'21" W.), extending from the 6.5-mile radius area to 7.5 miles south of the airport, excluding that airspace which overlies the Antlers, OK, 700-foot Transition Area.

Issued in Fort Worth, TX on November 28, 1990.

Larry L. Craig,

Manager, Air Traffic Division, Southwest Region.

[FR Doc. 90-29323 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 71

[Airspace Docket No. 90-AWP-8]

Proposed Alteration of VOR Federal Airway V-291; AZ

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes to alter the description of VOR Federal Airway V-291 located in the state of Arizona. The realignment of this airway is necessary to improve the flow of traffic along the Albuquerque Air Route Traffic Control Center (ARTCC) and Los Angeles ARTCC border. This action would improve traffic flow in this area, reduce the flying time of overflights, and reduce controller workload.

DATES: Comments must be received on or before January 23, 1991.

ADDRESSES: Send comments on the proposal in triplicate to: Manager, Air Traffic Division, AWP-500, Docket No. 90-AWP-8, Federal Aviation Administration, P.O. Box 92007, Worldway Postal Center, Los Angeles, CA 90009.

The official docket may be examined in the Rules Docket, weekdays, except Federal holidays, between 8:30 a.m. and 5 p.m. The FAA Rules Docket is located in the Office of the Chief Counsel, room 916, 800 Independence Avenue SW., Washington, DC.

An informal docket may also be examined during normal business hours at the office of the Regional Air Traffic Division.

FOR FURTHER INFORMATION CONTACT: Alton Scott, Airspace and Obstruction Evaluation Branch (ATP-240), Airspace-Rules and Aeronautical Information Division, Air Traffic Rules and Procedures Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267-9252.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested parties are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic, environmental, and energy aspects of the proposal. Communications should identify the airspace docket and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Airspace Docket No. 90-AWP-8." The postcard will be date/time stamped and returned to the commenter. All communications received before the specified closing date for comments will be considered before taking action on the proposed rule. The proposal contained in this notice may be changed in the light of comments received. All comments submitted will be available for examination in the Rules Docket both before and after the closing date for comments. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the docket.

Availability of NPRM's

Any person may obtain a copy of this Notice of Proposed Rulemaking (NPRM) by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-230, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for future NPRM's should also request a copy of Advisory Circular No. 11-2A which describes the application procedure.

The Proposal

The FAA is considering an amendment to part 71 of the Federal Aviation Regulations (14 CFR part 71) to substantially increase the efficiency of operations along the Albuquerque and Los Angeles ARTCC border by reducing the flying time between Winslow and Peach Springs, AZ, and eliminating some of the congestion over the Drake, AZ, VORTAC. The adjustment of this route is designated to alleviate congestion of air traffic and to establish optimum use of the airspace. Section 71.123 of part 71 of the Federal Aviation Regulations was republished in Handbook 7400.6G dated September 4, 1990.

The FAA has determined that this proposed regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule, when promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 71

Aviation safety, VOR federal airways.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration proposes to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) as follows:

PART 71—DESIGNATION OF FEDERAL AIRWAYS, AREA LOW ROUTES, CONTROLLED AIRSPACE, AND REPORTING POINTS

1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 1348(a), 1354(a), 1510; Executive Order 10854; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); 14 CFR 11.69.

§ 71.123 [Amended]

2. Section 71.123 is amended as follows:

V-291 [Amended]

By removing the words "to Flagstaff, AZ." and substituting the words "Flagstaff, AZ; to Peach Springs, AZ. The airspace within R-2302 is excluded."

Issued in Washington, DC, on November 29, 1990.

Harold W. Becker,

Manager, Airspace-Rules and Aeronautical Information Division.

[FR Doc. 90-29322 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

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14 CFR Part 71

[Airspace Docket No. 90-AWP-9]

Proposed Alteration of VOR Federal Airways V-208 and V-442; CA

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes to alter the descriptions of VOR Federal Airways V-208 and V-442 located in the state of California. This notice would remove the exclusion of V-208 and V-442 contained within the Turtle Military Operations Area (MOA). This action would increase the amount of navigable airspace available when the Turtle MOA is inactive. This action would improve traffic flow in the area while reducing the time required to overfly the MOA and reducing controller workload.

DATES: Comments must be received on or before January 25, 1991.

ADDRESSES: Send comments on the proposal in triplicate to: Manager, Air Traffic Division, AWP-500, Docket No. 90-AWP-9, Federal Aviation Administration, P.O. Box 92007, Worldway Postal Center, Los Angeles, CA 90009.

The official docket may be examined in the Rules Docket, weekdays, except Federal holidays, between 8:30 a.m. and 5 p.m. The FAA Rules Docket is located in the Office of the Chief Counsel, room 916, 800 Independence Avenue SW., Washington, DC.

An informal docket may also be examined during normal business hours at the office of the Regional Air Traffic Division.

FOR FURTHER INFORMATION CONTACT: Alton Scott, Airspace and Obstruction Evaluation Branch (ATP-240), Airspace-Rules and Aeronautical Information Division, Air Traffic Rules and Procedures Service, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267-9252.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested parties are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic, environmental, and energy aspects of the proposal. Communications should identify the airspace docket and be submitted in triplicate to the address listed above. Commenters wishing the FAA to acknowledge receipt of their comments on this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Airspace Docket No. 90-AWP-9." The postcard will be date/time stamped and returned to the commenter. All communications received before the specified closing date for comments will be considered before taking action on the proposed rule. The proposal contained in this notice may be changed in the light of comments received. All comments submitted will be available for examination in the Rules Docket both before and after the closing date for comments. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the docket.

Availability of NPRM's

Any person may obtain a copy of this Notice of Proposed Rulemaking (NPRM) by submitting a request to the Federal Aviation Administration, Office of Public Affiars, Attention: Public Inquiry Center, APA-230, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for future NPRM's should also request a copy of Advisory Circular No. 11-2A which describes the application procedure.

The Proposal

The FAA is considering an amendment to part 71 of the Federal Aviation Regulations (14 CFR part 71) to alter the descriptions of V-208 and V-442. This notice would remove the exclusion of V-208 and V-442 contained within the Turtle MOA. During periods when the Turtle MOA is inactive, this route is virtually unusable and requires the issuance of preferential routes by controllers, which adds a substantial number of miles to the routes of aircraft overflying this area, thus increasing controller workload. The adjustment of this route is designed to alleviate congestion and compression of air traffic and to establish optimum use of the airspace. Section 71.123 of part 71 of the Federal Aviation Regulations was republished in Handbook 7400.6G dated September 4, 1990.

The FAA determined that this proposed regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule, when promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 71

Aviation safety, VOR federal airways.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration proposes to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) as follows:

PART 71—DESIGNATION OF FEDERAL AIRWAYS, AREA LOW ROUTES, CONTROLLED AIRSPACE AND REPORTING POINTS

1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 1348(a), 1354(a), 1510; Executive Order 10854; 49 U.S.C. 106(g) (Revised Pub. L. 97-449, January 12, 1983); 14 CFR 11.69.

§ 71.123 [Amended]

2. Section 71.123 is amended as follows:

V-208 [Amended]

By removing the words "excluding the airspace above 10,000 feet MSL between Twentynine Palms and Needles"

V-442 [Amended]

By removing the words "The airspace above 10,000 feet MSL between Parker and a point 45 miles northwest is excluded."

Issued in Washington, DC, on December 3, 1990.

William C. Davis,

Acting Manager, Airspace-Rules and Aeronautical Information Division.

[FR Doc. 90-29319 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

DEPARTMENT OF THE TREASURY

Customs Service

19 CFR Part 4

Negligence as a Casualty Within the Meaning of the Vessel Repair Statute

AGENCY: Customs Service, Department of the Treasury.

ACTION: Proposed interpretative rule.

SUMMARY: The current position of Customs regarding negligence as a basis for relief under the vessel repair statute is that absent any evidence of owner direction or inducement, negligence

causing vessel damage is considered a casualty within the meaning of the statute (see C.S.D. 82–42). This interpretation, however, does not reflect the congressional intent of formulating a narrow provision which protects U.S. shipyards. Customs is proposing to revoke C.S.D. 82–42 and re-adopt the doctrine of foreseeability, albeit in a more limited scope, in assessing claims for relief from the duties assessed pursuant to the vessel repair statute. The negligence of regular crew members and other parties, for example stevedores, if proven by the vessel owner or his authorized agent, would still be considered a casualty within the meaning of section 1466(d)(1); however, no relief will be granted where the repairs resulted from conditions arising from: (1) Violations of the U.S. Coast Guard or other applicable regulations; and/or (2) failure to correct, at the earliest opportunity, hazardous or potentially hazardous situations reported in any of the vessel logs, surveys, or transmittals to, from or between the vessel's operators, owners or other parties with direct knowledge of such situations. Because a change in the current interpretation of negligence in this area will have an effect on the domestic shipping industry, comments are invited with respect to this proposal.

DATES: Comments must be submitted on or before January 14, 1991.

ADDRESSES: Written comments (preferably in triplicate) may be submitted to an inspected at the Regulations and Disclosure Law Branch, U.S. Customs Service Headquarters, room 2119, 1301 Constitution Avenue NW., Washington, DC 20229.

FOR FURTHER INFORMATION CONTACT: Glen E. Vereb, Carrier Rulings Branch, (202) 566–5706.

SUPPLEMENTARY INFORMATION:

Background

Title 19, Unites States Code, section 1466, provides in pertinent part for payment of duty in the amount of 50 percent ad valorem on the cost of foreign repairs to vessels documented under the laws of the U.S. to engage in foreign or coastwise trade, or intended to engage in such trade. Section 1466(d)(1) provides for remission of the above duties in instances where good and sufficient evidence is furnished to show that foreign repairs were compelled by "stress of weather or other casualty" and necessary to secure the safety and seaworthiness of the vessel to enable her to reach port of destination. Regulations implementing the statute are set forth in § 4.14, Customs Regulations (19 CFR 4.14).

Customs has modified its approach over the years with regard to the concept of negligence constituting an "other casualty" within the meaning of section 1466(d)(1). The doctrine of foreseeability was first enunciated in C.I.E. 488/47. The test at that time was whether or not the negligent act or acts (or the damages resulting therefrom) could have been foreseen and guarded against by the officers of the ship. This approach was found not to be conclusive in determining whether an occurrence which is not the consequence of extrinsic fore is a casualty. C.I.E. 1161/62 (See also C.I.E. 688/72 and T.D. 55670(2)).

A line of cases subsequent to C.I.E. 1161/62 exists, however, holding that single negligent acts of officers of ships (as opposed to regular crew) preclude relief under the "other casualty" provisions of section 1466(d)(1) (C.S.D. 79-33, 81-154 and rulings cited therein). In C.S.D. 82-42 the distinction between officer and crew was eliminated. Negligent acts, whether committed by crew members or officers, were considered to be "other casualties" within the meaning of section 1466(d)(1) where owner direction or inducement is not in evidence.

The current position of Customs is that negligence committed by any party, absent owner direction or inducement, resulting in damage to the vessel constitutes a "casualty" within the meaning of section 1466(d)(1). This position, however, is in contravention of the interpretation of "casualty" by the Customs Court and ordinary English usage. Dictionaries uniformly define "casualty" as involving an accident and define "accident" as involving something unexpected or unforeseeable. Customs believes, for example, that if a vessel's chief engineer stores oily waste rags near a furnace, the resulting fire is foreseeable and therefore not a casualty.

In *Dollar Steamship Lines Inc.* v. *United States*, 5 Cust. Ct. 23, 28-29, C.D. 362 (1940), the court reasoned that:

> the word "casualty" is to be considered together with the phrase "stress of weather." The phrase "or other casualty" is supplemental to and qualifies the phrase "stress of weather" broadening the term to include other similar casualties * * *. A casualty similar to "stress of weather" would include such as is violently exerted; that which comes with unexpected force or violence, such as that of a fire, or a collision, or an explosion. We are of the opinion that a casualty similar to "stress of weather" should be of necessity a happening that comes with the violence of the turbulent forces of nature.

See also *International Navigation Co., Inc.* v. *United States*, 38 Cust. Ct. 5, 11, C.D. 1836; *Suwannee Steamship Co.* v. *United States*, 79 Cust. Ct. 19, 27, C.D. 4708.

Customs is of the opinion that the approach articulated in C.S.D. 82-42 is incorrect as a matter of law and that the doctrine of foreseeability should once again be implemented, albeit in a more limited scope, regarding claims for relief under the vessel repair statute based on the negligence of officers of a ship. The negligence of regular crew members and other parties, for example stevedores, if proven by the vessel owner or his authorized agent, would still be considered an unforeseeable casualty within the meaning of section 1466(d)(1); however, no relief will be granted where the repairs resulted from conditions arising from: (1) Violations of U.S. Coast Guard or other applicable regulations; and/or (2) failure to correct, at the earliest opportunity, hazardous or potentially hazardous situations reported in any of the vessel's logs, surveys, or transmittals to, from or between the vessel's operators, owners, or the other parties with direct knowledge of such situations.

Comments

Prior to making a determination on these matters and revoking C.S.D. 82-42, consideration will be given to written comments timely submitted to Customs. Submitted comments will be available for public inspection in accordance with the Freedom of Information Act (5 U.S.C. 552), § 1.4, Treasury Department Regulations (31 CFR 1.4), and § 103.11(b), Customs Regulations (19 CFR 103.11(b)), on regular business days between the hours of 9 a.m. and 4:30 p.m., at the Regulations and Disclosure Law Branch, room 2119, U.S. Customs Service Headquarters, 1301 Constitution Avenue NW., Washington, DC.

Drafting Information

The principal author of this document was Michael Smith, Regulations and Disclosure Law Branch, Office of Regulations and Rulings, U.S. Customs Service. However, personnel from other offices participated in its development.

Carol Hallett,

Commissioner of Customs.

Approved: December 10, 1990.

Peter K. Nunez,

Assistant Secretary of Treasury.

[FR Doc. 90–29333 Filed 12–13–90; 8:45 am]

BILLING CODE 4820-02-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

42 CFR Part 124

[0905-AD27]

Grants for Hospital Construction and Modernization; Federal Right of Recovery and Waiver of Recovery

AGENCY: Public Health Service, DHHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Public Health Service proposes to amend its regulations relating to the waiver of the Federal right of recovery for good cause to include instances where a facility has been acquired from an agency of the United States. The Department is of the view that it is in the best interest of the United States to have the waiver available in appropriate circumstances where facilities are purchased from Federal agencies, which have acquired title to the facilities in the course of carrying out their responsibilities under Federal law, and have made reasonable effort to dispose of the facility for operation as a public or nonprofit health care facility.

DATES: Comments on the proposed rule must be received on or before January 14, 1991.

ADDRESSES: Address comments in writing to: Donald B. Sylvain, Chief, Medical Facilities Branch, Division of Facilities Assistance and Recovery, Bureau of Health Resources Development (BHRD), Health Resources and Services Administration, room 11A-05, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857. Comments will be available for public inspection at the above address on Monday through Friday of each week from 8:30 a.m. to 5 p.m.

FOR FURTHER INFORMATION CONTACT: Donald B. Sylvain, (301-443-5766).

SUPPLEMENTARY INFORMATION: On March 7, 1986, the Secretary of Health and Human Services added a new subpart H to part 124 of title 42, CFR, to implement sections 609 and 1622 of the Public Health Service Act (42 U.S.C. 291i, 300s-1a) as amended (51 FR 7935). The regulations provide for recovery of funds by the United States when a health care facility that was constructed with the aid of a grant under title VI (The Hill-Burton Act) or title XVI of the Public Health Service Act is, within 20 years, sold or transferred to an entity that would not have been qualified to receive a grant. The regulations also provide for recovery where, within the same 20-year period, an assisted facility ceases to be a health care facility to which a grant could have been made. In a "cease to be" situation, the statutes and regulations authorize the Secretary to waive the recovery rights of the United States if the Secretary determines, in accordance with applicable regulations, that there is good cause for waiving such rights with respect to a facility. The provisions relating to the good cause waiver are set out in § 124.708.

The Department proposes to amend this section to take into consideration in determining good cause for a waiver that the facility has been acquired from an agency of the United States (e.g. The Federal Housing Administration under its mortgage insurance commitment program) which has made a reasonable effort to dispose of it for operation as a public or nonprofit health care facility.

The Department is of the view that it is in the best interest of the United States to have the waiver available in appropriate circumstances where facilities are purchased from Federal agencies, which have acquired title to the facilities in the course of carrying out their responsibilities under Federal law.

Executive Order 12291

The Secretary concludes that the amendment is not a major rule within the meaning of the Executive Order because it will not have an effect on the economy of $100 million or more or otherwise meet the threshold criteria.

Regulatory Flexibility Act and Executive Order 12291

The Department of Health and Human Services has determined that this proposed rule will not have a significant economic impact on a substantial number of small entities, and therefore an initial regulatory flexibility analysis is not required.

The Department also has determined that this proposed regulation is not a "major rule" under Executive Order 12291. Thus, a regulatory impact analysis is not required.

Paperwork Reduction Act

This proposed rule contains no new additional information collection or record keeping requirements.

List of Subjects in 42 CFR Part 124

Grant Programs—Health, Health facilities Low income persons.

Accordingly, the Department of Health and Human Services proposes to amend § 124.708 in subpart H of 42 CFR part 124 as set forth below:

Dated: October 10, 1990.

James O. Mason,

Assistant Secretary for Health.

Approved: November 26, 1990.

Louis W. Sullivan,

Secretary.

PART 124—MEDICAL FACILITY CONSTRUCTION AND MODERNIZATION

Subpart H—Recovery of Grant Funds

1. The authority citation for subpart H of part 124 continues to read as follows:

Authority: 42 U.S.C. 291i and 300s-1a.

2. Section 124.708 is amended by adding paragraph (c) as follows:

§ 124.708 Waiver of Recovery—good cause for other use of facility.

* * * * *

(c) The facility has been acquired from an agency of the United States (e.g. the Federal Housing Administration under its mortgage insurance commitment program) which has made a reasonable effort to dispose of it for operation as a public or nonprofit health care facility.

[FR Doc. 90-29276 Filed 12-13-90; 8:45 am]

BILLING CODE 4160-15-M

Health Care Financing Administration

42 CFR Parts 401 and 488

[HSQ-159-P]

RIN 0938-AF17

Medicare Program; Granting and Withdrawal of Deeming Authority to National Accreditation Organizations

AGENCY: Health Care Financing Administration (HCFA), HHS.

ACTION: Proposed rule.

SUMMARY: This rule proposes to implement section 1865(a) of the Act, as amended by sections 2345 and 2346 of Public Law 98-369 and section 6019 of Public Law 101-239. The amendments expand the types of providers and suppliers of services that we may consider to meet conditions of participation or certification or conditions for coverage by virtue of their accreditation by a national accreditation program; these providers and suppliers would also be subject to validation surveys. The rule would also extend confidentiality to accreditation surveys, other than home health agency surveys, done by accreditation programs in addition to the Joint Commission on Accreditation of Healthcare

Organizations, except that the Secretary may disclose survey and related information to the extent that such information relates to an enforcement action taken by the Secretary. The rule would also provide for: (1) The release to and use by the Secretary of all accreditation surveys and other relevant information even if a provider or supplier is not subject to a validation survey; and (2) the removing of deemed status of a facility based on a validation survey, an accreditation survey, or other information related to either.

DATES: Comments will be considered if we receive them at the appropriate address, as provided below, no later than 5 p.m. on February 12, 1991.

ADDRESSES: Mail comments to the following address:

Health Care Financing Administration, Department of Health and Human Services, Attention: HSQ-159-P, P.O. Box 26676, Baltimore, Maryland 21207.

Due to staffing and resource limitations, we cannot accept facsimile (FAX) copies of comments.

If you prefer, you may deliver your comments to one of the following addresses: Room 309-G, Hubert H. Humphrey Building, 200 Independence Ave., SW., Washington, DC, or Room 132, East High Rise Building, 6325 Security Boulevard, Baltimore, Maryland.

In commenting, please refer to file code HSQ-159-P. Comments received timely will be available for public inspection as they are received, beginning approximately three weeks after publication of this document, in room 309-G of the Department's offices at 200 Independence Ave., SW., Washington, DC, on Monday through Friday of each week from 8:30 a.m. to 5 p.m. (phone: 202-245-7890).

FOR FURTHER INFORMATION CONTACT: Irene Gibson, (301) 966-6768.

SUPPLEMENTARY INFORMATION:

Background

In order to participate in the Medicare program, providers and most types of suppliers of health care services, such as hospitals, rural health clinics, and laboratories, must meet requirements specified in the Social Security Act (the Act) and any others specified by the Secretary of Health and Human Services. These requirements are called conditions of participation for providers, conditions for coverage for suppliers or conditions of certification for rural health clinics (RHCs). Any provider or supplier who does not meet these requirements is considered out of compliance and risks having its participation in the Medicare program terminated.

State health departments or similar agencies under contract with HCFA (in accordance with section 1864 of the Act) survey health care facilities and some types of suppliers to ascertain compliance with the conditions of participation or conditions for coverage and to certify their findings to HCFA. On the basis of these State survey agency certifications, HCFA decides whether the provider or supplier qualifies, or continues to quality, for participation in the Medicare program, whether deficiencies exist, and if they are corrected.

Section 1865(a) of the Act provides that a hospital that is accredited by the Joint Commission on Accreditation of Healthcare Organizations (Joint Commission) is deemed to meet, by virtue of that accreditation, the Medicare conditions of participation, except those on utilization review, discharge planning and any requirement promulgated by the Secretary under section 1861(e)(9) that is higher than Joint Commission requirements for accreditation unless the Secretary determines that the Joint Commission process in these areas is at least equivalent to the standards promulgated by the Secretary. This eliminates the need for State survey agencies to determine routinely whether these "deemed" hospitals comply with the requirements of section 1861(e).

Section 1864(c) of the Act authorizes the Secretary to enter into agreements with the State survey agencies to determine, through validation surveys, whether hospitals participating in Medicare on the basis of Joint Commission accreditation are in fact meeting the conditions of participation. In order for a Joint Commission accredited hospital to be deemed to meet the Medicare conditions of participation, the hospital must agree, if it is included in a validation survey, to authorize the Joint Commission to release (and the Joint commission must release), to HCFA or a designated State agency, on a confidential basis, a copy of the most current Joint Commission accreditation survey together with any other information related to the survey (including corrective action plans) that the Secretary requires.

Section 1865(b) provides that if a hospital is found to have significant deficiencies, based on a validation survey or any other information, it will no longer be deemed to meet the Medicare conditions of participation.

Section 1865(a) of the Act, until July 18, 1984, provided that if the Secretary found that accreditation of an institution or agency by the American Osteopathic Association (AOA) or another national accreditation organization provided reasonable assurance that any or all of the conditions of sections 1861(e) (for hospitals), 1861(j) (for skilled nursing facilities (SNFs)), and 1861(o) (for home health agencies (HHAs)), as the case may be, were met, to the extent he deemed it appropriate, he could treat the entity as meeting the conditions of participation. On July 18, 1984, legislation expanded the types of entities that could be deemed. (See the section entitled "LEGISLATION", below.) Up to the present, we have not determined that any accreditation organization except AOA (for hospitals) has provided these assurances.

The majority of hospitals are accredited by either the Joint Commission or the AOA. No providers other than hospitals are currently-deemed to meet our conditions of participation or conditions for coverage. That is, although the Joint Commission accredits many other types of providers, such as SNFs, hospices,ambulatory surgical centers (ASCs), and RHCs, no members of these other provider categories have been granted deemed status.

Section 1864(c) of the Act authorizes the Secretary to enter into an agreement with the State survey agency to survey Joint Commission-accredited hospitals, either on a selective-sample basis or in response to a substantial allegation that significant deficiencies exist. In a previous rule, under the authority provided in sections 1865(a) and 1871 of the Act, we extended these surveys to AOA-accredited hospitals in order to provide reasonable assurance that an AOA-accredited hospital meets the requirements of section 1861 of the Act. In this rule, also under the authority of section 1865(a) and 1871 of the Act, we would extend validation surveys to all providers and suppliers deemed to meet Medicare conditions through the process of accreditation. This is done to provide reasonable assurance that deemed entities meet the applicable Medicare conditions of participation or for coverage.

Under section 1865(a) of the Act, we may deem as meeting conditions of participation a Joint Commission-accredited hospital only if the hospital authorizes the Joint Commission to release to us, and the Joint Commission releases to us, its most current accreditation survey together with any other information directly related to the survey (including corrective action plans) as the Secretary requires. This survey and other information is, in

general, confidential. However, the survey and other information may be disclosed by us to the extent that it relates to an enforcement action we have taken.

There is no similar specific statutory statement for requiring entities accredited by another accreditation organization to authorize release of accreditation surveys to us. However, under the general authority of section 1865(a) of the Act, we also have required AOA-accredited hospitals to authorize release of their surveys in order to provide reasonable assurance that all the conditions of section 1861(e) (the statutory definition of "hospital") are met. Until July 18, 1984, other than for the Joint Commission's accreditation findings there was no statutory authority to keep any accreditation finding confidential.

Current regulations at 42 CFR 488.5 (53 FR 22850, June 17, 1988) implement the statutory requirements of section 1865 of the Act insofar as the Joint Commission and AOA are concerned. Section 488.6, which applies to both Joint Commission and AOA accredited hospitals, implements section 1864(c) of the Act. This section discusses the basis for selecting a provider for a validation survey, what the provider must do if selected and the effect if it refuses to cooperate.

Legislation

On July 18, 1984, the Deficit Reduction Act of 1984 (DEFRA, Pub. L. 98-369) was enacted. Section 2345 of DEFRA amended section 1865(a) of the Social Security Act to require the Secretary to keep confidential the accreditation survey released to us by any accreditation body for any entity accredited by that body.

Section 2346 of DEFRA also amended section 1865(a) of the Act. This amendment allows us to find that if the accreditation of the following additional types of entities by any national accreditation organization provide reasonable assurance that the conditions of participation or certification (for rural health clinics) or conditions for coverage are met for these entities, then we may deem these entities as meeting these conditions. These additional entities are: psychiatric hospitals; ASCs; RHCs; laboratories; hospices; comprehensive outpatient rehabilitation facilities (CORFs); and clinic, rehabilitation agency, or public health agency providers of outpatient physical therapy (which includes speech pathology services) or occupational therapy services.

Section 411 of the Medicare Catastrophic Coverage Act of 1988 (Pub. L. 100-360) also amended section 1865(a) of the Act. This amendment requires the Secretary to keep confidential the accreditation survey released to us by any accreditation organization for any entity other than a survey with respect to a home health agency.

However, section 6019 of the Omnibus Budget Reconciliation Act of 1989 (OBRA '89) (Pub. L. 101-239), enacted December 19, 1989, further amended section 1865(a) of the Act to allow the Secretary to disclose an accreditation survey and information related to it to the extent the survey and information are related to an enforcement action taken by the Secretary. This provision was effective December 19, 1989. Section 6019 of OBRA '89 also amended section 1865(a), effective June 19, 1990, to require JCAHO-accredited hospitals to authorize the JCAHO to release to the Secretary upon request any other information (in addition to the accreditation survey) directly related to the survey as the Secretary may require (including corrective action plans), if they are to be deemed to meet the conditions of participation. Also effective June 19, 1990, the JCAHO must release the survey and other information to the Secretary in order for the hospital to be deemed to meet the conditions of participation.

Provisions of the Proposed Regulations

1. Confidentiality and Disclosure Provisions

We propose to revise 42 CFR 401.126(b)(2), which concerns information or records that are not available upon public request. Currently, this paragraph extends confidentiality to accreditation surveys and related materials furnished to us under section 1865(a)(2) of the Act by the Joint Commission or by any of its hospitals. We would extend the confidentiality to any national accreditation program recognized by the Secretary under section 1865 of the Act that accredits the specified providers or suppliers other than home health agencies (hospitals; psychiatric hospitals; SNFs; hospices; ASCs; RHCs; CORFs; laboratories; and clinic, rehabilitation agency, or public health agency providers of outpatient physical therapy services, speech pathology services, or occupational therapy services).

We would also simultaneously amend § 401.126 (b)(2) and add a paragraph (d) to § 401.133, Availability of official reports on providers of services, State agencies, intermediaries, and carriers under Medicare, to indicate that we will disclose any survey and related information released to us by an accreditation organization to the extent they are related to an enforcement action taken by HCFA and the accreditation survey of any HHA. We would add a paragraph (e) to § 401.133 to show that home health agency surveys are available without regard to reason for disclosure. We would also revise the title of § 401.133 to include suppliers.

We would also revise § 488.5, Effect of JCAHO and AOA accreditation, to show that hospitals accredited by JCAHO or AOA must authorize the release to HCFA of the most current accreditation surveys and any other related information (including corrective action plans) HCFA requires. We would also repeat the provision in revised § 401.126 (b)(2) and new § 401.133(d) that accreditation surveys and related information may be disclosed to the extent they relate to an enforcement action taken by HCFA. In addition, the accreditation survey of any HHA can be disclosed. We would state that we may determine, based on a validation survey, the accreditation survey or other related information, that the hospital does not meet Medicare conditions of participation. (Our interpretation of the latter provision is explicitly supported by the Conference Committee report to OBRA '89 concerning the miscellaneous technical provisions of the bill relating to part A. The report states that the OBRA '89 provisions permit the Secretary to determine that a hospital does not meet participation requirements on the basis of information other than information derived from a validation survey. (H.R. Rep. No. 386, 101st Cong., 1st Sess. 736 (1989)).

Based on the provisions of sections 1865(a) and 1871 of the Act, we are extending the confidentiality and disclosure provisions and the provisions concerning expansion of types of accreditation organizations (see section immediately below) to providers and suppliers other than hospitals accredited by the Joint Commission. Under the disclosure provisions of section 1865(a), an institution accredited by the Joint Commission must authorize the Joint Commission to release to the Secretary a copy of its most current accreditation survey, and in accordance with OBRA '89, any other information directly related to the survey as the Secretary may require. Under section 1865(a) of the Act, we must keep confidential any accreditation survey and related information (except for those of home health agencies) of accrediting organizations in addition to those of the Joint Commission, except to the extent that the survey or related information

relate to an enforcement action the Secretary takes.

By this rule, we propose to extend these disclosure requirements to the other types of providers and suppliers for which we are permitting deeming. We have interpreted the "reasonable assurance" and other provisions of section 1865(a) to extend not only to the confidentiality of surveys and related information that we require a provider or supplier to authorize its accreditation organization to release to us, but also to the disclosure provision as well. It would be inconsistent with the reasonable operations of our program to single out only one organization's providers as having to authorize the release of surveys and related information. In addition, we do not believe that Congress intended to extend the confidentiality provisions of OBRA '89 without simultaneously extending the disclosure provisions as well. Therefore, we are proposing that the confidentiality and disclosure provisions apply to all providers and suppliers.

We would also extend to providers (other than those hospitals accredited by the Joint Commission or AOA) and suppliers, by the same reasoning, the Conference Committee's intention that we be able to determine that a hospital does not meet program requirements based on an accreditation survey or related information.

2. Expansion of Types of Accredited Entities

We propose to redesignate § 488.6, Validation survey, as § 488.7 and add a new § 488.6, Other national accreditation programs. This new section would amend the regulations to conform to the statute, which permits HCFA to deem entities other than hospitals to meet the conditions of participation or certification or conditions for coverage, if HCFA finds that a national accreditation organization has provided reasonable assurance that these conditions are met. (Hospitals accredited by the Joint Commission or the AOA would continue to have to meet the requirements in § 488.5 to be deemed to meet conditions of participation.) The accreditation organization would have to provide HHS with reasonable assurance that the requisite conditions of participation or certification or conditions for coverage are met by the entities the accrediting body has accredited.

We propose to revise the regulations to reflect our current policy of publishing in the **Federal Register** any change in organizations whose specified providers or suppliers may be deemed as meeting conditions of participation or certification or conditions for coverage.

We would include a parallel provision to that in § 488.5 regarding the release and use of hospital accreditation surveys. That is, we would disclose the most current accreditation survey and related information to the extent they are related to an enforcement action taken by HCFA; the provider or supplier must authorize its accreditation organization to release to us a copy of its most current accreditation survey; and we may determine that a provider or supplier does not meet Medicare conditions, based on its accreditation survey or related information

3. Validation Surveys

The redesignated § 488.7, Validation survey, would be revised to extend the validation survey to the specified types of providers and suppliers accredited by accreditation organizations other than the Joint Commission and AOA.

In § 488.7(a), we would make a distinction between a survey done on the basis of a selective sample and one done on the basis of a substantial allegation of significant deficiencies. The first is comprehensive and addresses all conditions of participation or certification or conditions for coverage; the latter is initially directed solely at the requirements related to the allegation. If the State survey agency substantiates the allegation, and HCFA determines that the provider or supplier is out of compliance with one or more conditions of participation or conditions for coverage, the survey agency then conducts a complete survey.

Paragraphs (b), (c), (d) and (e) would be revised to substitute "provider or supplier" for "hospital" so that our rules would apply to any approved accreditation organization that accredits providers or suppliers other than hospitals. We would also revise paragraph (b) to extend confidentiality to an accreditation survey of any accredited entity other than a home health agency.

4. Review of Accrediting Bodies

In a new section, § 488.9, Federal review of accreditation organizations, we propose the standards for evaluating a deeming authority. We plan to evaluate an accreditation organization's accreditation requirements to determine whether they are equivalent to ours; the organization's survey process to determine the composition of the survey team, its qualifications and its ability to continue surveyor training; the comparability of survey procedures; the organization's monitoring procedures for providers or suppliers found out of compliance; the ability to provide HCFA with electronic data and reports necessary for effective validation and assessment of the survey process; the adequacy of staff and other resources; and the organization's ability to provide adequate resources for performing required surveys.

We would include in HCFA's review of a national accreditation organization the organization's agreement with HCFA to allow the organization to release the most current accreditation survey to us with any information related to the survey that we may require, including corrective action plans.

We also indicate that we would publish a notice in the **Federal Register** to notify the public of any organizations whose accredited, specified types of providers or suppliers are deemed to meet Medicare participation requirements. The notice would describe how the accreditation organization's accreditation program provides reasonable assurance that an entity accredited by the organization meets the Medicare requirements.

In this section, we also establish the criteria and procedures for removing the deeming authority. At the end of a validation review period, HCFA would identify any accreditation programs for which validation survey results indicate a rate of disparity between certifications of the accreditation organization and those of the State agency validating the accreditations of 20 percent or more. We would also identify validation survey results of accreditation programs that indicate a patterns over two years or more of increasing disparity between the certifications of the accreditation organization and those of the State agency. In addition, we would assess the equivalency of the accreditation organization's accreditation requirements compared to our comparable requirements if an accreditation organization changes its requirements. If an organization adopts less stringent requirements, we would allow it 60 days to notify us.

We would provide written notification to an accreditation organization indicating its approval to be an accreditation organization may be in jeopardy based on documentation identified through the validation review. We would include in the notification a statement concerning the discrepancies found; information explaining our deeming authority review; a description of the procedure the accreditation organization may follow to explain or justify findings made during validation review; and a description of what we

may do as a result of the findings from the validation review.

If we find an accreditation organization to have a disparity rate of 20 percent or more between its accreditation determinations and the certification determinations of the State survey agency or if we find validation survey results over a period of two or more years show a pattern of increasing disparity between the certifications of the accreditation organization and certifications of the State agency, we would conduct a deeming authority review. We would reevaluate whether the accreditation organization meets all the criteria we have for initial determinations that an organization's specified providers or suppliers are deemed to meet conditions of participation. We define "rate of disparity" and include an example in the definitions section, § 488.1, as follows.

"Rate of disparity" is the percent total validation surveys represented by the number of surveys for which the survey agency finds noncompliance with one or more Medicare conditions and no comparable condition level deficiencies were cited by the accreditation organization.

Example: Assume the State survey agency performs validation surveys at 200 facilities during a validation review period and finds that 60 of the 200 facilities had one or more conditions of participation out of compliance. HCFA compares the validation surveys with the accreditation surveys of the validated facilities and determines that the accreditation organization has found no condition level deficiencies comparable to those found by HCFA in 38 of the 60 facilities and it is reasonable to assume that the deficiencies were present at the time of the accreditation organization's survey. This would indicate a rate of disparity of 19 percent because 38 divided by 200 equals 19 percent.

If we determine, following the deeming authority review, that the organization's requirements are not comparable to ours, we may give the organization a conditional approval of its deeming authority for a probationary period of up to 180 days, to adopt comparable requirements. If we determine that the rate of disparity identified during the validation review indicates poor performance, we may: (1) Give conditional approval of its deeming authority for a period of up to one year, effective 30 days after the determination; (2) require the accreditation organization to release to us any facility-specific data we require for continued monitoring; (3) require the organization to provide us with a survey schedule for the purpose of intermittent onsite monitoring (by HCFA, State surveyors, or both) of the accreditation organization's survey process; and (4) publish in the Medicare Annual Report to Congress the name of any accreditation organization we give a probationary period.

Within 60 days after the conclusion of the probationary period, we would determine whether the organization continues to meet the criteria necessary for its accredited providers or suppliers to be deemed to meet conditions of participation and issue an appropriate notice. The determination would be based on any or all of the following:

(1) The evaluation of the most recent validation findings. For an organization to continue to have its providers or suppliers deemed to meet conditions of participation, the evaluation would have to show a significant reduction (from the prior two or more years) in the rate of disparity between the certifications of the State agency and the accreditation organization, and show a disparity rate of less than 20 percent;

(2) The evaluation of facility-specific data, as necessary, as well as other information;

(3) The evaluation of an accreditation body's surveyors in terms of qualifications, ongoing training, composition of survey team, etc.;

(4) The evaluation of survey procedures; and

(5) The evaluation of accreditation requirements.

If the accreditation organization has made no significant improvements during the probationary period, we would remove recognition of deemed authority, effective 30 days after we provide written notice to the organization that its deeming authority is removed. We would also publish a notice in the **Federal Register** giving the basis for removing the deeming authority from the accreditation organization and providing the reasons the organization's accreditation program no longer meets our requirements.

The regulations would state that the existence of any validation review, deeming authority review, probationary period, or any other action by HCFA does not affect or limit the conducting of any validation survey.

5. Other Clarifying Revisions

a. We propose to revise the definition of "accredited hospital" in § 488.1, Definitions, to "accredited provider or supplier" in order to include other providers and suppliers and to include accreditation programs other than the Joint Commission and AOA.

b. We propose to revise the definition of "substantial allegation" in § 488.1 in order to show that such an allegation may be a complaint from a variety of sources. We would clarify that a complaint need not be formal, directed to HCFA or the survey agency, or as a result of first-hand experiences.

c. We propose to add to § 488.1 a definition of "conditions of participation" in order to clarify that the requirements include conditions of certification for RHCs and a definition of "conditions for coverage". We would also define "Medicare condition" as any condition of participation or for coverage, or, long term care requirement, in order to avoid repeating the latter phrase every place it is applicable. We also propose to add definitions of "rate of disparity" (previously given) and "validation review period." The "validation review period" would be the period after the end of a fiscal year during which HCFA conducts a review of the previous year's validation surveys.

d. We propose to add parts 416 and 485 to the list of applicable conditions of participation or conditions for coverage a provider must meet in order to participate in the Medicare program. These parts contain the conditions for ASCs and CORFs. Part 488 has inadvertently not been updated to include these parts.

e. We would revise redesignated § 488.7(d) to parallel paragraph (c) of that section; i.e., we would add that a provider found out of compliance with Medicare conditions following a full State agency survey may be subject to termination of its provider agreement under § 489.53.

f. We would delete current § 488.6(d)(2) concerning when a significant deficiency will be determined not to exist and revise redesignated § 488.7(b)(3). These paragraphs, which may have caused some confusion, currently allow the Joint Commission or AOA to monitor the progress of a hospital's correction of deficiencies found during a validation survey, unless it is determined that follow-up by the State agency is necessary. We believe it is in the public interest to clarify the necessity for the State agency to follow-up any flaw serious enough to threaten the hospital's participation in the Medicare and Medicaid programs; therefore, this regulatory revision would clarify our current policy and eliminate any confusion that our current regulation may have caused in some cases. We also need to monitor progress ourselves to assure that the provider or supplier meets our requirements. Therefore, any accredited provider or supplier that fails to meet a condition of participation or certification or for coverage would be subject to the same adverse action procedures as an

unaccredited provider or supplier that fails to meet a condition.

We would make a conforming change to redesignated § 488.7 by removing paragraph § 488.6(e)(3), which allows a hospital to regain its deemed status if it withdraws a prior refusal to authorize its accreditation organization to release periodic status reports of correction progress since the accreditation organization would no longer monitor its correction progress.

g. We also propose to delete the informal review procedures now specified in § 488.6(f). Under these procedures, a hospital may request an informal review if it is dissatisfied with a finding that it is not in compliance with a condition of participation. We do not believe it is necessary or fair to unaccredited providers to afford accredited providers and suppliers a step in the appeals process not granted to unaccredited providers and suppliers. Eliminating this procedure for accredited providers and suppliers would assure that the appeals process is applied uniformly for all facilities participating in the program regardless of accreditation status. Moreover, we do not wish to encourage participation in an accreditation program by virtue of our appeals procedures. All providers and suppliers are entitled to a formal review (see part 498).

h. We would also amend § 488.10, State survey agency review; Statutory provisions, to include the additional types of providers and suppliers in the statutory provision in paragraph (d) that concerns treating accredited entities as meeting conditions of participation or conditions for coverage.

i. We would update the cross-reference in § 488.11, which refers to validation surveys, from § 488.6 to § 488.7.

Regulatory Impact Statement

A. Executive Order 12291

Executive Order 12291 (E.O. 12291) requires us to prepare and publish a regulatory impact analysis for any proposed rule that meets one of the E.O. criteria for a "major rule"; that is, that would be likely to result in—

- An annual effect on the economy of $100 million or more;
- A major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or
- Significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

This proposed rule would implement section 1865(a) of the Act, as amended by sections 2345 and 2346 of Public Law 98–369 and section 411 of Public Law 100–360 and section 6019 of Public Law 101–239. The amendments would—

- Extend confidentiality to accreditation surveys and related materials furnished to us by any accreditation program (other than home health agencies) and to its providers and suppliers;
- Permit HHS to deem as meeting conditions of participation, certification, or coverage, specified types of providers and suppliers accredited by accreditation organizations, including the Joint Commission and AOA; and
- Extend the validation survey to the specified types of providers and suppliers accredited by accreditation organizations other than the Joint Commission and AOA.

We do not believe that the provisions of this proposed rule would have an effect on the economy because they would not specify the accrediting organization(s) we would recognize. Should we decide in the future to recognize the Joint Commission or AOA for a purpose for which it is not currently recognized or to recognize any other accrediting authority, we would issue a notice in the **Federal Register.** The notice would include consideration of the economic impact of recognizing these organizations and, if appropriate, we would prepare a regulatory impact analysis.

Therefore, we conclude that this proposed rule, in itself, would have no effect on the economy and no threshold criteria under E.O. 12291 would be exceeded. Consequently, a regulatory impact analysis is not required.

B. Regulatory Flexibility Act

We generally prepare a regulatory flexibility analysis that is consistent with the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 through 612) unless the Secretary certifies that a proposed rule would not have a significant economic impact on a substantial number of small entities. As discussed above, we believe that the provisions of this regulation would not, in themselves, have an economic impact. Indirectly, this proposed rule may result in future issuances whereby small entities might be affected. However, in each of these cases, producers consistent with the RFA will be followed and a regulatory flexibility analysis performed, if warranted. Therefore, we conclude, and the Secretary certifies, that this proposed rule would not have a significant economic impact on a substantial number of small entities.

C. Rural Hospital Impact Statement

Section 1102(b) of the Act requires the Secretary to prepare a regulatory impact analysis if a proposed rule may have a significant impact on the operations of a substantial number of small rural hospitals. Such an analysis must conform to the provisions of section 603 of the RFA. For purposes of section 1102(b) of the Act, we define a small rural hospital as a hospital with fewer than 50 beds located outside of a Metropolitan Statistical Area.

We are not preparing a rural impact statement since we have determined, and the Secretary certifies that this proposed rule, in itself, would not have a significant economic impact on the operations of a substantial number of small rural hospitals.

Paperwork Burden

These changes do not impose paperwork collection requirements. Consequently, they need not be reviewed by the Executive Office of Management and Budget under the authority of the Paperwork Reduction Act of 1980 (44 U.S.C. 3801 et seq.).

Response to Comments

Because of the large number of items of correspondence we normally receive on a proposed rule, we are not able to acknowledge or respond to them individually. However, we will consider all comments that we receive by the date and time specified in the "Date" section of this preamble, and, if we proceed with a final rule, we will respond to the comments in the preamble of that rule.

List of Subjects

42 CFR Part 401

Claims, Freedom of information, Health facilities, Medicare, Privacy.

42 CFR Part 488

Health facilities, Survey and certification, Forms and guidelines.

Title 42 of the Code of Federal Regulations would be amended as follows:

PART 401—GENERAL ADMINISTRATIVE REQUIREMENTS

A. Part 401, subpart B is amended as follows:

1. The authority citation for subpart B is revised to read as follows:

Authority: Secs. 205, 1102, 1106, 1865, and 1871 of the Social Security Act (42 U.S.C. 405, 1302, 1306, 1395bb, and 1395hh); the Freedom

of Information Act (5 U.S.C. 552); and the Privacy Act (5 U.S.C. 552a).

2. Section 401.126(b)(2) is revised to read as follows:

§ 401.126 Information or records that are not available.

* * * * *

(b) *Materials exempt from disclosure by statute.* * * *

(2)(i) Except as specified in paragraph (b)(2)(ii) of this section, the Secretary may not disclose any accreditation survey or any information directly related to the survey (including corrective action plans) made by and released to it by the Joint Commission on Accreditation of Healthcare Organizations, the American Osteopathic Association or any other national accreditation organization that meets the requirements of § 488.6 of this chapter. Materials that are confidential include accreditation letters and accompanying recommendations and comments prepared by an accreditation organization concerning the entities it surveys.

(ii) *Exceptions.* (A) The Secretary may release the accreditation survey of any home health agency; and

(B) The Secretary may release the accreditation survey and other information directly related to the survey (including corrective action plans) to the extent the survey and information relate to an enforcement action taken by the Secretary; and

* * * * *

3. In § 401.133, the introductory text is republished, the section heading is revised and the section is amended by adding new paragraphs (d) and (e) to read as follows:

§ 401.133 Availability of official reports on providers and suppliers of services, State agencies, intermediaries, and carriers under Medicare.

The following shall be made available to the public under the conditions specified:

* * * * *

(d) *Accreditation surveys.* Upon written request, the Secretary may release the accreditation survey and related information from an accreditation organization meeting the requirements of § 488.5 or § 488.6 of this chapter to the extent the survey and information relate to an enforcement action taken by the Secretary..

(e) The Secretary may release the accreditation survey of any home health agency.

PART 488—SURVEY AND CERTIFICATION PROCEDURES

B. Part 488 is amended as follows:

1. The authority citation continues to read as follows:

Authority: Secs. 1102, 1814, 1861, 1865, 1866, 1871, 1880, 1881 and 1883 of the Social Security Act (42 U.S.C. 1302, 1395f, 1395x, 1395bb, 1395cc, 1395hh, 1395qq, 1395rr and 1395tt).

2. The table of contents to part 488 is amended by redesignating the title of § 488.6 as § 488.7, revising the title of § 488.5, adding a new title for § 488.6 and adding a new § 488.9 to read as follows:

Subpart A—General Provisions

Sec.

* * * * *

488.5 Effect of JCAHO or AOA accreditation of hospitals.

488.6 Other national accreditation programs for hospitals and other providers and suppliers.

488.7 Validation survey.

* * * * *

488.9 Federal review of accreditation organizations.

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3. Section 488.1 is amended by revising the definition of "Substantial allegation", removing "Accredited hospital" and adding definitions for "Accredited provider or supplier", "Conditions for coverage", "Conditions of participation", "Medicare condition", "Rate of disparity" and "Validation review period" to read as follows:

§ 488.1 Definitions.

As used in this part—

Accredited provider or supplier means a provider or supplier accredited by a national accreditation program meeting the requirements of and approved by HCFA in accordance with § 488.5 or § 488.6.

* * * * *

Conditions for coverage means the requirements suppliers must meet to participate in the Medicare program.

Conditions of participation means the requirements providers must meet to participate in the Medicare program and includes conditions of certification for rural health clinics.

* * * * *

Medicare condition means any condition of participation or for coverage or long-term care requirements.

* * * * *

Rate of disparity means the percent of total validation surveys represented by the number of surveys for which the survey agency finds noncompliance with one or more Medicare conditions and no comparable condition level deficiencies were cited by the accreditation organization.

Example: Assume the State survey agency performs validation surveys at 200 facilities during a validation review period and finds that 60 of the 200 facilities had one or more conditions of participation out of compliance. HCFA compares the validation surveys with the accreditation surveys of the validated facilities and determines that the accreditation organization has found no condition level deficiencies comparable to those found by HCFA in 38 of the 60 facilities and it is reasonable to assume that the deficiencies were present at the time of the accreditation organization's survey. This would indicate a rate of disparity of 19 percent because 38 divided by 200 equals 19 percent.

* * * * *

Substantial allegation means a complaint from any of a variety of sources (including complaints submitted in person, by telephone, through written correspondence, or in newspaper or magazine articles), that reflects on the health and safety of patients and raises doubts as to a provider's or supplier's compliance with any Medicare condition.

* * * * *

Validation review period is the period after the end of a Federal fiscal year during which HCFA conducts a review on the validation surveys for the previous fiscal year.

4. Section 488.3(a) is revised to read as follows:

§ 488.3 Conditions of participation: Conditions for coverage and requirements for SNFs and ICFs.

(a) *Basic rules.* In order to be approved for participation in or coverage under the Medicare program, a prospective provider or supplier must:

(1) Meet the applicable statutory definition in section 1861 or section 1881 of the Act; and

(2) Be in compliance with the applicable conditions or level A requirements (for SNFs) prescribed in subpart Q or U of part 405, part 416, subpart C of part 418, part 482, part 483, part 484, part 485, subpart A of part 491, or subparts G through N of part 493 of this chapter.

* * * * *

5. Section 488.5 is revised to read as follows:

§ 488.5 Effect of JCAHO or AOA accreditation of hospitals.

(a) *Deemed to meet.* Institutions accredited as hospitals by the JCAHO or AOA are deemed to meet all of the Medicare conditions of participation for hospital, except:

(1) The requirement for utilization review as specified in section 1861(e)(6) of the Act and in § 482.30 of this chapter.

(2) The additional special staffing and medical records requirements that are considered necessary for the provision of active treatment in psychiatric hospitals (section 1861(f) of the Act) and implementing regulations; and

(3) Any requirements under section 1861(e) of the Act and implementing regulations which the Secretary, after consulting with JCAHO or AOA, identifies as being higher or more precise than the requirements for accreditation (section 1865(a)(4) of the Act).

(b) *Release and use of hospital accreditation surveys.* (a) A hospital deemed to meet program requirements must authorize its accreditation organization to release to HCFA a copy of its most current accreditation survey together with any other information related to the survey that HCFA may require (including corrective action plans).

(2) HCFA may use a validation survey, an accreditation survey or other information related to the survey to determine that a hospital does not meet the Medicare conditions of participation.

(3) HCFA may disclose the survey and information related to the survey to the extent that the accreditation survey and related survey information related to an enforcement action taken by HCFA.

6. Section 488.6 is redesignated as § 488.7, and is revised to read as follows:

§ 488.7 Validation survey.

(a) *Basis for survey.* HCFA may require a survey of an accredited provider or supplier to validate its Organization's accreditation process. These surveys will be conducted on a selective-sample basis, or in response to substantial allegations of significant deficiencies.

(1) When conducted on a selective sample basis, the survey is comprehensive and addresses all Medicare conditions.

(2) When conducted in response to a substantial allegation, the State survey agency surveys for any condition that HCFA determines is related to the allegation. If the State survey agency substantiates a deficiency and HCFA determines that the provider or supplier is our of compliance on any Medicare condition, the State survey agency conducts a full Medicare survey.

(b) *Effect of selection for survey.* A provider or supplier selected for a validation survey must: (1) Authorize its accreditation organization to release to HCFA or the State survey agency a copy of the provider's or supplier's most current full accreditation survey and any subsequent partial survey. (For the rules on confidentiality, see 42 CFR 401.126(b)(2)).

(2) Authorize carrying out the validation survey; and

(3) Authorize the State survey agency to monitor the correction of any deficiencies found through the validation survey.

(c) *Refusal to cooperate with survey.* If a provider or supplier selected for a validation survey fails to comply with the requirements specified in paragraph (b) of this section, it will no longer be deemed to meet the Medicare conditions but will be subject to full review by the State survey agency in accordance with § 488.11 and may be subject to termination of its provider agreement under § 489.53 of this chapter.

(d) *Consequences of finding of non-compliance.* If a validation survey results in a finding that the provider or supplier is out of compliance with one or more Medicare conditions the provider or supplier will no longer be deemed to meet the Medicare conditions. Specifically, the provider or supplier will be subject to the requirements applied to unaccredited providers or suppliers that are found out of compliance following a State agency survey under § 488.28, and to full review by a State agency survey in accordance with § 488.11 and may be subject to termination of the provider agreement under § 489.53 of this chapter.

(e) *Reinstating effect of accreditation.* An accredited provider or supplier will be once again deemed to meet the Medicare conditions in accordance with this section if:

(1) It withdraws any prior refusal to authorize its accreditation organization to release a copy of the provider's or supplier's current accreditation survey;

(2) It withdraws any prior refusal to allow a validation survey; and

(3) HCFA finds that the provider or supplier hospital meets all the Medicare conditions.

If HCFA finds that an accredited facility meets the Life Safety Code Standard by virtue of a plan of correction, the State survey agency will continue to monitor the facility until it is in compliance with the Life Safety Code Standard.

7. A new § 488.6 is added to read as follows:

§ 488.6 Other national accreditation programs for hospitals and other providers and suppliers.

(a) A national accreditation program for hospitals; psychiatric hospitals; SNFs; HHAs; ASCs; RHCs; CORFs; hospices; laboratories; or clinic, rehabilitation agency, or public health agency providers of outpatient physical therapy, occupational therapy or speech pathology services may provide reasonable assurance to the Secretary that it requires the providers or suppliers it accredits to meet any or all of the Medicare conditions. In such a case, the Secretary may deem the providers or suppliers the program accredits to be in compliance with the appropriate Medicare conditions.

These providers and suppliers are subject to validation surveys under § 488.7 of this subpart. The Secretary will publish a notice in the Federal Register identifying the programs and describing the basis for granting deeming authority of any national accreditation program and the providers or suppliers it accredits. The notice will describe how the accreditation organization's accreditation program provides reasonable assurance that entities accredited by the organization meet Medicare requirements. (See § 488.5 for requirements concerning hospitals accredited by the Joint Commission or AOA.)

(b)(1) A provider or supplier deemed to meet program requirements under paragraph (a) of this section must authorize its accreditation organization to release to HCFA a copy of its most current accreditation survey, together with an information related to the survey that HCFA may require (including corrective action plans).

(2) HCFA may determine that a provider or supplier does not meet the Medicare conditions on the basis of its own investigation of the accreditation survey or any other information related to the survey.

(3) Upon written request, HCFA may disclose the survey and information related to the survey—

(i) Of any HHA; or

(ii) Of any other provider or supplier specified at paragraph (a) of this section if the accreditation survey and related survey information relate to an enforcement action taken by HCFA.

8. a new § 488.9 is added to read as follows:

§ 488.9 Federal review of accreditation organizations.

(a) *Review and approval of national accreditation organizations.* (1) HCFA's review of a national accreditation organization will include, but will not necessarily be limited to, an evaluation of the following—

(i) The equivalency of an accreditation organization's accreditation requirements of an entity to the comparable HCFA requirements for the entity;

(ii) The organization's survey process to determine—

(A) The composition of the survey team, surveyor qualifications, and the ability of the organization to provide continuing surveyor training;

(B) The comparability of survey procedures to those of State survey agencies, including survey frequency, and the ability to investigate complaints against accredited facilities;

(C) The organization's procedures for monitoring providers or suppliers found by the organization to be out of compliance with program requirements. These monitoring procedures are to be used only when the organization identifies noncompliance. If noncompliance is identified through validation surveys, the State survey agency monitors corrections as specified at § 488.7(b)(3);

(D) The ability of the organization to provide HCFA with electronic data in ASCII comparable code and reports necessary for effective validation and assessment of the organization survey process;

(E) The adequacy of staff and other resources; and

(F) The organization's ability to provide adequate funding for performing required surveys; and

(iii) The accreditation organization's agreement to provide HCFA with a copy of the most current accreditation survey together with any other information related to the survey as HCFA may require (including corrective action plans);

(2) HCFA will publish a notice in the **Federal Register** identifying and describing the accreditation organization and the basis for granting an accreditation organization deeming authority of any national accreditation program and the providers or suppliers it accredits. The notice will describe how the accreditation organization's accreditation program provides reasonable assurance that entities accredited by the organization meet Medicare requirements.

(b) *Effects of approval of accreditation organization.* HCFA will deem providers and suppliers accredited by an approved accreditation organization to meet all of the conditions of participation or conditions of coverage except for any condition that HCFA identifies as being more stringent or more precise than the requirements for accreditation.

(c) *Removal of approval of accreditation organization authority.* This paragraph establishes specific criteria and procedures for removing the approval of a national accreditation organization.

(1) Comparability review. HCFA will compare the equivalency of an accreditation organization's accreditation requirements to the comparable HCFA requirements if:

(i) HCFA imposes new requirements; or

(ii) An accreditation organization proposes to adopt new requirements. An accreditation organization must provide written notification to HCFA at least 30 days in advance of the effective date of any proposed changes in its accreditation requirements.

(2) Validation review. Following the end of a validation review period, HCFA will identify any accreditation programs for which—

(i) Validation survey results indicate a rate of disparity between certifications of the accreditation organization and certification of the State agency of 20% or more; or

(ii) Validation survey results over a period of two or more years indicate a pattern of increasing disparity between the certifications of the accreditation organization and certifications of the State agency.

(3) If validation review reveals documentation that an accreditation organization is not meeting the requirements of this subpart, HCFA will provide written notice to the organization indicating that its approval to be an accreditation organization may be in jeopardy. The notice provides the following information—

(i) A statement of the requirements, instances, rates and/or patterns of discrepancies that were found as well as other related documentation;

(ii) An explanation of HCFA's deeming authority review on which the final determination is based;

(iii) A description of the process available if the accreditation organization wishes an opportunity to explain or justify the findings made during the validation review; and

(iv) A description of the possible actions that may be imposed by HFCA based on the findings from the validation review.

(4) Deeming authority review. (i) HCFA will conduct a review of an accreditation organization's accreditation program if the comparability or validation review produces findings as described at paragraph (c)(1) or (2), respectively, of this section, HCFA will review, as appropriate, either or both—

(A) The requirements of the accreditation organization; or

(B) The criteria described in paragraph (a)(1) of this section to reevaluate whether the accreditation organization continues to meet all these criteria.

(ii) If HCFA determines, following the deeming authority review, that the accreditation organization has failed to adopt requirements comparable to HCFA's or submit new requirements timely, the accreditation organization may be given a conditional approval of its deeming authority for a probationary period of up to 180 days, to adopt comparable requirements.

(iii) If HCFA determines, following the deeming authority review, that the rate of discrepancies identified during the validation review indicates poor performance by an accreditation program, HCFA—

(A) May give the accreditation organization conditional approval of its deeming authority during a probationary period of up to one year (whether or not there are also noncomparable requirements) that will be effective 30 days following the date of this determination;

(B) Will require the accreditation organization to release to HCFA any facility-specific data that is required by HCFA for continued monitoring;

(C) Will require the accreditation organization to provide HCFA with a survey schedule for the purpose of intermittent onsite monitoring by HCFA staff, State surveyors, or both; and

(D) Will publish in the Medicare Annual Report to Congress the name of any accreditation organization given a probationary period by HCFA.

(iv) Within 60 days after the end of any probationary period, HCFA will make a final determination as to whether or not an accreditation program continues to meet the criteria described at paragraph (a)(1) of this section and will issue an appropriate notice (including reasons for the determination) to the accreditation organization and affected providers or suppliers. This determination will be based on any of the following—

(A) The evaluation of the most current validation survey and review findings. In order for the specified providers or suppliers to continue to be deemed as meeting the criteria in paragraph (a)(1) of this section, the results of the evaluation must indicate a significant reduction in the rate of disparity between the certifications of the accreditation organization and the certifications of the State agency as described at paragraph (c)(2) of this section, and a rate of less than 20 percent;

(B) The evaluation of facility-specific data, as necessary, as well as other related information;

(C) The evaluation of an accreditation organization's surveyors in terms of qualifications, ongoing training, composition of survey team, etc.;

(D) The evaluation of survey procedures; or

(E) The accreditation requirements.

(v) If the accreditation program has not made improvements acceptable to HCFA during the probationary period, HCFA may remove recognition of deemed authority effective 30 days from the date that it provides written notice to the organization that its deeming authority will be removed.

(vi) The existence of any validation review, deeming authority review, probationary period, or any other action by HCFA, does not affect or limit the conducting of any validation survey.

(vii) HCFA will publish a notice in the Federal Register containing a justification of the basis for removing the deeming authority from an accreditation organization. The notice will provide the reasons the accreditation organization's accreditation program no longer meets Medicare requirements.

8. Section 488.10(d) is revised to read as follows:

§ 488.10 State survey agency review; Statutory provisions.

* * * * *

(d) Section 1865(a) of the Act also provides that if the Secretary finds that accreditation of a hospital; psychiatric hospital; SNF; HHA; hospice; ASC; RHC; CORF; laboratory; or clinic, rehabilitation agency, or public health agency provider of outpatient physical therapy, occupational therapy, or speech pathology services by any national accreditation organization provides reasonable-assurance that any or all Medicare conditions are met, HHS may treat the provider or supplier as meeting the conditions.

§ 488.11 [Amended]

10. In § 488.11(b), the reference to § 488.6 is revised to read "§ 488.7".

(Catalog of Federal Domestic Assistance Programs No. 13.773, Medicare—Supplementary Medical Insurance)

Dated: August 1, 1990.

Gail R. Wilensky,

Administration, Health Care Financing Administration.

Approved: September 27, 1990.

Louis W. Sullivan,

Secretary.

[FR Doc. 90-29163 Filed 12-13-90; 8:45 am]

BILLING CODE 4120-01-M

FEDERAL EMERGENCY MANAGEMENT AGENCY

44 CFR Part 67

[Docket No. FEMA-7008]

Proposed Flood Elevation Determinations

AGENCY: Federal Emergency Management Agency.

ACTION: Proposed rule.

SUMMARY: Technical information or comments are solicited on the proposed modified base (100-year) flood elevations listed below for selected locations in the nation. These base (100-year) flood elevations are the basis for the floodplain management measures that the community is required to either adopt or show evidence of being already in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program.

DATES: The period for comment will be ninety (90) days following the second publication of the proposed rule in a newspaper of local circulation in each community.

ADDRESSES: See table below.

FOR FURTHER INFORMATION CONTACT: Mr. John L. Matticks, Chief, Risk Studies Division, Federal Insurance Administration, Federal Emergency Management Agency, Washington, DC 20472, (202) 646-2767.

SUPLEMENTARY INFORMATION: The Federal Emergency Management Agency gives notice of the proposed determinations of modified base (100-year) flood elevations for selected locations in the nation, in accordance with section 110 of the Flood Disaster Protection Act of 1973 (Pub. L. 93-234), 87 Stat. 980, which added section 1363 to the National Flood Insurance Act of 1968 (title XIII of the Housing and Urban Development Act of 1968 (Pub. L. 90-448)), 42 U.S.C. 4001-4128, and 44 CFR 67.4(a).

These elevations, together with the floodplain management measures required by § 60.3 of the program regulations, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements on its own, or pursuant to policies established by other Federal, State, or regional entities. These proposed modified elevations will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and their contents. Pursuant to the provisions of 5 U.S.C. 605(b), the administrator, to whom authority has been delegated by the Director, Federal Emergency Management Agency, hereby certifies that the proposed modified flood elevation determinations, if promulgated, will not have a significant economic impact on a substantial number of small entities. A flood elevation determination under section 1363 forms the basis for new local ordinances, which, if adopted by a local community, will govern future construction within the floodplain area. The local community voluntarily adopts floodplain ordinances in accord with these elevations. Even if ordinances are adopted in compliance with Federal standards, the elevations prescribe how high to build in the floodplain and do not proscribe development. Thus, this action only forms the basis for future local actions. It imposes no new requirement; or itself it has no economic impact.

List of Subjects in 44 CFR Part 67

Flood Insurance, Floodplains.

1. The authority citation for part 67 continues to read as follows:

Authority: 42 U.S.C. 4001 et seq., Reorganization Plan No. 3 of 1978, E.O. 12127.

The proposed modified base flood elevations for selected locations are:

PROPOSED MODIFIED BASE FLOOD ELEVATIONS

State	City/Town/County	Source of Flooding	Location	#Depth in feet above ground *Elevation in feet (NGVD)	
				Existing	Modified
Alabama	City of Madison, Madison County.	Bradford Creek	Just downstream of Joe Wheeler Highway	None	*614

PROPOSED MODIFIED BASE FLOOD ELEVATIONS—Continued

State	City/Town/County	Source of Flooding	Location	#Depth in feet above ground *Elevation in feet (NGVD)	
				Existing	Modified
			About 1.3 miles upstream of Joe Wheeler Highway.	None	*631
		Bradford-Sullivan Ditch	At mouth	None	*615
			Just downstream of Wall-Triana Highway	None	*634

Maps are available for inspection at the City Hall, 100 Hughes Road, Madison, Alabama.

Send comments to The Honorable Teague Cuddeback, Mayor, City of Madison, 100 Hughes Road, Madison, Alabama 34758.

Arizona	Town of Eagar Apache County.	Wash A	At Eighth Street	None	*7,168
			Approximately 775 feet upstream of Eighth Street.	None	*7,195
			At 10th Street	None	*7,260
			Approximately 150 feet upstream of Pine Street.	None	*7,308

Maps are available for review at Town Hall, Town of Eagar, Arizona.

Send comments to The Honorable Art Eagar, Mayor, Town of Eagar, P.O. Box 1300, Eagar, Arizona 85925.

Arkansas	Bay, City of Craighead County	Ditch No. 6	Flooding controlled by Gum Slough Ditch downstream corporate limits.	None	*227
			Upstream corporate limits	None	*228

Maps are available for inspection at the City Hall, 222 Elder Street, Bay, Arkansas.

Send comments to The Honorable Billy McMasters, Mayor of the City of Bay, Craighead County, P.O. Box 99, Bay, Arkansas 72411.

Arkansas	Conway, City of Faulkner County.	Stone Dam Creek	Upstream side of State Route 365	None	*275
			Approximately 2,530 feet upstream of State Route 286.	*297	*299
		Railroad Creek	At confluence with Stone Dam Creek	None	*276
			Downstream side of American Transportation Building.	None	*290
		Stone Dam Tributary	At confluence with Stone Dam Creek	None	*281
			Approximately 180 feet upstream of Hardy Street.	None	*399
		Gold Creek (East)	Approximately 500 feet downstream of Wiggle Worm Road.	*280	*278
			Approximately 1,600 feet downstream of U.S. Route 64.	*286	*285
		Tucker Creek	Upstream side of State Route 286	None	*285
			Approximately 1,580 feet downstream of Salem Road.	None	*289
		Tucker Creek Tributary	At the confluence with Tucker Creek	None	*285
			Approximately 110 feet upstream of West Tyler Street.	None	*314
		Unnamed Tributary to Tucker Creek Tributary.	At confluence with Tucker Creek Tributary	None	*285
			Approximately 770 feet upstream of State Route 60.	None	*285
		Tributary 1 to Tucker Creek Tributary.	At confluence with Tucker Creek Tributary	None	*296
			Approximately 130 feet upstream of W. Tyler Street.	None	*308
		Tributary 2 to Tucker Creek Tributary.	At confluence with Tucker Creek Tributary	None	*299
			Approximately 130 feet upstream of W. Tyler Street.	None	*308
		Arkansas River	Approximately 100 feet downstream of Lake Carol Dam.	None	*287
		Lake Conway	At the Amity Road	None	*272
		Little Creek	At the confluence with Lake Conway	None	*272

Maps are available for inspection at the City Hall, 1201 Oak, Conway, Arkansas.

Send comments to The Honorable David Kinley, Mayor of the City of Conway, Faulkner County, 1201 Oak, Conway, Arkansas 72032.

Arkansas	Greenbrier, City, Faulkner County.	Greenbrier Creek	Approximately 1,690 feet downstream of State Route 25.	None	*324
			Approximately 500 feet upstream of State Route 225.	None	*355
		Tributary 1	Approximately 1,110 feet downstream of U.S. Route 65.	None	*322
			Approximately 700 feet upstream of Linder Road.	None	*336
		Tributary A	At confluence with Tributary 1	None	*327
			Approximately 1,300 feet upstream of U.S. Route 65.	None	*332

PROPOSED MODIFIED BASE FLOOD ELEVATIONS—Continued

State	City/Town/County	Source of Flooding	Location	#Depth in feet above ground *Elevation in feet (NGVD)	
				Existing	Modified
Maps available for inspection at the City Hall, U.S. Highway 65, Greenbrier, Arkansas.					
Send comments to The Honorable Melton Cotton, Mayor of the City of Greenbrier, Faulkner County, P.O. Box 233, Greenbrier, Arkansas 72058.					
Arkansas	Jonesboro, City, Craighead County.	Whiteman's Creek	Approximately 317 feet upstream of Union Pacific Railroad.	None	*251
			Approximately 739 feet downstream of Caraway Road.	None	*268
		Lateral No. 3	Approximately 1,056 feet downstream of County Route 46 (Parker Road).	None	*232
			At the Commerce Drive	None	*236
		Moore's Ditch	At the confluence with Moore's Ditch	None	*237
			Approximately 53 feet upstream of Union Pacific Railroad.	None	*250
		Higginbottom Creek	Upstream side of Union Pacific Railroad	*255	*253
			At the Parker Road	None	*282
		Butlers Ditch	At the County Route 49	None	*235
			At State Route 18	None	*235
		Little Bay Ditch	Approximately 1,320 feet downstream of County Route 46.	None	*232
			At State Route 18	None	*235
		Maple Slough Ditch	At the County Route 46	None	*233
			At the State Route 18	None	*235
		Christian Creek	Approximately 422 feet downstream of Wood Springs Road.	None	*314
			Approximately 211 feet downstream of Covey Road.	None	*339
		Turtle Creek	Approximately 106 feet downstream of St. Louis Southwestern Railway.	None	*267
			At the St. Louis Southwestern Railway	None	*267
Maps available for inspection at the City Hall, 314 W. Washington, Jonesboro, Arkansas.					
Send comments to The Honorable Hubert Bordell, Mayor of the City of Jonesboro, Craighead County, P.O. Box 1845, Jonesboro, Arkansas 72403.					
California	City of La Quinta Riverside County.	Bear Creek	At Calle Nogalas extended across Bear Creek	*140	None
			At the intersection of Calle Yucatan and Avenida Obreson.	*55	None
			On eisenhower Drive 200 feet north of the intersection of Calle Tampico and Eisenhower Drive.	*43	#1
			On Avenida Bermudas 200 feet north of the intersection of Avenida Bermuda and 52 Avenue.	None	#1
			At the intersection of Calle Tampico and Washington Street.	*40	#1
			At the intersection of Adams Street and 52 Avenue.	None	#1
Maps are available for review at the City Engineering Department, 78105 Calle Estado, La Quinta, California.					
Send comments to The Honorable John Pena, Mayor, City of La Quinta, P.O. Box 1504, La Quinta, California 92253.					
Colorado	City of Manitou Springs El Paso County	Beckers Lane Tributary	At confluence with Fountain Creek	*6,200	*6,200
			Approximately 50 feet upstream of Via San Miguel.	None	*6,204
			Just downstream of Via Chula Vista	None	*6,212
			Approximately 370 feet upstream of Via Chula Vista.	None	*6,223
Maps are available for review at the Manitou Springs Planning Department, 606 Manitou Avenue, Manitou Springs, Colorado.					
Send comments to The Honorable Chris Daly, Mayor, City of Manitou Springs, 606 Manitou Avenue, Manitou Springs, Colorado 80829.					
Delaware	Delaware City, City New Castle County.	Delaware River	Along entire shoreline	*12	*9
			At intersection of Washington and Harbor Streets.	*10	*9
Maps available for inspection at the City Hall, 407 Clinton Street, Delaware City, Delaware.					
Send comments to Ms. Carol Boyer, Manager of the City of Delaware City, New Castle County, 407 Clinton Street, P.O. Box 4159, Delaware City, Delaware 19706.					
Delaware	Wilmington, City New Castle County.	Christina River	At confluence with the Delaware River	*11	*10
			At upstream corporate limits	*9	*10
		Brandywine	At confluence with Christina River	*9	*10
		Downstream side of Amtrak Railroad	*9	*10	
		Little Mill Creek	Approximately 100 feet east of intersection of 5th Avenue and Duncan Street.	*9	*6

PROPOSED MODIFIED BASE FLOOD ELEVATIONS—Continued

State	City/Town/County	Source of Flooding	Location	#Depth in feet above ground *Elevation in feet (NGVD)	
				Existing	Modified
Maps available for inspection at the City/County Building, 800 French Street, Wilmington, Delaware.					
Send comments to The Honorable Daniel S. Frawley, Mayor of the City of Wilmington, New Castle County, City/County Building, 800 French Street, Wilmington, Delaware 19801-3537.					
New Hampshire	Gilford, Town Belknap County.	Gunstock Brook	Approximately 250 feet upstream of State Route 11B.	*506	*507
			Approximately .4 mile upstream of Alvah Wilson Road.	*749	*750
		Gunstock Brook Tributary Tributary.	At confluence with Gunstock Brook	*516	*517
			At upstream side of State Route 11B	*536	*537
Maps Available for inspection at the Selectmen's Office, 47 Cherry Valley Road, Gilford, New Hampshire, and Department of Public Works, 55 Cherry Valley Road, Gilford, New Hampshire.					
Send comments to Mr. David R. Caron, Town of Gilford Administrative Assistant, Belknap County, 47 Cherry Valley Road, Gilford, New Hampshire 03246.					
Indiana	Unincorporated Areas of Vanderburgh County.	Pond Flat Ditch	At mouth	None	*424
			About 0.5 mile upstream of U.S. Route 41	None	*438
		Pond Flat Ditch Lateral "A"	At mouth	None	*432
			Just downstream of Boyle Land	None	*440
		Pond Flat Ditch lateral "B"	At mouth	None	*432
			About 0.54 mile upstream of mouth	None	*438
		Pond Flat Ditch Lateral "C"	At mouth	None	*430
			At confluence of Pond Flat Ditch Lateral "E"	None	*435
		Pond Flat Ditch Lateral "D"	At mouth	None	*431
			About 0.33 mile upstream of Volkman Road	None	*439
		Pond Flat Ditch Lateral "E"	At mouth	None	*435
			About 0.332 mile upstream of mouth	None	*435
		Rusher Creek	At mouth	None	*435
			About 0.7 mile upstream of CSX railroad	None	*446
		Locust Creek	About 0.74 mile downstream of U.S. Route 66	None	*378
			At Wimberg Road	None	*388
		Little Pigeon Creek	At Petersburg Road	None	*380
			About 0.18 mile upstream of Hillsdale Road	None	*404
Maps Available for inspection at the Building Commissioner's Office, Civic Center Complex, Room 310, 1 NW Seventh Street, Evansville, Indiana.					
Send comments to The Honorable Robert Willner, President, Vanderburgh County Commissioners, Civic Center Complex, 305 Administration Building, Evansville, Indiana 47708.					
Iowa	City of Elgin, Fayette County	Turkey River	About 1650 feet downstream of Center Street	None	*802
			About 0.3 mile upstream of Center Street	None	*809
		Otter Creek	At mouth	None	*804
			About 1600 feet upstream of County Road	None	*831
Maps available for inspection at the City Attorney's Office, P.O. Box 275, Elgin, Iowa, Attention: T. David Katsumes.					
Send comments to The Honorable Virgil Miles, Mayor, City of Elgin, City Hall, Route 2, Elgin, Iowa 52141.					
Massachusetts	Fitchburg, City Worcester County.	North Nashua River	Approximately 150 feet downstream of Bemis Road.	*361	*362
			Approximately 1,330 feet upstream of Bemis Road.	*379	*378
		Baker Brook	Approximately 50 feet upstream of Boston and Maine Railroad.	None	*364
			Approximately 40 feet downstream of Summer Street.	None	*365
Maps available for inspection at the City Hall, 718 Main Street, Fitchburg, Massachusetts.					
Send comments to The Honorable Jeffrey A. Bean, Mayor of the City of Fitchburg, Worcester County, 718 Main Street, Fitchburg, Massachusetts 01420.					
Massachusetts	Wenham, Town Essex County	Ipswich River	Approximately 0.5 mile downstream of corporate limits.	None	*37
			At confluence of Salem Beverly Waterway Canal.	None	*37
Maps available for inspection at the Town Hall, 138 Main Street, Wenham, Massachusetts.					
Send comments to The Honorable William L. Shailor, Chairman of the Town of Wenham Board of Selectmen, Essex County, 138 Main Street, Wenham, Massachusetts 01984.					
Missouri	City of Crestwood, St. Louis County.	Gravois Creek	Just upstream of Pardee Road	*509	*506
			Just downstream of Union Pacific Railroad	*529	*533
			Just downstream of Big Bend Road	*561	*564
		Kirkwood Creek	At mouth	*528	*530
			Just downstream of Holmes Road	*568	*566
			Just downstream of Big Bend Road	*572	*578

PROPOSED MODIFIED BASE FLOOD ELEVATIONS—Continued

State	City/Town/County	Source of Flooding	Location	#Depth in feet above ground *Elevation in feet (NGVD)	
				Existing	Modified
Maps available for inspection at the City of Crestwood, Public Works Department, #1 Detjen Drive, Crestwood, Missouri.					
Send comments to The Honorable Patrica A. Killoren, Mayor, City of Crestwood, #1 Detjen Drive, Crestwood, Missouri.					
Nebraska	Village of Howells, Colfax County.	East Fork Maple Creek	About 500 feet downstream of State Highway 91.	None	*1453
			About 1,600 feet upstream of Third Street	None	*1467
		East Fork Creek—Landward of Levee.	About 1,800 feet downstream of Main Street	None	*1458
			About 1,550 feet upstream of Third Street	None	*1464
Maps available for inspection at the Village Hall, Village Clerk's Office, P.O. Box 351. Howells, Nebraska.					
Send comments to The Honorable Paul A. Pekarek, Chairman of the Board of Trustee, Village Hall, P.O. Box 351, Howells, Nebraska 68641.					
New Jersey	Moorestown, Township Burlington County	Pompeston Creek	At downstream corporate limits	*33	*34
			Approximately 450 feet upstream of Maple Avenue.	None	*54
Maps available for inspection at the Community Development Office, Town Hall, 111 West Second Street, Moorestown, New Jersey.					
Send comments to Mr. John T. Terry, Moorestown Township Manager, Burlington County, 111 West Second Street, Moorestown, New Jersey 08057.					
Oklahoma	Durant, City Bryan County	Mineral Bayou	Approximately 140 feet upstream of Chuckwa Creek.	None	*596
			Approximately 120 feet upstream of confluence of Mineral Bayou Tributary 6.	None	*654
		Mineral Bayou Tributary 5 South Branch.	At the confluence with Mineral Bayou	None	*621
			At U.S. Routes 69 and 75	None	*671
		Mineral Bayou Tributary 5	At the confluence with Mineral Bayou	None	*621
			Approximately 100 feet northwest of Missouri-Kansas-Texas Railroad.	None	*639
		Mineral Bayou Tributary 6	At the confluence with Mineral Bayou	None	*653
			Approximately 120 feet upstream of confluence with Mineral Bayou.	None	*654
		Chuckwa Creek	Approximately 125 feet upstream of confluence with Mineral Bayou.	None	*596
			Approximately 25 feet upstream of Missouri-Kansas-Texas Railroad.	None	*597
		Chuckwa Creek Tributary 2	At the confluence with Chuckwa Creek	None	*625
			Approximately 0.4 mile upstream of confluence	None	*641
Maps available for inspection at the City Hall, Durant, Oklahoma.					
Send comments to The Honorable Joe Bullard, Mayor of the City of Durant, Bryan County, 1625 Larkspur, Durant, Oklahoma 74701.					
Pennsylvania	Coolbaugh, Township Monroe County.	Dresser Lake	For entire shoreline within community	None	*2,093
		Lake Carobeth	For entire shoreline within community	None	*1,999
Maps available for inspection at the Coolbaugh Municial Center, 5550 Memorial Boulevard, Tobyhanna, Pennsylvania.					
Send comments to Mr. Clency Dennis, Chairman of the Township of Coolbaugh Board of Supervisors, Monroe County, 242 Laurel Drive, Tobyhanna, Pennsylvania 18466.					
Puerto Rico	(Commonwealth) Rio Guanajibo Basin.	Quebrada Mendoza	Approximately 1.2 kilomters downstream of Puerto Rico Highway 102.	**13.9	**13.8
			At confluence of Quebrada Las Tunas	**22.1	**19.1
		Quebrada Las Tunas	At confluence with Quebrada Mendoza	**22.1	**19.1
			Approximately 1 kilometer upstream of P.R. Highway 308.	None	**24.9
		Qubrada Pileta	Approximately 950 meters downstream of P.R. Highway 102.	**13.9	**13.8
			Approximately 50 meters upstream of Calle Baldoriott.	**22.1	**18.5
		Concepcion Channel	At confluence with Quebrada Mendoza	**22.1	**19.1
			Approximately 750 meters upstream of confluence with Quebrada Mendoza.	**24.5	**20.1
**Elevation in meters (Mean Sea Level).					
Maps available for inspection at the Minillas Governmental Center, 13th Floor, North Building, De Diego Avenue, Stop 22, San Juan, Puerto Rico, Monday-Friday between 8-12 and 1-4:30.					
Send comments to Ms. Patria G. Custodio, Chairperson of the Puerto Rico, Planning Board, Minillas Governmental Center, North Building, De Diego Avenue, Stop 22, P.O. Box 41119, San Juan, Puerto Rico 00940-9985.					
Texas	Bryan, City Brazos County	Burton Creek Tributary D	At confluence with Burton Creek	*289	*288
			At approximately 800 feet upstream of confluence with Burton Creek.	*292	*290

PROPOSED MODIFIED BASE FLOOD ELEVATIONS—Continued

State	City/Town/County	Source of Flooding	Location	#Depth in feet above ground *Elevation in feet (NGVD)	
				Existing	Modified
		Turkey Creek	Approximately 1.2 miles downstream from the downstream side of Villa Maria Road.	None	*255
			At the downstream side of Villa Maria Road	None	*271

Maps available for inspection at the City Hall, 300 S. Texas Avenue, Bryan, Texas.

Send comments to The Honorable Marvin Tate, Mayor of the City of Bryan, Brazos County, P.O. Box 1000, Bryan, Texas 77805.

Texas	College Station, City, Brazos County.	Wolf Pen Creek	Approximately 0.3 mile upstream of confluence with Carter's Creek.	*248	*247
			Approximately 680 feet upstream of Anderson Street.	None	*305
		Wolf Pen Creek Tributary A	At confluence with Wolf Pen Creek	*273	*275
			Approximately 50 feet upstream of Dominik Drive.	None	*290
		Wolf Pen Creek Tributary B	At confluence with Wolf Pen Creek	*280	*286
			Approximately 0.2 mile upstream of State Route 30.	None	*291
		Wolf Pen Creek Tributary C	At confluence with Wolf Pen Creek	None	*292
			Approximately 100 feet upstream of Jersey Street.	None	*298
		Lick Creek	Approximately 1.7 miles upstream of Peach Creek Road.	None	*210
			Approximately 3.5 miles upstream of confluence of Spring Creek.	None	*276
		Alum Creek	At confluence with Lick Creek	None	*217
			Approximately 0.9 mile upstream of confluence with Lick Creek.	None	*226
		Stream AC-1	Approximately 1.0 mile upstream of confluence with Alum Creek.	None	*244
			Approximately 1.8 miles upstream of confluence with Alum Creek.	None	*277

Maps available for inspection at the City Hall, 1101 Texas Avenue, College Station, Texas.

Send comments to The Honorable Larry J. Ringer, Mayor of the City of College Station, Brazos County, P.O. Box 9960, College Station, Texas 77840.

Texas	Greenville, City, Hunt County	Farber Creek	Approximately 3.8 miles upstream of Interstate Route 30 and U.S. Route 67.	None	*560
			Approximately 3.9 miles upstream of Interstate Route 30 and U.S. Route 67.	None	*561

Maps available for inspection at the City Hall, Greenville, Texas.

Send comments to The Honorable Bill F. Morgan, Mayor of the City of Greenville, Hunt County, P.O. Box 1049, Greenville, Texas 75401.

Texas	Oak Ridge North, City Montgomery County.	Sam Bell Gully	Approximately 325 feet downstream of Maplewood Drive.	None	*121
			Approximately 800 feet upstream of Robinson Road.	*134	*135

Maps available for inspection at the City Secretary's Office, 27326 Robinson Road, Suite 115, Conroe, Texas.

Send comments to The Honorable Richard Derr, Oak Ridge North City Administrator, Montgomery County, 27326 Robinson Road, suite 115, Conroe, Texas 77386.

West Virginia	Greenbrier County, Unincorporated Areas.	Greenbrier River	At corporate limits of Town of Alderson	None	*1,553
			At Interstate Route 64	None	*1,696
		Howard Creek	At confluence with Greenbrier River	None	*1,690
			At downstream side of State Route 63 (Monroe Draft Road).	*1,689	*1,690

Maps available for inspection at the Greenbrier County Courthouse, Planning Commission Office, Lewisburg, West Virginia.

Send comments to Mr. Joe Feamaster, President of the Greenbrier, County Commission, c/o County Planning Commission, P.O. Box 265, Lewisburg, West Virginia 24901.

West Virginia	Kanawha County Unincorporated Areas.	Big Coal River	Approximately 1.4 miles downstream of confluence of Dry Branch.	None	*644
			Approximately 1,850 feet upstream of confluence of Dry Branch.	None	*648

Maps available for inspection at the Kanawha County Courthouse, 409 Virginia Street East, Charleston, West Virginia.

Send comments to Mr. Don Joe Hunt, President of the Kanawha County Commissioners, P.O. Box 3627, Charleston, West Virginia 25336.

C.M. "Bud" Schauerte,
Administrator, Federal Insurance Administration.

[FR Doc. 90-29344 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-03-M

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44 CFR Part 67

[Docket No. FEMA-7007]

Federal Insurance Administration; Proposed Flood Elevation Determinations

AGENCY: Federal Emergency Management Agency.

ACTION: Proposed rule.

SUMMARY: Technical information or comments are solicited on the proposed base (100-year) flood elevations and proposed base flood elevation modifications listed below for selected locations in the nation. These base (100-year) flood elevations are the basis for the floodplain management measures that the community is required to either adopt or show evidence of being already in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP).

DATES: The period for comment will be ninety (90) days following the second publication of this proposed rule in a newspaper of local circulation in each community.

ADDRESSES: See table below.

FOR FURTHER INFORMATION CONTACT: John L. Matticks, Chief, Risk Studies Division, Federal Insurance Administration, Federal Emergency Management Agency, Washington, DC 20472, (202) 646-2767.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency gives notice of the proposed determinations of base (100-year) flood elevations and modified base flood elevations for selected locations in the nation, in accordance with section 110 of the Flood Disaster Protection Act of 1973 (Pub. L. 93-234), 87 Stat. 980, which added section 1363 to the National Flood Insurance Act of 1968 (title XIII of the Housing and Urban Development Act of 1968 (Pub. L. 90-448)), 42 U.S.C. 4001-4128, and 44 CFR 67.4(a).

These elevations, together with the floodplain management measures required by § 60.3 of the program regulations, are the minimum that are required. They should not be construed to mean the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements on its own, or pursuant to policies established by other Federal, State, or regional entities. These proposed elevations will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and their contents.

Pursuant to the provisions of 5 U.S.C. 605(b), the Administrator, to whom authority has been delegated by the Director, Federal Emergency Management Agency, hereby certifies that the proposed flood elevation determinations, if promulgated, will not have a significant economic impact on a substantial number of small entities. A flood elevation determination under section 1363 forms the basis for new local ordinances, which, if adopted by a local community, will govern future construction within the floodplain area. The elevation determinations, however, impose no restriction unless and until the local community voluntarily adopts floodplain ordinances in accord with these elevations. Even if ordinances are adopted in compliance with Federal standards, the elevations prescribe how high to build in the floodplain and do not prohibit development. Thus, this action only forms the basis for future local actions. It imposes no new requirement; of itself it has no economic impact.

List of Subjects in 44 CFR Part 67

Flood insurance, Flood plains.

PART 67—[AMENDED]

The authority citation for part 67 continues to read as follows:

Authority: 42 U.S.C. 4001 et seq., Reorganization Plan No. 3 of 1978, E.O. 12127.

The proposed base (100-year) flood elevations for selected locations are:

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
ARKANSAS	
Craighead County (unincorporated areas)	
Little Bay Ditch:	
At the County Route 751	*224
At the County Route 64	*248
Whitemans Creek:	
At the confluence with Little Bay Ditch	*227
Approximately 100 feet downstream of Union Pacific Railroad	*249
Gum Slough Ditch:	
At the confluence with Big Bay Ditch	*225
At the County Route 61	*232
Maple Slough Ditch:	
At the confluence with Gum Slough Ditch	*232
Approximately 1.0 mile upstream of County Route 78	*239
Viney Slough Ditch:	
At the County Route 751	*227
At the confluence of Higginbottom Creek	*247
Christian Creek:	
At the confluence with Lost Creek	*287
Downstream of Oakhurst Street	*295
Christian Creek Lateral:	
At the confluence with Christian Creek	*288
Approximately 317 feet downstream of Clubhouse Street	*294
Lateral No. 3:	
At the confluence with Little Bay Ditch	*232
Approximately 1,500 feet upstream of Commerce Drive	*237
Lost Creek:	
Approximately 1,056 feet downstream of U.S. Route 63	*283
At the County road	*323
Moore's Ditch Lateral:	
Approximately 158 feet upstream of confluence with Moore's Ditch	*237
Approximately 158 feet upstream of Commerce Drive	*238
Higginbottom Creek:	
At the confluence with Viney Slough Ditch	*247
At the downstream side of Parker Road	*282
Turtle Creek:	
At the St. Louis Southwestern Railway	*267
Downstream side of State Route 1	*297
Turtle Creek Lateral:	
At the confluence with Turtle Creek	*269
Approximately 264 feet upstream of confluence with Turtle Creek	*269
Tributary to Maple Slough Ditch:	
Approximately 53 feet downstream of Rural Road bridge	*248
Approximately 0.4 mile upstream of County Route 74 (Stephens Avenue)	*271
Whaley Slough Ditch:	
Approximately 1,300 feet downstream of State Route 230	*255
Approximately 900 feet downstream of U.S. Route 63	*258
Butlers Ditch:	
At the confluence with Little Bay Ditch	*232
Downstream side of County Route 64	*238

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
Maps available for inspection at the County Courthouse, 511 South Main Street, Room 100, Jonesboro, Arkansas.	
Send comments to The Honorable Roy Bearden, Craighead County Judge, 511 South Main, Room 100, Jonesboro, Arkansas 72401.	
Faulkner County (unincorporated areas)	
Arkansas River:	
At downstream County boundary with Pulaski County	*265
At confluence of Cadron Creek	*288
Palarm Creek:	
At confluence with Arkansas River	*269
Just downstream of Lake Conway Dam	*270
Lake Conway: Entire shoreline within community	*272
Gold Creek (South):	
At confluence with Lake Conway	*272
At confluence of Gold Creek South Tributary	*315
Gold Creek South Tributary:	
At confluence with Gold Creek (South)	*315
At approximately 850 feet upstream of County Route 14	*333
Gold Creek (East):	
At confluence with Little Creek	*277
At approximately 2,270 feet upstream of Wiggle Worm Road	*285
Little Creek:	
At the confluence with Lake Conway	*272
Approximately 130 feet upstream of the upstream crossing of State Route 286	*279
Tucker Creek:	
Approximately 2.5 miles upstream of confluence with Tupelo Bayou	*285
Approximately 100 feet upstream of Country Club Road (extended)	*286
Tucker Creek Tributary:	
At confluence with Tucker Creek	*285
Approximately 1,700 feet upstream of State Route 60	*295
Unnamed Tributary to Tucker Creek Tributary: At State Route 60	*285
Stone Dam Creek:	
At confluence with Lake Conway	*272
Downstream side of Sturges Road	*276
Greenbrier Creek: Approximately 500 feet upstream of State Route 225	*355
Maps available for inspection at the Faulkner County Courthouse, Conway, Arkansas.	
Send comments to The Honorable Gerald Ward, Faulkner County Judge, Faulkner County Courthouse, Conway, Arkansas 72032.	
Mayflower (city), Faulkner County	
Arkansas River: Backwater approximately 400 feet north of Old Sandy Road	*271
Lake Conway: Entire shoreline within community	*272
Palarm Creek:	
At Interstate Route 40 and U.S. Route 65	*270
Just downstream of Lake Conway Dam	*270
Maps available for inspection at the City Hall, #2 Ashmore, Mayflower, Arkansas.	
Send comments to The Honorable Wifiiam Logan, Mayor of the City of Mayflower, Faulkner County, P.O. Box 186, Mayflower, Arkansas 72106.	
KANSAS	
Jefferson County (unincorporated areas)	
Kansas River:	
About 0.6 mile downstream of confluence of Buck Creek	*837
At confluence of Little Muddy Creek	*875
Stone House Creek:	
At mouth	*841
Just downstream of U.S. Highway 59	*877
Big Muddy Creek:	
At mouth	*867
Just downstream of State Highway 4	*895
Little Muddy Creek:	
At mouth	*875
Just upstream of State Highway 4	*901
Maps available for inspection at the County Courthouse, Oskaloosa, Kansas. Send comments to The Honorable Rollin A. Clark, Chairman, Board of Commissioners, Jefferson County, P.O. Box 321, Oskaloosa, Kansas 66066.	
KENTUCKY	
Hopkins County (unincorporated areas)	
Pleasant Run:	
At mouth	*401
About 850 feet upstream of Illinois Central Railroad	*428
Otter Creek:	
Just upstream of State Route 1033	*381
About 1,350 feet upstream of Wolf Hollow Road	*435
Flat Creek:	
Just upstream of Free Henry Road	*402
Just downstream of CSX railroad (downstream crossing)	*413
Just upstream of CSX railroad (downstream crossing)	*420
About 1.4 miles upstream of U.S. Route 41A	*434
Green River:	
At northern county boundary	*387
At confluence of Pond River	*388
Drakes Creek:	
At confluence of Pleasant Run	*401
About 1.40 miles upstream of confluence of Craborchard Creek	*413
Craborchard Creek:	
At mouth	*409
About 1,300 feet upstream of Pennyrile Parkway	*412
Maps available for inspection at the County Courthouse, Madisonville, Kentucky. Send comments to The Honorable O.T. Rudd, Judge/Executive, Hopkins County, County Courthouse, Madisonville, Kentucky 42431.	
MAINE	
Norway (town) Oxford County	
Pennesseewassee Stream:	
At confluence with Little Androscoggin River	*327
Approximately 600 feet upstream of Highland Avenue Bridge	*390
Bird Brook:	
At confluence with Pennesseewassee Stream	*375
Approximately 75 feet upstream of Elm Hill Road Bridge	*382
Little Androscoggin River:	
At downstream corporate limits	*326
At upstream corporate limits	*329
Maps available for inspection at the Town Clerk's Vault, Town Office, 26 Danforth Street, Norway, Maine.	
Send comments to Mr. David Holt, Manager of the Town of Norway, Oxford County, Town Office, 26 Danforth Street, Norway, Maine 20426.	
MICHIGAN	
Hersey (village), Osceola County	
Muskegon River:	
About 1500 feet downstream of Fourth Street	*959
About 1600 feet upstream of Fourth Street	*962
Hersey River:	
At mouth	*961
Just downstream of Hersey Dam	*973
Just upstream of Hersey Dam	*978
About 2500 feet upstream of Hersey Dam	*978
Maps available for inspection at the Village Hall, 306 East Third Street, Hersey, Michigan.	
Send comments to The Honorable John Calabrese, Village President, Village of Hersey, 306 East Third Street, Hersey, Michigan 49639.	
James (township), Saginaw County	
Shiawassee River: Within community	*594
Tittabwassee River:	
Just upstream of Center Road	*595
About 0.84 mile upstream of Conrail	*598
Maps available for inspection at the Township Hall, 6060 Swan Creek Road, James, Michigan.	
Send comments to The Honorable Gerald Wieneke, Supervisor, Township of James, 6060 Swan Creek Road, James, Michigan 48603.	
Lincoln (township), Newaygo County	
White River:	
About 2.0 miles downstream of State Highway 20	*762
About 2.7 miles upstream of Baldwin Avenue	*794
Maps available for inspection at the Township Hall, Wisner Road, White Cloud, Michigan.	
Send comments to The Honorable Virginia Wunsch, Township Supervisor, Township of Lincoln, 2780 Mundy, White Cloud, Michigan 49349.	
Port Huron (township), St. Clair County	
Black River:	
About 2150 feet downstream of Interstate 94	*586
About 6.6 miles upstream of Interstate 94	*595
Maps available for inspection at the Township Hall, 3800 Lapeer Road, Port Huron, Michigan.	
Send comments to The Honorable C. Robert Lewandowski, Township Supervisor, Township of Port Huron, 3800 Lapeer Road, Port Huron, Michigan 48060.	
MISSISSIPPI	
Itawamba County (unincorporated areas)	
Tombigbee River:	
About 2500 feet downstream of Barrs Ferry Road	*242
Just downstream of Walker Road	*300
Tennessee-Tombigbee Waterway:	
At southern county boundary	*249
Just downstream of Lock C	*253
Just upstream of Lock C	*270
Just downstream of Lock D	*271
Just upstream of Lock D	*300
Just downstream of Lock E	*300
About 4300 feet upstream of Lock E	*330
Twentymile Creek:	
At mouth	*260
Just downstream of Natchez Trace Parkway	*300
Maps available for inspection at the Chancery Clerk's Office, County Courthouse, 201 West Main Street, Fulton, Mississippi.	
Send comments to The Honorable Danny Holley, President, Board of Supervisors, Itawamba County, 201 West Main Street, Fulton, Mississippi 38843.	
NEW YORK	
Flower Hill (village), Nassau County	
Hempstead Harbor:	
Approximately 200 feet east of West Shore Road	*15
Southern corporate limits	*17
Maps available for inspection at the Village Hall, Manhasset, New York.	
Send comments to The Honorable John W. Walter, Mayor of the Village of Flower Hill, Nassau County, 1 Bonnie Height Row, Manhasset, New York 11030.	

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
Greenwich (town), Washington County	
Batten Kill:	
Approximately 0.95 mile downstream of State Route 29	
Approximately 1.2 miles upstream of confluence of Whittaker Brook	*157
Maps available for inspection at the Town Hall, 2 Academy Street, Greenwich, New York.	*410
Send comments to Mr. Michael Karp, Supervisor of the Town of Greenwich, Washington, County, Town Hall, 2 Academy Street, Greenwich, New York 12834.	
Woodstock (town), Ulster County	
Saw Kill:	
At downstream corporate limits	
Approximately 110 feet upstream of MacDaniel Road	*263
Beaver Kill:	*957
At downstream corporate limits	
Approximately 0.5 mile upstream of Sickler Road	*763
East Branch Tannery Brook:	*1,084
At the confluence with West Branch Tannery Brook	
Approximately 140 feet upstream of State Route 212 (Glasco Turnpike)	*586
West Branch Tannery Brook:	*717
At the confluence with Saw Kill	
Approximately 120 feet upstream of State Route 212 (Glasco Turnpike)	*520
Maps available for inspection at the Town Hall, 81 Tinker Street, Woodstock, New York.	*881
Send comments to Mr Brian Hollander, Woodstock Town Supervisor, Ulster County, 81 Tinker Street, Woodstock, New York 12498.	
PENNSYLVANIA	
Armagh (Township), Mifflin County	
Laurel Creek:	
At confluence with Laurel Creek Overflow Channel	
At upstream crossing of U.S. Route 32	*693
Laurel Creek Overflow Channel:	*927
At confluence with Honey Creek	
At confluence with Laurel Creek	*669
Honey Creek:	*693
At downstream corporate limits	
Approximately 240 feet upstream of the abandoned railroad bridge near Naginey Quarrey	*622
Maps available for inspection at the Township Office, 2nd Floor Mellon Bank Building, Main Street, Milroy, Pennsylvania.	*670
Send comments to The Honorable Otis Riden, Jr., Chairman of the Township of Armagh Board of Supervisors, Mifflin County, P.O. Box 396, Milroy, Pennsylvania 17063.	
Hawley (Borough), Wayne County	
Lackawaxen River:	
Downstream corporate limits	*884
Upstream side of Church Street	*887
Approximately 1,450 feet upstream of Church Street	*890
Approximately 180 feet upstream of U.S. Route 6	*893
Upstream corporate limits	*898
Maps available for inspection at the Borough Building, Hawley, Pennsylvania.	
Send comments to The Honorable Robert Jones, President of the Borough of Hawley Council, Wayne County, P.O. Box 197, Hawley, Pennsylvania 18428.	
Jackson (Township), Venango County	
Sugar Creek:	
Approximately .6 mile downstream of State Route 427	*1,096

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
Approximately 1.0 mile upstream of TR 607	*1,202
East Branch Sugar Creek:	
At the confluence with Sugar Creek	*1,135
Approximately 1.3 miles upstream of TR-593	*1,154
Lake Creek:	
Approximately 100 feet downstream of Borough of Cooperstown corporate limits	*1,145
At TR 605	*1,238
Maps available for inspection at the Jackson Township Municipal Building, R.D. 1, Cooperstown, Pennsylvania.	
Send comments to Mr. Homer Shay, Chairman of the Township of Jackson Board of Supervisors, Venango County, R.D. 1 Cooperstown, Pennsylvania 16317.	
Masontown (Borough), Fayette County	
Monongahela River:	
At downstream corporate limits	*795
At upstream corporate limits	*795
Maps available for inspection at the Borough Building, Two Court Street, Masontown, Pennsylvania.	
Send comments to Mr. David A. Berish, President of the Masontown Borough Council, Fayette County, Two Court Avenue, Masontown, Pennsylvania 15461.	
Nicholson (Township), Fayette County	
Monongahela River:	
At confluence of Cats Run	*797
At confluence of Georges Creek	*801
Maps available for inspection at the Nicholson Township Building, Old Frame, Pennsylvania.	
Send comments to Mr. John E. Black, Supervisor of the Township of Nicholson, Fayette County, R.D. 2, Box 66, Smithfield, Pennsylvania 15478.	
Sadsbury (Township), Crawford County	
Conneaut Lake:	
Entire shoreline within community	*1,075
Maps available for inspection at the Sadsbury Township Municipal Building, Conneaut Lake, Pennsylvania.	
Send comments to Ms. Linda Boyd, Chair of the Township of Sadsbury Board of Supervisors, Crawford County, R.D. 2, Box 1021 A, Conneaut Lake, Pennsylvania 16316.	
Shenango (Township), Mercer County	
Shenango River:	
At the downstream corporate limits	*819
Approximately 0.45 mile upstream of State Route 718	*836
Maps available for inspection at the Shenango Township Building, R.D. 1, West Middlesex—Hubbard Road, West Middlesex, Pennsylvania.	
Send comments to Mr. T. Scott Campbell, Chairman of the Township of Shenango Board of Supervisors, Mercer County, R.D. 1, West Middlesex—Hubbard Road, West Middlesex, Pennsylvania 16149.	
Shippingport (Borough), Beaver County	
Ohio River:	
At downstream corporate limits	*694
At upstream corporate limits	*697
Maps available for inspection at the Municipal Building, Secretary's Office, P.O. Box 76, State Route 3016, Shippingport, Pennsylvania.	
Send comments to Mr. Richard Kiss, Chairman of the Borough of Shippingport Board of Supervisors, Beaver County, P.O. Box 298, Shippingport, Pennsylvania 15077.	
Sterling (Township), Wayne County	
West Branch Wallenpaupack Creek:	
Approximately 5,250 feet downstream of State Routes 191 and 196	*1,290

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
At confluence of Wilcox Creek and upstream corporate limits	*1,300
Maps available for inspection at the Township Building, Spring Hill Road, Sterling, Pennsylvania.	
Send comments to The Honorable Bob Bird, Chairman of the Township of Sterling Board of Supervisors, Wayne County, P.O. Box 109, Sterling, Pennsylvania 18463.	
West Middlesex (Borough), Mercer County	
Shenango River:	
Approximately 180 feet downstream of the downstream corporate limits	*827
Approximately 240 feet upstream of the upstream corporate limits	*829
Maps available for inspection at the corner of Erie and Walnut, P.O. Box 582, West Middlesex, Pennsylvania.	
Send comments to Mr. Charles O. Shrawder, President of the Borough of West Middlesex Council, Mercer County, P.O. Box 343, 316 Garfield Street, West Middlesex, Pennsylvania 16159.	
TENNESSEE	
Bradley County (unincorporated areas)	
Hiwassee River:	
About 2.93 miles downstream of confluence of Candies Creek	*689
About 11.70 miles upstream of Norfolk Southern Railway	*711
Candies Creek:	
About 800 feet downstream of Lower River Road	*690
About 2,900 feet upstream of Black Fox Road	*765
South Mouse Creek:	
About 0.94 mile downstream of Charleston Access Road	*696
Just downstream of Charleston Access Road	*703
Just upstream of Charleston Access Road	*709
About 1.14 miles upstream of Mapleton Drive	*770
Coahulla Creek:	
About 3,600 feet downstream of confluence of Wolf Branch	*800
About 1,150 feet upstream of Patterson Road	*850
Wolf Branch:	
At mouth	*803
About 1,400 feet upstream of Hunt Road	*846
Tributary C:	
At mouth	*826
About 2,800 feet upstream of mouth	*831
Goodwill Branch:	
At mouth	*804
Just upstream of Goodwill Road	*821
Waterville Branch:	
At mouth	*819
About 0.83 mile upstream of mouth	*829
Maps available for inspection at the County Courthouse, Cleveland, Tennessee.	
Send comments to The Honorable Donna J. Hubbard, County Executive, Bradley County, P.O. Box 1167, Cleveland, Tennessee 37364-1167.	
McMinn County (unincorporated areas)	
Hiwassee River:	
At county boundary	*689
At county boundary	*710
Costanaula Creek:	
About 2,600 feet downstream of confluence of Black Branch	*840
About 1,500 feet upstream of confluence of Black Branch	*848
Black Branch:	
At mouth	*843
At confluence of Walker Branch	*845
Walker Branch:	
At confluence with Black Branch	*845
About 350 feet upstream of confluence with Black Branch	*847
North Mouse Creek:	

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
Just upstream of Rocky Mount Road	*795
Just downstream of County Route 255	*851
Little North Mouse Creek:	
At mouth	*831
Just downstream of Shoemaker Road	*892
Just upstream of Shoemaker Road	*899
About 0.63 mile upstream of County Route 260	*920
Tributary No. 1 to North Mouse Creek:	
At mouth	*803
About 0.3 miles upstream of mouth	*808
Maps available for inspection at the County Courthouse, Athens, Tennessee.	
Send comments to The Honorable Ron Banks, County Executive, McMinn County, County Courthouse, Athens, Tennessee 37303.	
Monroe County (unincorporated areas)	
Sinkhole Creek:	
Just upstream of Cagle Road	*894
Just downstream of confluence of Tributary B	*1,013
Bat Creek:	
About 800 feet upstream of confluence of Tributary C	*903
About 3,000 feet upstream of confluence with Bat Creek Tributary	*924
Bat Creek Tributary:	
At confluence of Bat Creek	*910
About 3,600 feet upstream of confluence of Bat Creek	*922
Maps available for inspection at the County Courthouse, Madisonville, Tennessee.	
Send comments to The Honorable Allan Watson, County Executive, Monroe County, County Courthouse, Madisonville, Tennessee 37354.	
Rhea County (unincorporated areas)	
Tennessee River:	
At downstream county boundary	*688
Just downstream of Watts Bar Dam	*698
Watts Bar Lake: Within community	*746
Piney River:	
About 1,080 feet downstream of Toestring Road	*746
About 3,100 feet upstream of State Route 68	*825
Town Creek:	
About 400 feet upstream of Kemmer Road	*767
Just downstream of J Lon Foust Highway	*777
Little Richland Creek:	
About 400 feet downstream of Walnut Grove Road	*696
About 120 feet downstream of Norfolk Southern Railway, upstream of confluence of Yarborough Branch	*761
Tributary to Little Richland Creek:	
About 450 feet downstream of Hidden Valley Road	*725
About 300 feet upstream of Back Valley Road	*740
Roaring Creek:	
At mouth	*717
Just downstream of Brayton Mountain Road	*867
Just upstream of Brayton Mountain Road	*876
About 1,570 feet upstream of Brayton Mountain Road	*894
Sale Creek:	
At confluence of Roaring Creek	*717
About 1.4 miles upstream of Norfolk Southern Railway	*740
McGill Creek:	
At mouth	*717
About 1,330 feet upstream of Walker Road	*767
Hickman Branch:	
At mouth	*731
About 2,000 feet upstream of County Road	*746
Whites Creek:	
About 2.5 miles downstream of J Lon Foust Highway	*746
About 0.48 miles upstream of Norfolk Southern Railway	*791
Maps available for inspection at the County Courthouse, Dayton, Tennessee.	

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
Send comments to The Honorable Robert Aikman, County Executive, Rhea County, County Courthouse, Room 103, Dayton, Tennessee 37321.	
TEXAS	
Hunt County (unincorporated areas)	
South Fork Sabine River:	
Approximately 2,200 feet downstream of State Route 34	*446
Approximately 1,200 feet upstream of County boundary	*494
Greasy Creek:	
At the confluence with South Fork Sabine River	*451
Approximately 200 feet upstream of County boundary	*474
Bearpen Creek:	
At the confluence with South Fork Sabine River	*458
Approximately 0.95 mile upstream of Interstate Route 30 and U.S. Route 67	*552
Brushy Creek:	
At the confluence with West Caddo Creek	*477
Approximately 350 feet upstream of State Route 6	*534
Lower Caddo Creek:	
Approximately 500 feet downstream of State Route 34	*446
At the confluence of West Caddo Creek	*463
West Caddo Creek:	
At the confluence with Lower Caddo Creek	*463
At the confluence of Brushy Creek	*477
Jones Creek:	
Approximately 0.56 mile downstream of State Route 34	*447
Approximately 200 feet downstream of State Route 276	*488
Farber Creek:	
Approximately 100 feet downstream of FM 1903	*486
Approximately 3.8 miles upstream of Interstate Route 30 and U.S. Route 67	*560
Maps available for inspection at the Hunt County Courthouse, Greenville, Texas.	
Send comments to The Honorable Mike Farris, Hunt County Judge, P.O. Box 1097, Greenville, Texas 75403.	
Llano County (unincorporated areas)	
Colorado River:	
Approximately 1,800 feet downstream of the downstream Llano County boundary	*828
At the upstream Llano County boundary	*1,029
Llano River:	
At the confluence with the Colorado River	*839
At the downstream corporate limits of the City of Llano	*1,010
Maps available for inspection delineation are available for review at the County Courthouse, 801 Ford Street, Llano, Texas.	
Send comments to The Honorable J. Howard Coleman, Llano County Judge, County Courthouse, 801 Ford Street, Llano, Texas 78643.	
Quinlan (city), Hunt County	
Jones Creek:	
Approximately 200 feet downstream of State Route 276	*486
At the State Route 276	*488
Maps available for inspection at the City Hall, Quinlan, Texas.	
Send comments to The Honorable Sherry O'Neill, Mayor of the City of Quinlan, Hunt County, P.O. Box 3A, Quinlan, Texas 75074.	
VERMONT	
Granville (town), Addison County	
White River:	
At downstream corporate limits	*922

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
Approximately 1,100 feet upstream of confluence of Alder Meadow Brook	*1,023
Alder Meadow Brook:	
At confluence with White River	*980
Approximately 600 feet upstream of upstream crossing of State Route 100	*1,038
Maps available for inspection at the Town Clerk's Vault, Granville, Vermont.	
Send comments to Mr. Guy Christie, Chairman of the Town of Granville Board of Selectmen, Addison County, P.O. Box 66, Granville, Vermont 05747.	
Hancock (town), Addison County	
White River:	
At the downstream corporate limits	*873
At the upstream corporate limits	*922
Hancock Branch:	
At the confluence with White River	*905
Approximately 0.87 mile upstream of State Route 125	*1,116
Maps available for inspection at the Town Clerk's Vault, Hancock, Vermont.	
Send comments to Mr. Frank Curtis, Chairman of the Town of Hancock Board of Selectmen, Addison County, P.O. Box 132, Hancock, Vermont 05748.	
Pittsfield (town), Rutland County	
Tweed River:	
Downstream corporate limits	*797
At the confluence of West Branch Tweed River and South Branch Tweed River	*836
South Branch Tweed River:	
At the confluence with Tweed River	*836
Upstream corporate limits	*1,110
West Branch Tweed River:	
At the confluence with Tweed River	*836
Upstream corporate limits	*1,096
Guernsey Brook:	
Downstream corporate limits	*826
Approximately 1,900 feet upstream of State Route 100	*903
Maps available for inspection at the Town Clerk's Vault, Pittsfield, Vermont.	
Send comments to Mr. Robert Lincoln, Chairman of the Town of Pittsfield Board of Selectmen, Rutland County, P.O. Box 517, Pittsfield, Vermont 05762.	
VIRGINIA	
Isle of Wight County (unincorporated areas)	
Blackwater River:	
Approximately 1.9 miles downstream of CSX Transportation	*14
Approximately 1.2 miles upstream of State Route 620	*33
James River:	
Adjoining Estuaries	*8.5
Shoreline along Mogarts Beach	*12
Maps available for inspection at the Department of Community Development, County Courthouse, Isle of Wight, Virginia.	
Send comments to The Honorable Myles E. Standish, Isle of Wight County Administrator, P.O. Box 80, Isle of Wight, Virginia 23397.	
Page County (unincorporated areas)	
Dry Run:	
At confluence with Hawksbill Creek	*765
Approximately 1,000 feet upstream of State Route 611	*1,001
Pass Run:	
At confluence with Hawksbill Creek	*702
At confluence of Rocky Branch	*976
Rocky Branch:	
At confluence with Pass Run	*976

PROPOSED BASE (100-YEAR) FLOOD ELEVATIONS—Continued

Source of flooding and location	#Depth in feet above ground. *Elevation in feet (NGVD)
Approximately 70 feet upstream of State Route 612	*1,214
Hawksbill Creek:	
Approximately 1,200 feet downstream of State Route 642	*800
Approximately 1,300 feet upstream of State Route 642	*802
Maps available for inspection at the Administrative Building, 108 South Court Street, Luray, Virginia 22835.	
Send comments to Mr. Ron Wilson, Page County Administrator, 108 South Court Street, Luray, Virginia 22835.	
WISCONSIN	
Elroy (city), Juneau County	
Baraboo River:	
About 1,000 feet downstream of Main Street	*942
About 2,500 feet upstream of Academy Street	*949
Maps available for inspection at the City Hall, 225 Main Street, Elroy, Wisconsin.	
Send comments to The Honorable Don Picha, Mayor, City of Elroy, 225 Main Street, Elroy, Wisconsin 53929-1251.	
Juneau County (unincorporated areas)	
Yellow River:	
Just upstream of County Highway G	*883
At northern county boundary	*955
Lemonweir River:	
At mouth	*855
Just downstream of County Highway C	*858
Just upstream of Lemonweir Dam	*864
Just downstream of County Highway M	*886
Cranberry Creek:	
At mouth	*928
Just downstream of County Highway F	*947
Little Yellow River:	
At mouth	*883
Just downstream of 30th Street	*903
Baraboo River	
About 2,200 feet upstream of Hillsboro Street	*914
Just downstream of Hillsboro and Northeastern Railway	*918
West Branch Baraboo River:	
At mouth	*918
Just upstream of Smith Road	*924
Wisconsin River:	
At southern county boundary	*848
Just downstream of Castle Rock Dam	*864
Just upstream of Castle Rock Dam	*883
Just downstream of Petenwell Dam	*925
Just upstream of Petenwell Dam	*925
At northern county boundary	*929
Black Hawk Divergence:	
At mouth	*848
At divergence with Wisconsin River	*849
Maps available for inspection at the Courthouse Annex, Room 20, Mauston, Wisconsin.	
Send comments to The Honorable C.F. Saylor, Chairman, County Board, Juneau County, County Courthouse, Mauston, Wisconsin 53948.	
Mauston (city), Juneau County	
Lemonweir River:	
About 0.8 mile downstream of Union Street	*867
About 2.3 miles upstream of Union Street	*874
Maps available for inspection at the City Hall, 303 Mansion Street, Mauston, Wisconsin.	
Send comments to The Honorable Larry Taylor, Mayor, City of Mauston, 303 Mansion Street, Mauston, Wisconsin 53948.	
Necedah (village), Juneau County	
Yellow River:	
About 0.9 mile downstream of Chicago and North Western railroad	*900
About 0.9 mile upstream of State Highway 21	*906
Maps available for inspection at the Village Hall, 100 Center Street, Necedah, Wisconsin.	
Send comments to The Honorable Dwayne Hays, Village President, Village of Necedah, Box 371, 100 Center Street, Necedah, Wisconsin 54646.	
New Lisbon (city), Juneau County	
Lemonweir River:	
About 0.9 mile downstream of Soo Line Railroad	*880
About 1,100 feet upstream of Interstate 90	*883
Maps available for inspection at the City Hall, 218 E. Bridge Street, New Lisbon, Wisconsin.	
Send comments to The Honorable Kenneth Southworth, Mayor, City of New Lisbon, Box 9, 218 E. Bridge Street, New Lisbon, Wisconsin 53950.	
Union Center (village), Juneau County	
Baraboo River:	
About 3,300 feet downstream of confluence of West Branch Baraboo River	*918
Just downstream of Hillsboro and Northeastern railway	*918
Maps available for inspection at the Village Hall, Union Center, Wisconsin.	
Send comments to The Honorable Gerald A. Notsinger, Village President, Village of Union Center, Box 5, Union Center, Wisconsin 53962.	

The proposed modified base (100-year) flood elevations for selected locations are:

PROPOSED MODIFIED BASE (100-Year) FLOOD ELEVATIONS

State	City/town/county	Source of flooding	Location	Depth in feet above ground *Elevation in feet (NGCV)	
				Existing	Modified
California	City of Grass Valley, Nevada County.	Wolf Creek	Just downstream of Idaho-Maryland Road near intersection of Sutton Way.	*2,528	*2,528
			Just upstream of confluence of White Water Creek.	None	*2,558
		Little Wolf Creek	Just upstream of State Highway 49	*2,379	*2,389
			Just upstream of South Auburn Street	*2,411	*2,407
			Just above a private drive, 1,000 feet upstream of South Auburn Street.	*2,447	*2,451
			Approximately 350 feet upstream of a private drive.	*2,448	*2,452
Maps are available for review at City Hall, 125 East Main Street, Grass Valley, California.					
Send comments to The Honorable Gerard Tassone, Mayor, City of Grass Valley, City Hall, 125 East Main Street, Grass Valley, California 95945.					
Louisiana	Tangipahoa Parish, Unincorporated Areas.	Chappepeela Creek	Approximately .6 mile upstream of confluence with Tangipahoa River.	None	*41
			Approximately 1.1 miles upstream of Zemurry Lodge Road.	None	*69
		Bedico Creek	Approximately 5.2 miles upstream of confluence with Tangipahoa River.	None	*9
			Approximately 0.7 mile upstream of U.S. Route 190.	None	*39
		Washley Creek	At confluence with Tangipahoa River	None	*28
			Approximately 2.0 miles upstream of U.S. Route 190.	None	*37
		Yellow Water River	Approximately .6 miles upstream of confluence with Ponchatoula Creek.	None	*8
			Upstream side of Parish Road 134	None	*58

PROPOSED MODIFIED BASE (100-Year) FLOOD ELEVATIONS—Continued

State	City/town/county	Source of flooding	Location	Depth in feet above ground *Elevation in feet (NGCV)	
				Existing	Modified
		Little Chappepeela Creek	Approximately 1.1 miles upstream of Zemurry Lodge Road.	None	*68
			At upstream side of Terrase Road	None	*112

Maps available for inspection at the Courthouse Building, Amite, Louisiana.

Send comments to Mr. Gordon Burgess, President of the Tangipahoa, Parish Police Jury, P.O. Box 215, Amite, Louisiana 70422.

North Dakota	City of Harwood, Cass County.	Sheyenne River	At northernmost corporate limit and between the Burlington Northern Railroad and Interstate Highway 29.	None	*891
			Intersection of Bender Boulevard and Bender Lane.	None	*891
			Just upstream of County Highway 22 and west of Interstate Highway 29.	None	*893
			At southern corporate limit and between Burlington Northern Railroad and Interstate Highway 29.	None	*891
		Red River of the North	At northernmost corporate limit and east of Burlington Northern Railroad.	*891	*890
			Just downstream of County Highway 22	*891	*890
			At southernmost corporate limit and east of Burlington Northern Railroad.	*892	*891

Maps are available for review at Harwood City Office, Main Street, Harwood, North Dakota.

Send comments to The Honorable John Woolery, Mayor, City of Harwood, Route 1, Box 482, Harwood, North Dakota 58042.

Texas	Hamilton, City, Hamilton County.	Pecan Creek	Approximately 1,600 feet downstream of East Gentry Street.	None	*1,128
			At upstream corporate limits	None	*1,180
		Tributary A	At confluence with Pecan Creek	None	*1,146
			At upstream corporate limits	None	*1,211
		Tributary B	At confluence with Tributary A	None	*1,162
			At upstream corporate limits	None	*1,207

Maps available for inspection at the City Hall, 200 East Main, Hamilton, Texas 76531.

Send comments to The Honorable Joe M. Crane, Mayor of the City of Hamilton, Hamilton County, 200 East Main, Hamilton, Texas 76531.

Wisconsin	Village of Wonewoc, Juneau County.	Baraboo River	About 1.4 miles downstream of Gehri Road	None	*912
			About 0.8 miles upstream of Hillsboro Street	None	*915

Maps available for inspection at Village Hall, 103 Washington Street, Wonewoc, Wisconsin.

Send comments to The Honorable Robert Smith, Village President, Village of Wonewoc, Box 303, 103 Washington Street, Wonewoc, Wisconsin 53968.

Issued: December 7, 1990.

C.M. "Bud" Schauerte,

Administrator, Federal Insurance Administration.

[FR Doc. 90-29343 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-03-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1 and 90

[PR Docket No. 90-481]

Construction, Licensing, and Operation of Private Land Mobile Stations

AGENCY: Federal Communications Commission.

ACTION: Proposed rule: Order extending comment period.

SUMMARY: In response to a Motion for Extension of Time filed by the Special Industrial Radio Service Association, the Commission adopted an Order extending the time period in which to file comments and reply comments in this proceeding. The intended effect of this action is to ensure a complete record by giving all interested parties an opportunity to participate.

DATES: Comments to the Notice of Proposed Rule Making and reply comments are due by January 8, 1991 and January 24, 1991, respectively.

ADDRESSES: Federal Communications Commission, Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Irene Bleiweiss, Land Mobile and Microwave Division, Private Radio Bureau (202) 634-2443.

SUPPLEMENTARY INFORMATION: A summary of the Notice of Proposed Rule Making was published on November 7, 1990 at 55 FR 46834.

[PR Docket No. 90-481; RM-6910]

Order Extending Comment Period

In the matter of amendment of part 90 of the Commission's rules concerning the construction, licensing, and operation of private land mobile radio stations.

Adopted: December 4, 1990.

Released: December 11, 1990.

By the Chief, Private Radio Bureau:

1. On October 11, 1990, the Commission adopted a Notice of Proposed Rule Making in the above-captioned matter. The specified deadlines for comments and reply comments are December 24, 1990 and January 8, 1991, respectively.

2. On November 29, 1990, the Special Industrial Radio Service Association, Inc. (SIRSA) filed a motion requesting an extension of the deadlines for comments and reply comments by approximately two weeks. SIRSA is concerned that the proximity of the current filing dates to the holiday season may prevent some businesses from participating due to competing commitments.

3. Extensions of time are not routinely granted, and the proximity of a filing date to a holiday is generally not a sufficient reason for an extension. See 47 CFR 1.46(a). *Cf.* 47 CFR 1.4(b). In this proceeding, however, the time conflicts affecting interested parties during the holiday season are particularly significant. The rules proposed in this proceeding have a potential impact on virtually every private radio licensee and, in some instances, could result in a loss of operating authority. Many of the potentially affected licensees are small businesses that, faced with other commitments, might find it difficult to participate within current deadlines. The length of the extension requested would ensure the development of a complete record in this proceeding without causing undue delay. We therefore find good cause to grant the extension requested.

4. Accordingly, *It is ordered*, pursuant to the authority set forth in § 0.331 of the Commission's Rules and Regulations, 47 CFR 0.331, that all interested parties will have until January 8, 1991 to file comments and until January 24, 1991 to file reply comments.

Federal Communications Commission.

Ralph A. Haller,

Chief, Private Radio Bureau.

[FR Doc. 90–29375 Filed 12–13–90; 8:45 am]

BILLING CODE 6712-01-M

Notices

Federal Register
Vol. 55, No. 241
Friday, December 14, 1990

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

ARMS CONTROL AND DISARMAMENT AGENCY

The President's General Advisory Committee on Arms Control and Disarmament; Closed Meeting

In accordance with the Federal Advisory Committee Act, as amended, the U.S. Arms Control and Disarmament Agency announces the following Presidential Committee meeting:

Name: General Advisory Committee on Arms Control and Disarmament.

Date: January 14–15, 1991.

Time: 8:30 a.m.

Place: State Department Building, Washington, DC.

Type of Meeting: Closed.

Contact: Robert M. Meissner, Executive Director, General Advisory Committee on Arms Control and Disarmament, room 5937, Washington, DC, 20451, (202)–647–5178.

Purpose of Advisory U.S. Committee: To advise the President, the Secretary of State, and Director, of the Arms Control and Disarmament Agency respecting matters affecting arms control, disarmament, and world peace.

Agenda: The Committee will review specific national security policy and arms control issues. Members will be briefed on current START and CFE negotiations, missile proliferation, status of the nuclear weapons production complex and nuclear testing. An Executive Session will be held.

Reason for Closing: The GAC members will be reviewing and discussing matters specifically required by Executive Order to be kept secret in the interest of national defense and foreign policy.

Authority to Close Meeting: The closing of this meeting is in accordance with a determination by the Director of the Arms Control and Disarmament Agency dated December 5, 1990, made pursuant to the provisions of section 10 (d) of the Federal Advisory Committee Act as amended.

William J. Montgomery,
Committee Management Officer.

[FR Doc. 90–29327 Filed 12–13–90; 8:45 am]

BILLING CODE 6820–32–M

DEPARTMENT OF AGRICULTURE

Forest Service

Teton Village Land Exchange; Bridger-Teton National Forest, Teton, County, WY

AGENCY: Forest Service, USDA.

ACTION: Notice of availability of draft environmental impact statement.

SUMMARY: The Forest Service has prepared an environmental impact statement on a proposed land exchange of approximately 80 acres of National Forest located adjacent to Teton Village for approximately 160 acres of non-Federal land known as the Diamond L Ranch located near the town of Moran.

DATES: Comments concerning the scope of the analysis should be received in writing by February 22, 1991.

ADDRESSES: Send written comments to District Ranger, Jackson Ranger District, Bridger-Teton National Forest, Box 1689, Jackson, WY 83001.

FOR FURTHER INFORMATION CONTACT: Pete Mourtsen, Realty Specialist (307) 733–4755.

SUPPLEMENTARY INFORMATION: The draft environmental impact statement compares three alternatives for conducting this land exchange, including a no action alternative. Preliminary concerns have been expressed regarding effects on the Jackson Hole Ski Area, administrative problems for Teton County, impacts on Grand Teton National Park and visual quality. If completed, this exchange will be made under the authority of the General Exchange Act of March 20, 1922 and the Federal Land Policy and Management Act of October 21, 1976. A public meeting is scheduled for January 17, 1991 in Jackson, Wyoming to discuss this proposal. The lead agency for this proposal is the USDA Forest Service. Written suggestions and comments are invited. The responsible official is Stan Tixier, Regional Forester, Intermountain Region, USDA Forest Service.

The comment period on the draft environmental impact statement will be 75 days from the date the Environmental Protection Agency's notice of availability appears in the **Federal Register**. It is very important that those interested in the this proposed action participate at that time. To be the most helpful, comments on the draft environmental impact statement should be as specific as possible and may address the adequacy of the statement or the merits of the alternatives discussed (see the Council on Environmental Quality Regulations for implementing the procedural provisions of the National Environmental Policy Act at 40 CFR 1503.3).

In addition, Federal court decisions have established that reviewers of draft environmental impact statements must structure their participation in the environmental review of the proposal so that it is meaningful and alerts an agency to the reviewers' position and contentions. *Vermont Yankee Nuclear Power Corp.* v. *NRDC*, 435 U.S. 519, 553 (1978). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final environmental impact statement. *City of Angoon* v. *Hodel*, (9th Circuit, 1986) and *Wisconsin Heritages, Inc.* v. *Harris*, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). The reason for this is to ensure that substantive comments and objections are made available to the Forest Service at a time when it can meaningfully consider them and respond to them in the final.

Dated: December 7, 1990.

Brian E. Stout,
Forest Supervisor, Bridger-Teton National Forest.

[FR Doc. 90–29263 Filed 12–13–90; 8:45 am]

BILLING CODE 3410–11–M

Noon Timber Sale, Dixie National Forest, Garfield County, Utah

AGENCY: Forest Service, USDA.

ACTION: Notice of intent to prepare an environmental impact statement.

SUMMARY: The Forest Service will prepare an environmental impact statement for a proposal to harvest timber, construct or reconstruct associated roads, and perform other related resource management activities in the Noon Lake area of Boulder

Mountain on the Teasdale Ranger District, Dixie National Forest. The area is located approximately 12 miles south of Teasdale, Utah.

Considerable scoping and a number of public meetings have been conducted concerning this proposals, and numerous comments have been received. The agency is seeking additional information and comments from Federal, State and local agencies and other individuals and organizations who may be interested in or affected by the proposed action. This input will be added to that already received and will be used in preparing the Draft Environmental Impact Statement.

DATES: Comments concerning the proposed action should be received in writing by February 1, 1991.

ADDRESSES: Submit written comments to Marvin R. Turner, District Ranger, Teasdale Ranger District, PO Box 99, Teasdale, Utah 84773.

FOR FURTHER INFORMATION CONTACT: Direct questions about the proposed action and EIS to Joseph A. Colwell, Resource Officer, Teasdale Ranger District, (801) 425-3702.

SUPPLEMENTARY INFORMATION: The proposal is an implementation action of the Dixie National Forest Land and Resource Management Plan and the attainment of the desired future conditions specified in the Plan. The proposed action will be accomplished in coordination with other resources and uses, and will provide a flow of timber from National Forest land.

Management activities under consideration would occur in an area encompassing approximately 5,000 acres of National Forest system lands. The area is located on a high plateau which contains stands of Engelmann spruce, open areas of brush and grass, and scattered lakes and wet meadows mostly in closed drainage basins. Logging of the dead spruce, killed during a 1920 insect epidemic, has occurred during the past 40 years. The area is grazed by permitted livestock and the small lakes which support fish are popular for fishing; some big game hunting, hiking, and recreation vehicle use also occurs. Roads in varying degrees of development, use and stability abound throughout the area.

The EIS will tier to the EIS for the Dixie National Forest Land and Resource Management Plan. The Forest Plan provides the overall guidance for management activities by specifying the goals and objectives, desired future condition, management area direction, and standards and guidelines. The proposal is mostly within Management Area—2B Roaded Natural Recreation, and Management Area 7A—Wood Production and Utilization. Small areas also exist in Management Areas 2A—Semi Primitive Recreation, 4A—Fish and Aquatic Habitat, and 9A—Riparian Management. The management direction for the Roaded Natural Recreation areas includes emphasis for rural and roaded-natural recreation opportunities, and the management of visual resources so that management activities maintain or improve the quality of recreation opportunity. Management direction for the Wood Production and Utilization areas includes emphasis on wood-fiber production and utilization of large roundwood of a size and quality suitable for sawtimber; The desired future condition includes objectives of creating and maintaining stands that will minimize growth loss and mortality from insects and diseases. The direction for Management Area 2A is management emphasis on semi-primitive recreation opportunities; the direction and goals for Fish and Aquatic Habitat and Riparian areas is to provide healthy, self-perpetuating plant communities, meet water quality standards, provide habitats for viable populations of wildlife and fish, and provide stable stream channels and still water body shorelines.

A reasonable range of alternatives will be considered. One of these will be the "no action" alternative in which the proposed action would not be implemented, but current management activities would continue (i.e., salvage logging, dispersed recreation, livestock grazing, etc.). Other alternatives will examine various silvicultural and management options designed to achieve integrated resource management goals. The Forest Service will analyze and document the direct, indirect and cumulative environmental effects of the alternatives. The EIS will also include site specific mitigation measures.

Public participation is important during the analysis. Scoping and public involvement to date have identified issues and concerns involving: the development of the transportation system, the level of the timber harvest, the protection and enhancement of the fishery and riparian areas, provisions for dispersed recreation, the management of the domestic grazing and the forage resource, and the project costs and effects on dependent communities. Information gained during this step of scoping will be combined with information and comments already received. The combined input will be used in the preparation of the draft environmental impact statement (DEIS). Additional written comments should be submitted by February 1, 1991 to be considered in the DEIS. Public involvement is planned throughout the process.

The Draft Environmental Impact statement (DEIS) is expected to be available for public review by May 1991. The comment period on the DEIS will be 45 days from the date the EPA's notice of availability appears in the **Federal Register.**

The Forest Service believes it is important to give reviewers notice, at this early stage, of several court ruling related to public participation in the environmental review process. First, reviewers of draft environmental impact statements (DEIS) must structure the participation in the environmental review of the proposal so that it is meaningful and alerts the agency to the reviewer's position and contentions. *Vermont Yankee Nuclear Power Corp.* v. *NRDC*, 435 U.S. 519, 53 (1978). Also, environmental objections that could be raised at the draft environmental impact statement stage but that are not raised until after completion of the final environmental impact statement may be waived or dismissed by the courts. *City of Angoon* v. *Hodel*, 803 F2d1016, 1002 (9th Cir1986) and *Wisconsin Heritages, Inc.* v. *Harris*, 490 F. Supp. 1334 (E.O. Wis. 1980). Because of these court rulings, it is very important that those interested in this proposed action participate by the close of the 45 day DEIS comment period so that substantive comments and objections are made available to the Forest Service at a time when it can meaningfully consider them and respond to them in the final environmental impact statement.

To assist the Forest Service in identifying and considering issues and concerns on the proposed action, comments on the DEIS should be as specific as possible. It is also helpful if comments refer to specific pages or chapters of the draft statement. Comments may also address the adequacy of the draft statement or the merits of the alternatives formulated and discussed in the statement. (Reviewers may wish to refer to the Council on Environmental Quality Regulations for implementing the procedural provisions of the National Environmental Policy Act at 40 CFR 1503.3 in addressing these points.)

The Final Environmental Impact Statement is expected to be published by September 1991.

Hugh C. Thompson, Forest Supervisor, Dixie National Forest is the responsible official.

Dated: December 6, 1990.

Hugh C. Thompson,

Forest Supervisor, Dixie National Forest.

[FR Doc. 90-29264 Filed 12-13-90; 8:45 am]

BILLING CODE 3410-11-M

Timber Management and Road Construction in the Le Perron Compartment (Jake T.S.), Humboldt County, CA

AGENCY: Forest Service, USDA.

ACTION: Notice of intent to prepare an environmental impact statement.

SUMMARY: Notice is hereby given that the USDA, Forest Service will prepare an Environmental Impact Statement for Jake Timber Sale which proposes timber management and road construction in the Le Perron compartment of the Orleans Ranger District, Six Rivers National Forest, Humboldt County, California.

DATES: Interested and affected individuals should make their input by March 18, 1991.

ADDRESSES: Written comments and suggestions concerning the analysis should be sent to John Larson, District Ranger, Orleans Ranger District, Six Rivers National Forest, Drawer B, Orleans, California, 95556.

FOR FURTHER INFORMATION CONTACT: Gene Graber, Timber Management Officer, Orleans Ranger District, Drawer B, Orleans, CA, 95556, phone (916) 627-3291.

SUPPLEMENTARY INFORMATION: The Le Perron compartment is located south of the Klamath River in the southern portion of the Orleans Ranger District and outside of the proposed Habitat Conservation Area for the Northern Spotted Owl. The compartment contains approximately 6000 acres and includes many historic mining claims, trails, and a fawning area at Le Perron Flat which is important to the local deer herd. The project area contains Red Cap Creek and Boise Creek, two main tributaries to the Klamath River. Red Cap Creek provides high quality spawning habitat for summer steelhead, winter steelhead, and fall run chinook salmon. The proposal would regenerate up to 179 acres of suitable forest land while maintaining the diverse structure of the forest landscape. In preparing the Environmental Impact Statement, the Forest Service will identify and consider a range of alternatives for this project. One of these will be no action. Other alternatives will consider the harvest of approximately 3.3 to 6.1 million board feet of timber using various silvicultural prescriptions and constructing various amounts of forest road.

Public participation will be especially important at several points during the analysis. The first point is during the scoping process (40 CFR 1501.7).

Federal, State, and local agencies; local property owners, and other individuals or organizations who may be interested in, or affected by the decision are hereby invited to participate in the scoping process. Previous scoping under the environmental analysis process included:

1. Open house meeting at the District.
2. Letters mailed to individuals, organizations, and agencies inviting comments about the project proposal.
3. Notice posted at local store soliciting comments regarding the proposal.

The input will be used in preparation of the draft environmental impact statement and will include:

1. Identifying potential issues.
2. Identifying issues to be analyzed in depth.
3. Eliminating insignificant issues or those which have been covered by a relevant previous environmental analysis.
4. Exploring additional alternatives.
5. Identifying potential environmental effects of the proposed action and alternatives.

The District Ranger will hold an additional public scoping meeting in the conference room located at the Orleans Ranger District office on Ishi Pishi Road, Orleans, California, at 1 p.m., Tuesday, April 2, 1991.

James L. Davis, Jr., Forest Supervisor, Six Rivers National Forest, is the responsible official.

The draft environmental impact statement (DEIS) is expected to be filed with the Environmental Protection Agency (EPA) and to be available for public review by May 31, 1991. At that time EPA will publish a notice of availability of the DEIS in the **Federal Register**.

The comment period on the DEIS will be 45 days from the date the EPA's Notice of Availability appears in the **Federal Register**. It is very important that those interested in the management of the Le Perron Compartment participate at that time. To be most helpful, comments on the DEIS should be as specific as possible and may address the adequacy of the statement or the merits of the alternatives discussed (see the Council on Environmental Quality Regulations for implementing the procedural provisions of the National Environmental Policy Act at 40 CFR 1503.3). In addition, Federal court decisions have established that reviewers of DEIS's must structure their participation in the environmental review of the proposal so that it is meaningful and alerts an agency to the reviewer's position and contentions, *Vermont Yankee Nuclear Power Corp.* v. *NRDC*, 435 U.S. 519, 553 (1978), and that environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final environmental impact statement (FEIS). *Wisconsin Heritages, Inc.* v. *Harris*, 490 F. Supp. 1334, 1338 E.D. Wis. 1980). The reason for this is to ensure that substantive comments and objections are made available to the Forest Service at a time when it can meaningfully consider them and respond to them in the FEIS.

After the comment period ends for the DEIS, the comments received will be analyzed and considered by the Forest Service in the preparation of the FEIS. The FEIS is scheduled to be completed by September 1991. In the FEIS the Forest Service is required to respond to the comments received (40 CFR 1503.4). The responsible official will consider the comments, responses, disclosure of environmental consequences, and applicable laws, regulations, and policies in making a decision regarding this proposal. The responsible official will document the decision and rationale in the Record of Decision. That decision will be subject to appeal under 36 CFR Part 217

Dated: December 3, 1990.

George Lottritz,

Timber Management Officer.

[FR Doc. 90-29265 Filed 12-13-90; 8:45 am]

BILLING CODE 3410-11-M

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

[Docket No: 901107-0307]

National Voluntary Laboratory Accreditation Program (NVLAP)

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice of change—NVLAP Commercial Products Testing Program.

SUMMARY: The National Voluntary Laboratory Accreditation Program (NVLAP), National Institute of Standards and Technology (NIST) announces a change in the scope of laboratory accreditation for the Commercial Products Testing Program (CPT) to include laboratories that test plumbing products and devices.

SUPPLEMENTAL INFORMATION:

Background

This notice is issued in accordance with § 7.18 of the NVLAP procedures (15 CFR part 7).

The commercial Products Testing Program (CPT) was established in 1984 at the request of the International Coalition for Procurement Standards (ICPS). The purpose of the program was to develop a list of accredited laboratories so that purchasing authorities could specify in their purchase contracts that vendors have the products tested by an accredited laboratory. The ICPS request identified a number of standards and test methods for paints and related coatings, paper and paper products and mattresses for initial inclusion in the program.

The scope of the CPT program established in 1984 was defined as those products important to the purchasing community listed in "Selected ASTM Standards for the Purchasing Community" First Edition 1983; published by the American Society for Testing and Materials (ASTM). The program initially included paint and related materials, paper and paper products, and mattresses. Other products could be added in response to written requests, either as listed in the ASTM Book, or for test methods in standards other than ASTM (48 FR 45448–45453, dated October 5, 1983). NVLAP announced the expansion of the scope of the Commercial Products Testing Program on April 2, 1990 to include plumbing—plastics, fixture fittings and fixtures as identified in plumbing standards for test methods listed below, so that purchase contracts can specify that these products be tested in a NVLAP accredited laboratory.

Test methods listed for which laboratories may apply are from the following standards.

Plumbing—Plastics (Application Codes 19/P01–19/P12) (Other current Plastic Test Methods are offered under CPL Codes 15/A01–15/A21):
- ANSI Z124.1 Plastic Bathtub Units
- ANSI Z124.2 Plastic Shower Receptors—Stalls
- ANSI Z124.3 Plastic Lavatories
- ANSI Z124.4 Plastic Water Closet Bowls and Tanks

Plumbing Fixture Fittings and Fixtures (Application Codes 19/F01–19/F15, and 19/W01–19/W08):
- ASME/ANSI A112.18.1 Plumbing Fixture Fittings
- ASME/ANSI A112.19.2 Vitreous China Plumbing Fixtures

Provisions for plumbing laboratory accreditation are responsive to inquiries and requests initially related to the need for energy and water conservation programs by the California Energy Commission (52 FR 18592–18593, dated May 18, 1987) and subsequently supported by responses from public review. Newer needs for plumbing testing accreditation were requested in letters which specifically designated ANSI Z124 plastic plumbing fixtures standards series by: HUD concerning application to the requirements for data from test laboratories in HUD Use of materials Bulletin 73 for product certification; the national plumbing consultant/Chairman of ASME/ANSI A112 Committee.

FOR FURTHER INFORMATION CONTACT: Lawrence Galowin, Project Leader, National Voluntary Laboratory Accreditation Program, National Institute of Standards and Technology, Building 411, A124, Gaithersburg, MD 20899 (301) 975–4022.

Need for Change: The purpose of the Commercial Products Testing Program was initially intended to support purchasing agents in procurement for products as announced in 1984 (since that time the ASTM Book has not been updated). NVLAP has responded to other information requests for inclusion of different products through expansion of the Commercial Products Testing Program; accreditation for testing other listed products has since been added to the CPT program. This announcement provides for laboratories to apply for accreditation for testing plumbing products.

Purchasing authorities, agencies, and other jurisdictional officials may request laboratory accreditation for testing products covered by voluntary standards writing organizations. Written requests for testing laboratories accreditation for other procured products under the CPT program may be made following NVLAP procedures.

John W. Lyons,
Director.

[FR Doc. 90–29364 Filed 12–13–90; 8:45 am]

BILLING CODE 3510–13–M

Announcement of Workshop for Users and Implementors of Integrated Services, Digital Network (ISDN)

AGENCY: National Institute of Standards and Technology (NIST), Commerce.

ACTION: Notice.

SUMMARY: The National Computer Systems Laboratory (NCSL) at the NIST announces a meeting of the North American ISDN Users' Forum (NIU–FORUM). The NIU–FORUM was formed under the Federal Technology Transfer Act of 1986 and is a consortium of businesses interested in creating a strong user voice in the implementation of Integrated Services Digital Network (ISDN) and to ensure that the emerging ISDN services meet users' application needs. Membership in the NIU–FORUM remains open to interested United States businesses, and such businesses should contact NIST for further information at the address shown below.

Tutorials focusing on ISDN-related topics will be conducted on the first day of each NIU–FORUM. These FORUMs will consist of joint workshops for the Users' (IUW) and Implementors' (IIW). The IUW will continue to work identifying, defining, and prioritizing user applications of ISDN. The IIW will continue defining implementation agreements for ISDN. Working group meetings will discuss issues related to the use and implementation of ISDN technology. Manufacturers and service providers are invited to participate in these workshops.

DATES: The North American ISDN Users' Forum (NIU–FORUM) will be held at the Town & Country Hotel in San Diego, California, February 26 through March 1, 1991.

ADDRESSES: To obtain registration forms for the workshop, companies may contact: ISDN Workshop, Attn: Ellen Parker, NIST, Administration Building, room A903, Gaithersburg, MD 20899; 301/975–4858. Upon receipt of the completed registration form, additional information will then be mailed to the registrant.

FOR FURTHER INFORMATION CONTACT: Dawn Hoffman, NIST, Building 223, room B364, Gaithersburg, MD 20899; 301/975–2937.

SUPPLEMENTARY INFORMATION: The registration fee for the February 26–March 1, 1991, NIU–FORUM will be $275. NIST reserves the right to cancel any part of the workshop.

Dated: December 10, 1990.

John Lyons,
Director.

[FR Doc. 90–29366 Filed 12–13–90; 8:45 am]

BILLING CODE 3510–CN–M

NIST Workshop for Implementors of OSI; 1992 Meeting Dates

AGENCY: National Institute of Standards and Technology (NIST), Commerce.

ACTION: Notice.

SUMMARY: The NIST announces four (4) workshop sessions to reach implementor agreements on Open Systems Interconnection (OSI) computer network protocols.

DATES: The 1992 meeting dates for the workshops have been established and are as follows:

March 9–13, 1992
June 8–12, 1992
September 21–25, 1992
December 14–18, 1992

The meetings will be hosted by NIST and will be held at Gaithersburg, Maryland.

ADDRESSES: To register for the workshops, companies may contact: OSI Workshop Series, Attn: Brenda Gray, National Institute of Standards and Technology, Building 225, room B–217, Gaithersburg, MD 20899, Telephone: (301) 975–3664.

The registration request must name the company representative(s) and specify the business address and telephone number for each participant.

FOR FURTHER INFORMATION CONTACT: For technical questions contact, Tim Boland (301) 975–3608.

SUPPLEMENTARY INFORMATION: The workshops will cover protocols in seven layers of the ISO Reference Model. Attendance at the workshops is limited due to space requirements and the size of the conference facility; therefore, registration is on a first come, first served basis. A registration fee will be charged for attending the workshops. Participants and expected to make their own travel arrangements and accommodations. NIST reserves the right to cancel any part of the workshops.

Dated: December 10, 1990

John W. Lyons,

Director.

[FR Doc. 90–29365 Filed 12–13–90; 8:45 am]

BILLING CODE 3510-CN-M

Improving Acceptance of U.S. Products in International Markets; Opportunity for Interested Parties to Attend and Observe

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice of workshop.

SUMMARY: This is to advise the public that the National Institute of Standards and Technology (NIST) is cosponsoring a Pressure Vessel workshop with The American Society of Mechanical Engineers. This is the first of a series of workshops in various product sectors. The purpose is to gather information, insights, and comments to determine conformity assessment related activities (testing, certification, accreditation, quality assessment, etc.) in which the U.S. Government can assist U.S. industry in gaining product acceptance within other markets such as the European Community (EC). Suggestions for future workshops are invited.

DATES: The Pressure Vessel workshop will be held at 9:30 a.m. on Thursday, January 31, 1991.

FOR FURTHER INFORMATION CONTACT: Dr. Stanley I. Warshaw, Director, Office of Standards Services, National Institute of Standards and Technology, Administration Building, room A–603, Gaithersburg, MD 20899 (301–975–4000).

Consistent with the growing importance of international standardization to the United States, NIST is cosponsoring a Pressure Vessel Workshop with The American Society of Mechanical Engineers to solicit views and recommendations on how the U.S. Government can assist this sector of U.S. industry in gaining product acceptance within international markets such as the EC.

Tentative topics for discussion at all workshops are listed below. Sponsors of individual workshops may identify specific issues focussed on their sectors.

1. Which EC requirements for conformity assessment are applicable to your sector?

2. Do the European regional standards (CEN/CENELEC/ETSI) or international standards (ISO, IEC, CCITT) that apply to your sector differ from U.S. standards?

3. To what extent do you feel that U.S. conformity assessment systems relating to your sector are adequate for acceptance of test data or other attestations of conformity by the EC member states?

4. Would your sector benefit from developing mutual recognition agreements between U.S. laboratories or product certifiers and their EC counterparts?

5. How can the U.S. Government better utilize private sector input when developing official positions with regard to possible negotiations with the EC for your sector for regulated products?

6. Should "CE" marks of conformity be made acceptable in the U.S. marketplace? What are the liability implications of such acceptance?

7. Does your sector need a recognizable mark of conformity? Is a U.S. mark needed?

The Pressure Vessel workshop will be held at 9:30 a.m. on January 31, 1991, in room 4830 at the U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230. To guarantee space, persons who wish to attend and observe the workshop should submit a notice in writing to Dr. Stanley I. Warshaw, Director, Office of Standards Services, National Institute of Standards and Technology, Administration Building, room A–603, Gaithersburg, MD 20899. Requests should contain the person's name, address, telephone and facsimile numbers, and affiliations. Requests should be received by January 18, 1991

Dated: December 10, 1990.

John W. Lyons,

Director.

[FR Doc. 90–29367 Filed 12–13–90; 8:45 am]

BILLING CODE 3510-13-M

National Oceanic and Atmospheric Administration

Committees; Establishment, Renewal, Termination, etc.; Sea Grant Review Panel

AGENCY: National Oceanic and Atmospheric Administration, Department of Commerce.

ACTION: Notice of solicitation for Sea Grant Review Panelists.

SUMMARY: This notice responds to section 209(c) of the National Sea Grant College Program Act, 33 U.S.C. 112, which requires the Secretary of Commerce to solicit nominations for membership on the Sea Grant Review Panel at least once a year. This advisory committee provides advice on the implementation of the National Sea Grant College Program.

DATES: Résumés should be sent to the address specified and must be received by January 14, 1991.

ADDRESSES: Mr. Robert D. Wildman, Director, National Sea Grant College Program, 1335 East-West Highway, room 5465, (BH) Silver Spring, Maryland 20910.

FOR FURTHER INFORMATION CONTACT: Mr. Robert J. Shephard of the National Sea Grant College Program at the address given above; telephone (301) 427–2431, (FTS) 427–2431.

SUPPLEMENTARY INFORMATION: Section 209 of the Act establishes a national review panel to advise the Secretary of Commerce, the Under Secretary for Oceans and Atmosphere, and the Director of the National Sea Grant College Program on the implementation of the Sea Grant Program. The panel provides advice on such matters as:

(a) The Sea Grant Fellowship program;

(b) Applications or proposals for, and performance under, grants and contracts awarded under section 205 and 206, and section 3 of the Sea Grant Program Improvement Act of 1976;

(c) The designation and operation of sea grant colleges and sea grant regional consortia; and the operation of the sea grant program;

(d) The formulation and application of the planning guidelines and priorities under section 203 (a) and (c)(1); and,

(e) Such other matters as the Secretary refers to the panel for review and advice.

The Panel is to consist of fifteen voting members composed as follows:

Not less than eight of the voting members of the panel should be individuals who, by reason of knowledge, experience, or training, are especially qualified in one or more of the disciplines and fields included in marine science. The other voting members shall be individuals who by reason of knowledge, experience, or training, are especially qualified in, or representative of, education, extension services, state government, industry, economics, planning, or any other activity which is appropriate to, and important for, any effort to enhance the understanding, assessment, development, utilization, or conservation of ocean and coastal resources. No individual is eligible to be a voting member of the panel if the individual is (a) the director of a sea grant college, sea grant regional consortium, or sea grant program, (b) an applicant for or beneficiary (as determined by the Secretary) of, any grant or contract under section 205 or 206; or, (c) a full-time officer or employee of the United States.

The Director of the National Sea Grant College Program and one Director of a Sea Grant Program also serve as non-voting members. Three positions on the panel will become vacant during 1991. Candidates who are selected to fill these vacancies will be appointed for a three-year term.

Dated: December 10, 1990.

Ned A. Ostenso,

Assistant Administrator, OAR.

[FR Doc. 90-29262 Filed 12-13-90; 8:45 am]

BILLING CODE 3510-12-M

Marine Mammals; Appl. for Modification; Dr. Daniel Costa (P227H)

Notice is hereby given that Dr. Daniel P. Costa, University of California, Institute of Marine Sciences, 100 Shaffer Road, Santa Cruz, CA 95060, has requested a modification to Permit No. 700, issued on March 23, 1990 (55 FR 12254), under the authority of the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361-1407) and the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR part 216).

Permit No. 700 authorizes the take and importation of blood, milk and tissue samples from Australia, New Zealand, Mexico, Argentina, Ecuador, and Chile from 12 species of pinniped: California seal lion (*Zalophus californianus*), Galapagos fur seal (*Zalophus californianus wallebaeki*), Australian sea lion (*Neophoca cinerea*), Southern sea lion (*Otaria flavescens*), Hookers sea lion (*Phocartos hookeri*), Galapagos fur seal (*Artocephalus galapagoensus*), Guadelupe fur seal (*A. townsendi*), Antarctic fur seal (*A. gazella*), South American fur seal (*A. australis*), New Zealand fur seal (*A. forsteri*), South African fur seal (*A. pusillus pusillus*), and Australian fur seal (*A. pusillus doriferus*).

The Permit Holder requests authorization to add the Southern Elephant Seal (*Mirounga leonina*) and the Weddell seal (*Leptonychotes weddelli*) to the list.

Concurrent with the publication of this notice in the **Federal Register**, the Secretary of Commerce is forwarding copies of this application to the Marine Mammal Commission and the Committee of Scientific Advisors.

Written data or views, or requests for a public hearing on this modification request should be submitted to the Assistant Administrator for Fisheries, National Marine Fisheries Service, U.S. Department of Commerce, 1335 East West Hwy., room 7324, Silver Spring, Maryland 20910, within 30 days of the publication of this notice. Those individuals requesting a hearing should set forth the specific reasons why a hearing on this particular application would be appropriate. The holding of such hearing is at the discretion of the Assistant Administrator for Fisheries. All statements and opinions contained in this modification request are summaries of those of the Applicant and do not necessarily reflect the views of the National Marine Fisheries Service.

Documents submitted in connection with the above modification request are available for review by interested persons in the following offices:

Office of Protected Resources, National Marine Fisheries Service, 1335 East West Hwy., suite 7324. Silver Spring, MD 20910; and

Director, Southwest Region, National Marine Fisheries Service, 300 South Ferry Street, Terminal Island, CA 90731.

Dated: December 7, 1990.

Richard H. Schafer,

Director, Office of Fisheries Conservation and Management, National Marine Fisheries Service.

[FR Doc. 90-29279 Filed 12-13-90; 8:45 am]

BILLING CODE 3510-22-M

Marine Mammals; Modification of Permit; Marine World Foundation

Modification No. 1 to Permit No. 632

Notice is hereby given that pursuant to the provisions of § 216.33 (d) and (e) of the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR part 261), Public Display Permit No. 632 issued to the Marine World Foundation, Marine World Parkway, Vallejo, California 94589, on April 27, 1988 (55 FR 15864) is modified in the following manner:

Section B.6 is deleted and replaced by:

6. The authority to acquire the marine mammals authorized herein shall extend from the date of issuance through December 31, 1992. The terms and conditions of this Permit (sections B and C) shall remain in effect as long as one of the marine mammals taken hereunder is maintained in captivity under the authority and responsibility of the Permit Holder.

This modification becomes effective upon publication in the **Federal Register.**

Documents submitted in connection with the above modification are available for review by appointment in the following offices:

Office of Protected Resources, National Marine Fisheries Service, NOAA, 1335 East West Highway, room 7324, Silver Spring, Maryland, 20910 (301/427-2289);

Director, Southeast Region, National Marine Fisheries Service, NOAA, 9450 Koger Boulevard, St. Petersburg, Florida 33702 (813/893-3141); and

Director, Southwest Region, National Marine Fisheries Service, NOAA, 300 South Ferry Street, Terminal Island, California 90731-7415 (213/514-6196).

Dated: December 7, 1990.

Richard H. Schaefer,

Director, Office of Fisheries Management and Conservation, National Marine Fisheries Service.

[FR Doc. 90-29280 Filed 12-13-90; 8:45 am]

BILLING CODE 3510-22-M

Endangered Marine Mammals

AGENCY: National Marine Fisheries Service, NOAA, DOC.

ACTION: Request for modification to scientific research permit no. 719.

SUMMARY: Notice is hereby given that Dr. Walter H. Munk, Scripps Institution of Oceanography (A-025), Institute of Geophysics and Planetary Physics, La Jolla, California 92093, has requested a modification to NMFS Permit No. 719, pursuant to the provisions of § 216.33(d) and (2) of the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR part 216), and § 220.24 of the Regulations Governing Endangered Species (50 CFR part 217-222).

Permit No. 719, issued December 7, 1990, and published in the **Federal Register** on December 13, 1990, authorized taking by harassment no more than 100 pinnipeds or 10 cetaceans, all sizes, sex and age classes of baleen whales, killer whales, dolphins, porpoises, beaked whales, Antarctic fur seals, southern elephant seals, and adult male sperm whales, in the vicinity of Heard Island in the Southern Indian Ocean. The marine mammal research project is in conjunction with the project "Acoustic Global Warming Feasibility Experiment," to measure global ocean warming in the presence of very large natural ocean variability.

This modification would add to the list of marine mammals to be harassed the following additional species: spectacled porpoise (*Australophocaena dioptrica*); strap-toothed whale (*Mesoplodon layardi*); Andrew's beaked whale (*M. bowdoini*); Arnoux's beaked whale (*Berardius arnuxii*); and hourglass dolphin (*Lagenorhynchus cruciger*). In addition, the Permit Holder requests authority to take by harassment additional species of marine mammals that have previously not been reported in the study area, but which may be sighted in the vicinity of Heard Island during the experiement.

Modification is requested to include all marine mammals that occur in the ensonified area (to include all surface waters to waters of 80m depth where sound levels exceed 120 dB re limicroPa). Sound levels are expected to attenuate to 120 dB or less at depths between the surface and 80m within 100 km of the sound source. Additionally, modification is requested to take a maximum of 15,000 Antarctic fur seals, 100,000 southern elephant seals, 6900 sei whales, 42,100 fin whales, 103,300 minke whales, 54,700 killer whales, 1500 blue whales, 1000 humpback whales, 1000 southern right whales, 23,700 sperm whales, and an unspecified number of other species. Take numbers are not specified for those species where population estimates for sectors III and IV of the southern ocean do not exist. The Permit Holder wishes to note that they do NOT anticipate actually harassing this large number of animals. Rather, the above numbers represent their best estimates of the number of animals from each species in sectors III and IV of the southern ocean.

Concurrent with the publication of this notice in the **Federal Register** the Secretary of Commerce is forwarding copies of this modification request to the Marine Mammal Commission and the Committee of Scientific Advisors.

Written data or views, or requests for a public hearing on this application should be submitted to the Assistant Administrator for Fisheries, National Marine Fisheries Service, U.S. Department of Commerce, 1335 East West Highway, room 7330, Silver Spring, Maryland 20910, within 30 days of the publication of this notice. Those individuals requesting a hearing should set forth the specific reasons why a hearing on this particular request would be appropriate. The holding of such hearing is at the discretion of the Assistant Administrator for Fisheries. All Statements and opinions contained in this modification request are summaries of those of the applicant and do not necessarily reflect the views of the National Marine Fisheries Service.

Documents submitted in connection with the above request are available for review by interested persons in the following offices:

Office of Protected Resources, National Marine Fisheries Service, 1335 East West Highway, room 7330, Silver Spring, Maryland 20910;

Director, Alaska Region, National Marine Fisheries Service, NOAA, 709 West 9th Street, Federal Bldg., Juneau, Alaska 99802;

Director, Northeast Region, National Marine Fisheries Service, NOAA, One Blackburn Drive, Gloucester, Massachusetts 01930;

Director, Northwest Region, National Marine Fisheries Service, NOAA, 7600 Sand Point Way, NE., BIN C15700, Seattle, Washington 98115;

Director, Southeast Region, National Marine Fisheries Service, NOAA, 9450 Koger Boulevard, St. Petersburg, Florida 33702;

Director, Southwest Region, National Marine Fisheries Service, NOAA, 300 South Ferry Street, Terminal Island, California 90731-7415; and

Administrator, Western Pacific Area Office, National Marine Fisheries Service, NOAA, 2570 Dole Street, room 106, Honolulu, Hawaii 96822-2396.

Dated: December 11, 1990.

David S. Crestin,

Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.

[FR Doc. 90-29370 Filed 12-13-90; 8:45 am]

BILLING CODE 3510-22-M

COMMITTEE FOR PURCHASE FROM THE BLIND AND OTHER SEVERELY HANDICAPPED

Procurement List; Additions

AGENCY: Committee for Purchase from the Blind and Other Severely Handicapped.

ACTION: Additions to procurement list.

SUMMARY: This action adds to the Procurement List commodities to be produced by workshops for the blind or other severely handicapped.

EFFECTIVE DATE: January 14, 1991.

ADDRESSES: Committee for Purchase from the Blind and Other Severely Handicapped, Crystal Square 5, suite 1107, 1755 Jefferson Davis Highway, Arlington, Virginia 22202-3509.

FOR FURTHER INFORMATION CONTACT: Beverly Milkman, (703) 557-1145.

SUPPLEMENTARY INFORMATION: On August 3 and October 19, 1990, the Committee for Purchase from the Blind and Other Severely Handicapped published notices (55 FR 31620 and 42428) of proposed additions to the Procurement List.

After consideration of the material presented to it concerning the capability of a qualified workshop to produce these commodities at a fair market price, the impact of the addition on the current or most recent contractor, the Committee has determined that the commodities listed below are suitable for procurement by the Federal Government under 41 U.S.C. 46-48c and 41 CFR 52-2.6.

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered for this certification were:

a. The actions will not result in any additional reporting, recordkeeping or other compliance requirements.

b. The actions will not have a serious economic impact on any contractors for the commodities listed.

c. The actions will result in authorizing small entities to produce the commodities procured by the Government.

Accordingly, the following commodities are hereby added to the Procurement List:

Bag, Storage, 1430-01-133-8435, (Remaining Government Requirement)

Strap, Webbing, 1430-01-174-5095, 4935-00-922-2480, (Remaining Government Requirement)

Strap Set, Webbing, 4935-00-824-5469, (Remaining Government Requirement)

Strap, Set, 4935-00-888-7208, (Remaining Government Requirement)

Strap Assembly, 4935-00-888-7207, (Remaining Government Requirement)

Liner, Parka, Night Camouflage, 8415-01-102-4481, 8415-01-102-4482, 8415-01-102-4483, 8415-01-102-4484, 8415-01-102-4485.

This action does not affect contracts awarded prior to the effective date of this addition or options exercised under those contracts.

E. R. Alley, Jr.,

Deputy Executive Director.

[FR Doc. 90-29368 Filed 12-13-90; 8:45 am]

BILLING CODE 6820-33-M

Procurement List; Proposed Additions

AGENCY: Committee for Purchase from the Blind and Other Severely Handicapped.

ACTION: Proposed additions to procurement list.

SUMMARY: The Committee has received proposals to add to the Procurement List services to be provided by workshops for the blind or other severely handicapped.

COMMENTS MUST BE RECEIVED ON OR BEFORE: January 14, 1991.

ADDRESSES: Committee for Purchase from the Blind and Other Severely Handicapped, Crystal Square 5, suite 1107, 1755 Jefferson Davis Highway, Arlington, Virginia 22202-3509.

FOR FURTHER INFORMATION CONTACT: Beverly Milkman, (703) 557-1145.

SUPPLEMENTARY INFORMATION: This notice is published pursuant to 41 U.S.C. 47(a)(2) and 41 CFR 51-2.6. Its purpose is to provide interested persons an opportunity to submit comments on the possible impact of the proposed actions.

If the Committee approves the proposed addition, all entities of the Federal Government will be required to procure the services listed below from workshops for the blind or other severely handicapped.

It is proposed to add the following services to the Procurement List:

Janitorial/Custodial, Naval Aviation Supply Officer, Buildings 3A thru D, 4A, 5A, 5B, 36/1, 36/2, 36/3 and 11 Trailers, Philadelphia, Pennsylvania

Mailroom Service, Food and Drug Administration, Federal Building 8, 200 C Street SW., Washington, DC.

E.R. Alley, Jr.,

Deputy Executive Director.

[FR Doc. 90-29369 Filed 12-13-90; 8:45 am]

BILLING CODE 6820-33-M

COMMODITY FUTURES TRADING COMMISSION

New York Mercantile Exchange: Proposed Amendments Relating to Maximum Daily Price Fluctuation Limits for Crude Oil, Gasoline and Heating Oil Futures and Option Contracts and the Propane Futures Contract and Amendments to the Strike Price Listing Procedure for the Crude Oil Option Contract

AGENCY: Commodity Futures Trading Commission.

ACTION: Notice of proposed contract market rule changes.

SUMMARY: The New York Mercantile Exchange (NYMEX or Exchange) has submitted proposed amendments that would revise the maximum daily price limit provisions of the Exchange's light sweet crude oil, New York Harbor heating oil, New York Harbor unleaded regular gasoline and liquefied propane futures (collectively, energy futures) contracts by: (1) Setting a price limit for the nearby contract month, which now trades without price limits, (2) raising the existing price limit for the second nearby contract month of each of the energy futures to the same level proposed for the nearby contract month, and (3) establishing procedures for one-hour trading halts applicable to all listed futures and option months for a particular energy commodity, when the proposed price limit for the nearby or second nearby futures contract month for that commodity is hit. In addition, the proposal would amend the strike-price listing procedures for the crude oil option contract to provide that, in addition to the strike prices listed pursuant to the existing rules at $1.00-per-barrel increments, up to three additional strike prices, both above and below the relevant futures settlement price, will be listed at $5.00-per-barrel increments.

In accordance with Section 5a(12) of the Commodity Exchange Act and acting pursuant to the authority delegated by Commission Regulation 140.96(b), 55 FR 35897 (Sept. 4, 1990), the Director of the Division of Economic Analysis (Division) of the Commodity Futures Trading Commission (Commission) has determined, on behalf of the Commission, that publication of the proposed rule amendments is in the public interest and will assist the Commission in considering the views of interested persons. On behalf of the Commission, the Division is requesting comment on this proposal.

DATES: Comments must be received on or before January 14, 1991.

ADDRESSES: Interested persons should submit their views and comments to Jean A. Webb, Secretary, Commodity Futures Trading Commission, 2033 K Street, NW., Washington, DC 20581. Reference should be made to the proposed changes to the maximum daily price limits for the NYMEX energy futures and option contracts or the changes to the strike price listing procedures for the crude oil option contract.

FOR FURTHER INFORMATION CONTACT: Richard Shilts, Division of Economic Analysis, Commodity Futures Trading Commission, 2033 K Street, NW., Washington, DC 20581, telephone (202) 254-7303.

SUPPLEMENTARY INFORMATION: For each subject futures contract, the existing rules establish a system of daily maximum price limits and provisions for expansion of such limits, except the rules further specify that "there shall be no maximum limit on price fluctuations for the contract nearest delivery" (*i.e.*, the nearby month). For all non-nearby months, existing rules provide for base price limits equal to $1.50 per barrel for crude oil futures and $0.04 per gallon for heating oil, gasoline and propane futures. Existing rules provide for expansion of the daily limit to $3.00 per barrel for crude oil and $0.06 per gallon for the three other subject futures contracts. With respect to the NYMEX's crude oil, heating oil and gasoline futures option contracts, no price limits are specified.

The Exchange is proposing to establish a price limit for the nearby future for the subject energy futures contracts and to raise the limit applicable to the second nearby futures month. The existing expansion provisions generally will not be changed under the proposal, except that they will no longer apply to the second nearby future, and the expanded limits will be higher in the event of trading halts as discussed below. The NYMEX's existing base daily price limits and the maximum expanded limits as well as the proposed base and expanded limits for the subject energy contracts are shown below.

DAILY BASE (EXPANDED) PRICE LIMITS*

[In dollars]

Futures contract	Existing limits (all but nearby)	Proposed limits	
		Nearby & 2nd nearby	All other months
Crude Oil	1.50 (3.00)	7.50	1.50 (3.00) (7.50**)
NY Heat Oil	0.04 (0.06)	0.20	0.04 (0.06) (0.20**)
NY Gasoline	0.04 (0.06)	0.20	0.04 (0.06) (0.20**)
Propane	0.04 (0.06)	0.20	0.04 (0.06) (0.20**)

*Limits are stated in terms of dollars per barrel for crude oil and dollars per gallon for heating oil, gasoline and propane.

**These higher expanded limits are applicable only if a trading halt(s) is declared for the future contract. Otherwise, the expanded limit remains the same as that provided under existing rules.

In addition to the prosed changes in the daily price limits for the nearby and second nearby futures months, the Exchange proposes to adopt procedures by which a one-hour trading halt would be instituted. Such a cessation of trading would be based exclusively upon price movements for these two nearby futures (these two futures are termed the "special limit month contracts" in the proposed rules). Whenever there are trades, bids or offers in the nearby or second nearby futures months which are for a period of five minutes exclusively at the proposed limit ($7.50 for crude oil and $0.20 for heating oil, propane, and gasoline), trading in all futures and option months for that commodity would cease for one hour commencing two minutes after the end of this five-minute period.[1] Trading in all months would resume after the one-hour trading halt, and trading in all futures months would then be subject to the same limit ($7.50 for crude oil and $0.20 for gasoline, heating oil and propane) that applied only to the nearby and second nearby futures prior to the halt.[2] For the nearby and second nearby months, as well as for all other months, the permissible price range after the first halt will be based on the maximum (in the case of price increases) or minimum (in the case of price decreases) price allowed for that month prior to the halt.

There are no provisions for a second trading halt in those cases where prices continue to move in a single direction and hit the limit. Therefore, following a first trading halt, for the remainder of that day, prices can continue to move in the same direction only as much as the applicable limit for each contract month that was established after the first trading halt.

The NYMEX also has proposed to adopt procedures for a second halt in those cases where there is a significant reversal of prices following a first trading halt. Specifically, after the first halt, if prices reverse to such an extent that the nearby or second nearby futures month trades, is bid or is offered for a period of five minutes at the maximum or minimum allowable price (which is the same as the level of the prior day's settlement price), trading in all futures and option months for that commodity again would cease for a second one-hour period commencing two minutes after the end of the five-minute period.[3] After the second one-hour halt, trading in the futures and option contracts for that commodity would them resume. The same price limits of $7.50 for crude oil and $0.20 for heating oil, gasoline and propane applicable after the first halt will continue to apply to all months after the second halt. For the nearby and second nearby months, the permissible price range will be based on the futures settlement price for the previous day, *i.e.*, the original price limit basing points. For all other months, the permissible price range will continue to be the same price range established after the first halt. Trading for the remainder of the day after the second halt would be subject to the price limits noted immediately above, as there is no provision for a third halt under the proposal.

As noted above, under the proposal the Exchange's existing price-limit expansion provisions would be altered in the event of a trading halt.[4] Specifically, the price limit of $7.50 per barrel for crude oil and $0.20 per gallon for heating oil, gasoline and propane above or below the previous day's settlement price will remain in effect for all deferred months until the day following two consecutive trading sessions in which the futures settlement price fluctuates by less than the price limits that were in effect at the time when the trading halt took effect.

Under the proposal, for each energy futures contract if, after the resumption of trading following a first or second halt, there is less than one-half hour prior to the regularly scheduled closing time, the trading hours for that commodity will be expanded such that there shall be a half hour of trading after trading is resumed. Also, if a halt is imposed during the closing range on the last day of trading in the expiring contract month, the closing range for that contract shall include the portion of the closing range prior to the halt plus the half hour of trading after trading is resumed.

The NYMEX justified its price limit and trading halt proposal by noting that:

> These proposed amendments to energy futures contracts are primarily intended to improve the Exchange's ability to fulfill its price discovery function. Due to current energy market conditions, the Exchange seeks to prepare for the potential that there may be periods of unprecedented market turbulence. Recently, for instance, there has been a substantial increase in price volatility. This has caused energy contracts to reach their price limits on numerous occasions since August 2, 1990. With prices so often being locked at their limit, it has occasionally become difficult for market participants to be able to gauge futures fundamental price levels. This lack of price information in turn interferes with the ability of market participants to assess their overall risk exposure, especially those with positions and commitments in underlying cash markets.
>
> * * * [T]he Exchange seeks under this proposal to institute temporary, intra-day trading cessations during trading sessions of extraordinary volatility. The Exchange recognizes that during such trading sessions, a temporary one-hour trading cessation could

[1] The only exception to this proposed trading halt provision is that, if the price limit is hit during the closing range on any day other than the last trading day in the expiring future, there will be no cessation of trading for that day.

[2] However, if trading has been halted sometime during a day that is the last trading day for an expiring future, the price limit in effect for that expiring contract month will be removed during the last half hour of trading.

[3] Except that if this price limit is hit during the closing range on any day other than the last day of trading for an expiring future, then there will be no cessation of trading.

[4] For the nearby and second nearby months, the same base price limits ($7.50 for crude oil and $0.20 for heating oil, gasoline and propane) would apply on all days whether or not a halt occurs—*i.e.*, there is no expansion provision for these two nearby months.

allow for more orderly trading if market participants are given some additional time to assess the flow of information coming into the market. Upon the resumption of trading, the Exchange seeks to place an absolute one-day price limit on its energy contracts to minimize financial strain that could ensue on such days from the necessity to meet variation margin requirements. Under this proposed new rule, the temporary trading cessations will also help insure the financial integrity of its energy contracts by allowing its Compliance and Clearing Departments time to ascertain the degree of financial strain various market participants are being subjected to. In addition, it would provide opportunity for clearing members to contact customers pertaining to the financing agencies; the Exchange to contact appropriate Government agencies; and the Exchange and traders and brokers to prepare staffs for a potential increase in trading and order flow.

In addition, the special expansion of price limits on the Exchange's more distant month contracts on days when the two front month contracts attain their special limits, would allow for a more equitable mark-to-market settlement process. The current structure of limits can act to incur administrative burdens on spread traders, who may, for example, incur losses on their spot month positions, yet are not able to recognize gains on their offsetting back month positions.

* * * When prices are restricted from moving freely, options markets also become less than perfect substitutes for hedging price risks. * * * If the underlying futures market is locked at its limit, * * * market-makers are forced to use the spot-month futures contract to hedge their own risk exposure. Consequently, they incur a basis risk that will be at least partially offset through wider bid/ask spreads. This in turn results in more expensive, less liquid options markets to hedge in the back-months.

* * * This proposal also places restrictions on price movements in the event either of the Special Limit Month contracts experiences sharp fluctuations in price in both directions. . . . Under such circumstances, the Exchange chooses to reduce the potential for self-reinforcing price movements in a time of rapid and severe volatility.

With regard to the listing of crude oil option strike prices, current NYMEX Rule 310.05 specifies the following initial strike prices (for both puts and calls) listed in increments of $1.00 per barrel: One strike price nearest the previous day's settlement price for the underlying futures contract, plus the next five higher and lower strike prices. In addition, these rules provide that after initial listing the Exchange will maintain five strike prices above and below the at-the-money strike price.

The Exchange is proposing to amend these rules to provide for up to three additional crude oil strike prices at $5.00 intervals above and below the previous day's settlement price. These strikes will be always at whole intervals of $5.00.

The NYMEX stated in its submission that:

Under the current listing rules, newly added strike prices can at most be $5.00 above and below the last settlement price. While the Exchange believes that this rule has served the needs of most market participants, current market conditions have apparently led to the demand for strike prices which entail a much higher degree of dispersion. For example, currently on the NYMEX, strike prices $40.00 or greater account for only about 3.5% of the total number of option series for crude oil. However, open-interest on those contracts represents 8.4%. If only call options are taken into account, the proportion of open-interest for strike prices above $40 rises to 16% of the total, even though these options are currently deep out-of the-money.

Since August 2, 1990, implied volatilities of these options have risen dramatically. For example, on July 30, 1990, implied volatilities on at-the-money options were about 27%. By November 7, these had risen to 102%. One of the major impacts of such a change in the trading environment is that options prices have risen in proportion * * *.

By purchasing a deep out-of-the-money option, * * * the trader can considerably lower his insurance premium * * *.

The Exchange proposes to apply all of the proposed amendments to existing and newly listed contracts on the business day following the day of Commission approval.

The Division is requesting comment on the proposed price limit provisions and trading halt procedures on the energy futures and option contracts and the proposed strike price provision for the crude oil option contract. Also, the Division requests comment on the appropriateness of the NYMEX's proposed implementation plan.

Copies of the proposed amendments are available for inspection at the Office of the Secretariat, Commodity Futures Trading Commission, 2033 K Street, NW., Washington, DC 20581. Copies of the amended rules can be obtained through the Office of the Secretariat by mail at the above address or phone at (202) 254-6314.

Other materials submitted by the NYMEX in support of the proposed amendments may be available upon request pursuant to the Freedom of Information Act (5 U.S.C. 552) and the Commission's regulations thereunder (17 CFR part 145 (1987)), except to the extent they are entitled to confidential treatment as set forth in 17 CFR 145.7 and 145.8.

Any person interested in submitting written data, views or argument on the amended rules, or with respect to other materials submitted by the NYMEX in support of the proposals, should send such comments to Jean A. Webb, Secretary, Commodity Futures Trading Commission, 2033 K Street, NW., Washington, DC, 20581, by the specified date.

Issued in Washington, DC on December 12, 1990.

Gerald Gay,

Director.

[FR Doc. 90-29499 Filed 12-13-90; 8:45 am]

BILLING CODE 6351-01-M

DEPARTMENT OF DEFENSE

Public Information Collection Requirement Submitted to OMB for Review

ACTION: Notice.

The Department of Defense has submitted to OMB for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35).

Title, Applicable Form and Applicable OMB Control Number: DoD National Media Pool Accreditation Form, SD Form X079 and DoD National Media Pool Personal Data Form, SD Form X080 OMB Control number is pending.

Type of Request: Existing Collection in Use Without an OMB Control Number.

Average Burden Hours/Minutes per Response: .23 hours.

Responses per Respondent: 1.

Number of Respondents: 84.

Annual Burden Hours: 55.

Annual Responses: 84.

Needs and Uses: The Assistant Secretary of Defense (Public Affairs) is responsible for operating the DoD National Media Pool. This pool of media representatives, comprised of radio, TV, print, and photographic journalists, is designed to be deployed to any location in the world at the direction of the President or the Secretary of Defense to provide media coverage of U.S. military contingency operations. Each quarter, nine national media organizations are placed on an "alert list" to provide journalists should there be a need to deploy the media pool during that quarter. The information collected allows the Media Pool Plans Officer to review passport and innoculation information for each representative identified by the respective bureau chief prior to activation of the media pool, and allows the Media Pool Administrative NCO to prepare orders and accreditation documents during processing immediately prior to deployment of the pool.

Affected Public: Business or other for profit.

Frequency: Quarterly.

Respondent's Obligation: Voluntary.

OMB Desk Officer: Dr. J. Timothy Sprehe. Written comments and recommendations on the proposed information collection should be sent to Dr. J. Timothy Sprehe at the Office of Management and Budget, Desk Officer, room 3235, New Executive Office Building, Washington, DC 20503.

DoD Clearance Officer: Mr. William P. Pearce. Written requests for copies of the information collection proposal should be sent to Mr. Pearce, WHS/DIOR, 1215 Jefferson Davis Highway, suite 1204, Arlington, VA 22202-4302, telephone (202) 746-0933.

Dated: December 10, 1990.

L.M. Bynum,

Alternate Federal Register Liaison Officer, Department of Defense.

[FR Doc. 90-29294 Filed 12-13-90; 8:45 am]

BILLING CODE 3810-01-M

Office of the Secretary

Civilian Health and Medical Program of the Uniformed Services (CHAMPUS); Fiscal Year 1991 Updates

AGENCY: Office of the Secretary, DoD.

ACTION: Notice of updated mental health per diem rates.

SUMMARY: This notice revises the updated FY 1991 mental health per diem rates of the CHAMPUS Mental Health Per Diem Payment System that were established in a previous notice which was published on October 18, 1990.

EFFECTIVE DATES: The rates contained in this notice are effective for services occurring on or after October 1, 1990.

ADDRESSES: Office of the Civilian Health and Medical Program of the Uniformed Services (OCHAMPUS), Office of Program Development, Aurora, CO 80045-6900. For copies of the **Federal Register** containing this notice, contact the Superintendent of Documents, U.S., Government Printing Office, Washington, DC 20402, (202) 783-3238.

The charge for the **Federal Register** is $1.50 for each issue payable by check or money order to the Superintendent of Documents.

FOR FURTHER INFORMATION CONTACT: Stan Regensberg, Office of Program Development, OCHAMPUS, telephone (303) 361-3572.

To obtain copies of this document, see the **"ADDRESSES"** section above. Questions regarding payment of specific claims under the CHAMPUS Mental Health Per Diem Payment System should be addressed to the appropriate CHAMPUS contractor.

SUPPLEMENTARY INFORMATION: The final rule published in the **Federal Register** on pages 34285 through 34294 on September 6, 1988, set forth reimbursement changes that were effective for all inpatient hospital admissions in psychiatric hospitals and exempt psychiatric units occurring on or after January 1, 1989. Included in this final rule were provisions for updating reimbursement rates for each federal fiscal year. As stated in the final rule, each per diem shall be updated by the Medicare update factor for hospitals and units exempt from the Medicare Prospective Payment System. In the **Federal Register** of September 4, 1990, on page 36078, Medicare recommended to Congress an update factor of 5.3 percent for federal fiscal year 1991 for hospitals and units excluded from the prospective payment system. In a notice published in the **Federal Register** on October 18, 1990, on pages 42241 and 42242, CHAMPUS stated that the Medicare recommended update factor of 5.3 percent would be adopted unless a different percent was finally adopted in the Federal budget for fiscal year 1991. The approved FY 1991 budget has caused the Medicare update factor to be reduced to 4.2545 percent. Therefore, as previously stated in the notice of October 18, 1990, the update factor of 4.2545 percent is the one which will be used by CHAMPUS. This means, that for all days of care rendered under the mental health per diem payment system on or after October 1, 1990, reimbursement is to be made on per diems updated from FY 1990 by the update factor of 4.2545 percent. Hospitals and units with hospital-specific rates (hospitals and units with high CHAMPUS volume) will have their FY 1990 CHAMPUS per diem rates updated by 4.2545 percent for FY 1991.

The following reflect an update of 4.2545 percent.

REGIONAL SPECIFIC RATES FOR PSYCHIATRIC HOSPITALS AND UNITS WITH LOW CHAMPUS VOLUME

United States Census Region	Rate [1]
Northeast	
New England	$434
Mid-Atlantic	415
Midwest:	
East North Central	360
West North Central	340
South:	
South Atlantic	429
East South Central	465
West South Central	390
West:	
Moutain	389

REGIONAL SPECIFIC RATES FOR PSYCHIATRIC HOSPITALS AND UNITS WITH LOW CHAMPUS VOLUME—Continued

United States Census Region	Rate [1]
Pacific	460

[1] The wage portion of the rate, subject to the area wage adjustment, is 71.40 percent.

Beneficiary Cost-Share: Beneficiary cost-share (other than dependents of active duty members) for care paid on the basis of a regional per diem rate is the lower of $114 per day or 25 percent of the hospital billed charges effective for services rendered on or after October 1, 1990.

Cap Amount: Cap amount for hospitals and units with high CHAMPUS volume is $641 per day.

The CHAMPUS contractors were previously instructed to update FY 1990 per diem rates using the 5.3 percent factor for services rendered on or after October 1, 1990. They have not been advised of the revised update factor and the revised per diem rates. They have been instructed to begin processing claims at the revised rates immediately, and to identify all claims that were paid based on the update factor of 5.3 percent for reprocessing and/or recoupment.

Dated: December 10, 1990.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 90-29290 Filed 12-13-90; 8:45 am]

BILLING CODE 3810-01-M

DIA Advisory Board Meeting

AGENCY: Defense Intelligence Agency Advisory Board.

ACTION: Notice of closed meeting.

SUMMARY: Pursuant to the provisions of subsection (d) of section 10 of Public Law 92-463, as amended by section 5 of Public Law 94-409, notice is hereby given that a closed meeting of the DIA Advisory Board has been scheduled as follows:

DATES: Wednesday and Thursday, 30-31 January 1991 (8 a.m. to 5 p.m.) each day.

ADDRESSES: The DIAC, Bolling AFB, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Lieutenant Colonel John G. Sutay, USAF, Chief, DIA Advisory Board, Washington, DC 20340-1328 (202/373-4930).

SUPPLEMENTARY INFORMATION: The entire meeting is devoted to the discussion of classified information as defined in section 552b(c)(1), title 5 of

the U.S. Code and therefore will be closed to the public. The Board will receive briefings on and discuss several current critical intelligence issues and advise the Director, DIA, on related scientific and technical intelligence matters.

Dated: December 10, 1990.

L. M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 90-29291 Filed 12-13-90; 8:45 am]

BILLING CODE 3810-01-M

Wage Committee; Closed Meetings

Pursuant to the provisions of section 10 of Public Law 92-463, the Federal Advisory Committee Act, notice is hereby given that a meeting of the Department of Defense Wage Committee will be held on Tuesday, March 5, 1991; Tuesday, March 12, 1991; Tuesday, March 19, 1991; and Tuesday, March 26, 1991 at 10 a.m. in room 1E801, The Pentagon, Washington, DC.

The Committee's primary responsibility is to consider and submit recommendations to the Assistant Secretary of Defense (Force Management and Personnel) concerning all matters involved in the development and authorization of wage schedules for federal prevailing rate employees pursuant to Public Law 92-392. At this meeting, the Committee will consider wage survey specifications, wage survey data, local wage survey committee reports and recommendations, and wage schedules derived therefrom.

Under the provisions of section 10(d) of Public Law 92-463, meetings may be closed to the public when they are "concerned with matters listed in 5 U.S.C. 552b." Two of the matters so listed are those "related solely to the internal personnel rules and practices of an agency," (5 U.S.C. 552b.(c)(2)), and those involving "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (5 U.S.C. 552b.(c)(4)).

Accordingly, the Deputy Assistant Secretary of Defense (Civilian Personnel Policy) hereby determines that all portions of the meeting will be closed to the public because the matters considered are related to the internal rules and practices of the Department of Defense (5 U.S.C. 552b.(c)(2)), and the detailed wage data considered from officials of private establishments with a guarantee that the data will be held in confidence (5 U.S.C. 552b(c)(4)).

However, members of the public who may wish to do so are invited to submit material in writing to the chairman concerning matters believed to be deserving of the Committee's attention.

Additional information concerning this meeting may be obtained by writing the Chairman, Department of Defense Wage Committee, room 3D264, The Pentagon, Washington, DC 20301.

Dated: December 10, 1990.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 90-29292 Filed 12-13-90; 8:45 am]

BILLING CODE 3810-01-M

Department of the Army

Privacy Act of 1974; Amend Record Systems

AGENCY: Department of the Army, DOD.

ACTION: Amend Privacy Act Record Systems.

SUMMARY: The Department of the Army proposes to amend sixteen record systems in its inventory of record system notices subject to the Privacy Act of 1974, as amended, (5 U.S.C. 552a).

DATES: The proposed action will be effective without further notice on January 14, 1991 unless comments are received that would result in a contrary determination.

ADDRESSES: Contact Ms. Alma Lopez, Office of Systems Management Branch (ASOP-MP), Ft. Huachuca, AZ 85613-5000.

SUPPLEMENTARY INFORMATION: The Department of the Army record system notices subject to the Privacy Act of 1974, as amended, have been published in the **Federal Register** as follows:

50 FR 22090, May 29, 1985 (DoD Compilation, changes follow)
51 FR 23576, June 30, 1986
51 FR 30900, Aug 29, 1986
51 FR 40479, Nov 7, 1986
51 FR 44361, Dec 9, 1986
52 FR 11847, Apr 13, 1987
52 FR 18798, May 19, 1987
52 FR 25905, Jul 9, 1987
52 FR 32329, Aug 27, 1987
52 FR 43932, Nov 17, 1987
53 FR 12971, Apr 20, 1988
53 FR 16575, May 10, 1988
53 FR 21509, Jun 8, 1988
53 FR 28247, Jul 27, 1988
53 FR 28249, Jul 27, 1988
53 FR 28430, Jul 28, 1988
53 FR 34576, Sep 7, 1988
53 FR 49586, Dec 8, 1988
53 FR 51580, Dec 22, 1988
54 FR 10034, Mar 9, 1989
54 FR 11790, Mar 22, 1989
54 FR 14835, Apr 13, 1989
54 FR 46965, Nov 8, 1989
54 FR 50268, Dec 5, 1989
55 FR 13935, Apr 13, 1990
55 FR 21897, May 30, 1990 (Army Address Directory)
55 FR 41743, Oct 15, 1990
55 FR 46707, Nov 6, 1990
55 FR 46708, Nov 6, 1990
55 FR 48671, Nov 21, 1990
55 FR 48678, Nov 21, 1990

The amendments are not within the purview of subsection (r) of the Privacy Act, as amended, (5 U.S.C. 552a) which requires the submission of an altered system report. The specific changes to the record systems are set forth below followed by the record system notices published in their entirety, as amended.

Dated: December 10, 1990.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

Amendments

A0027DAJA

System name:

Civil Process Case Files (50 FR 22141 May 29, 1985)

Changes:

* * * * *

Authority for maintenance of the system:

Delete entry and replace with "10 U.S.C. 3013; Agreement to Supplement the Agreement between the Parties to the North Atlantic Treaty regarding the Status of their Forces with respect to Foreign Forces stationed in the Federal Republic of Germany (NATO Status of Forces Supplementary Agreement)."

Storage:

Add "computer disk-packs and computerized database" to the end of the entry.

* * * * *

A0027DAJA

SYSTEM NAME:

Civil Process Case Files.

SYSTEM LOCATION:

Office of the Judge Advocate, Headquarters, U.S. Army Europe and Seventh Army, APO New York 09403-5000; segments exist at other Army Judge Advocate Offices in the Federal Republic of Germany. Official mailing addresses are published as an appendix to the Army's compilation of record system notices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Military members of the Armed Forces, civilian employees of the U.S. Government, and their dependents upon whom services is made of documents issued by German civil courts, customs and taxing agencies, and other administrative agencies.

CATEGORIES OF RECORDS IN THE SYSTEM:

Documents from German authorities regarding payment orders, execution orders, demands for payment of indebtedness, notifications to establish civil liability, customs and tax demands, assessing fines and penalties, demands for court costs or for costs for administrative proceedings summonses and subpoenas, paternity notices, complaints, judgments, briefs, final and interlocutory orders, orders of confiscation, notices, and other judicial or administrative writs; correspondence between U.S. Government authorities and the Federal Republic of Germany; identifying data on individuals concerned; and similar relevant documents and reports.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

10 U.S.C. 3013; Agreement to Supplement the Agreement between the Parties to the North Atlantic Treaty regarding the Status of their Forces with respect to Foreign Forces stationed in the Federal Republic of Germany (NATO Status of Forces Supplementary Agreement).

PURPOSE(S):

To ensure that U.S. Forces obligations under the North Atlantic Treaty Organization Status of Forces Agreement are honored and the rights of U.S. Government employees are protected by making legal assistance available.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information may be disclosed to foreign law enforcement or investigatory or administrative authorities, to comply with requirements imposed by, or to claim rights conferred in international agreements and arrangements regulating the stationing and status in Federal Republic of Germany of Defense military and civilian personnel. Information disclosed to authorities of the Federal Republic of Germany may be further disclosed by them to claimants, creditors or their attorneys.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records and cards in steel filing cabinets; computer disk-packs and computerized database.

RETRIEVABILITY:

By individual's surname.

SAFEGUARDS:

All information is maintained in areas accessible only to designated individuals having official need therefore in the performance of their duties. Records are housed in buildings protected by military police or security guards.

RETENTION AND DISPOSAL:

Paper records are destroyed 2 years after completion of case; card files are retained indefinitely.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, The Pentagon, Washington, DC 20310–2210.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in this record system should address inquiries to the Office of the Judge Advocate General, Headquarters, U.S. Army Europe and Seventh Army, ATTN: Chief, International Affairs Division, APO New York 09403–5000.

Individual should provide the full name, rank/grade, service number, sufficient details to permit locating the records, and signature.

RECORD ACCESS PROCEDURES:

Individuals seeking access to record about themselves contained in this record system should address inquiries to the Office of the Judge Advocate General, Headquarters, U.S. Army Europe and Seventh Army, ATTN: Chief, International Affairs Division, APO New York 09403–5000.

Individual should provide the full name, rank/grade, service number, sufficient details to permit locating the records, and signature.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340–21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual; German authorities; Army records and reports.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027–1DAJA

System name:

General Legal Files (50 FR 22135, May 29, 1985)

Changes:

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Categories of records in the system:

At the end of the second paragraph add the words "matters pertaining to attorney professional responsibility inquiries."

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add the following paragraphs "Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" published at the beginning of the Army's compilation of record system notices also apply to this system.

* * * * *

Retention and disposal:

Delete the words "Office of the General Counsel OSA".

* * * * *

A0027–1DAJA

SYSTEM NAME:

General Legal Files.

SYSTEM LOCATION:

Office of the Judge Advocate General, Headquarters, Department of the Army; Offices of Staff Judge Advocates; Judge Advocates; and Legal Counsels of Washington, DC 20310–2200; subordinate commands, installations, and organizations. Official mailing addresses are published as an appendix to the Army's compilation of record system notices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have been the subject of civil or criminal matters referred to the Office of the Judge Advocate General or to legal offices of subordinate commands, installations, and organizations for legal opinion, legal review, or other action.

CATEGORIES OF RECORDS IN THE SYSTEM:

Inquiries with substantiating documents, personnel actions, investigations, petitions, complaints, correspondence and responses thereto.

Examples of records include: elimination and separation proceedings; questions pertaining to entitlement to pay; allowances, or other benefits; flying evaluation boards, line of duty investigations; reports of survey; other boards of investigating officers; DA Suitability Evaluation Board cases; DA Special Review Board efficiency report appeals; petitions to the Army Board for

the Correction of Military Records; matters pertaining to on-post solicitation, revocation of privileges, and bars to entry on military installations; matters pertaining to appointments, promotions, enlistments, and discharges; matters pertaining to prohibited activities and conflicts of interest for Army personnel and employees; Article 138, UCMJ complaints; private relief legislation; military justice matters including requests for delivery of service members for trial by civilian authorities; appeals from nonjudicial punishment imposed under Article 15, UCMJ; appeals under Article 69, UCMJ; Secretarial review of officer dismissal cases; petitions for clemency, requests for pardons and requests for grants of immunity for civilian witnesses; matters pertaining to civilian employees and employees of nonappropriated fund instrumentalities including employment, pay, allowances, benefits, separations, discipline and adverse actions, grievances, equal opportunity complaints, awards, and claims processed by other agencies; and matters pertaining to attorney professional responsibility inquiries.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

10 U.S.C. 3037 and 3072.

PURPOSE(S):

To ensure legal sufficiency of Army operations, policies, procedures, and personnel actions.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information from this system of records may be disclosed to the Department of Justice for grants of immunity and requests for pardons.

Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" published at the beginning of the Army's compilation of record system notices also apply to this system.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders; magnetic tapes/discs.

RETRIEVABILITY:

Retrieved by individual's surname.

SAFEGUARDS:

Records are maintained in locked file cabinets and/or in locked offices in buildings employing security guards or on military installations protected by military police patrols.

RETENTION AND DISPOSAL:

Records at the Office of the Judge Advocate General and Office of the Chief Counsel, Office, Chief of Engineers are permanent; at all other locations, records are destroyed upon obsolescence.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2200.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in the record system should address written inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2200.

Individual should provide his/her full name, the address and telephone number, and any other personal data which would assist in identifying records pertaining to him/her such as current or former military status, date of birth, and, if applicable, specifics concerning the incident or event believed to be the basis for legal review.

RECORD ACCESS PROCEDURE:

Individuals seeking access to records about themselves contained in this record system should address written inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2200.

Individual should provide his/her full name, the address and telephone number, and any other personal data which would assist in identifying records pertaining to him/her such as current or former military status, date of birth, and, if applicable, specifics concerning the incident or event believed to be the basis for legal review.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340–21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual Army records.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

Parts of this system may be exempt under 5 U.S.C. 552a(k) (1), (2), (5), (6), and (7) as applicable.

An exemption rule for this exemption has been promulgated in accordance with requirements of 5 U.S.C. 553(b)(1), (2), and (3), (c) and (e) and published in 32 CFR part 505. For additional information contact the system manager.

A0027–3DAJA

System name:

Legal Assistance Files (50 FR 22136, May 29, 1990)

Changes:

* * * * *

System location:

Change the words "Legal Assistance Office" to "Army Legal Assistance."

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Delete entry and replace with "Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" published at the beginning of the Army's compilation of record system notices also apply to this system."

* * * * *

Retention and disposal:

Delete the words "by shredding."

System manager(s) and address:

Change the words "Legal Assistance Office" to "Army Legal Assistance."

* * * * *

A0027–3DAJA

SYSTEM NAME:

Legal Assistance Files

SYSTEM LOCATION:

Army Legal Assistance, Office of the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2200; Staff Judge Advocate offices at Army commands, installations, and activities. Official mailing addresses are published as an appendix to the Army's compilation of record system notices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Active duty or retired military personnel and/or their dependents.

CATEGORIES OF RECORDS IN THE SYSTEM:

Individual's name, grade/rank, SSN, organization, and details of problem/incident/matter on which legal assistance is sought. Records may be in the form of correspondence, memoranda, opinions of legal assistance officers, and may include interviews,

summary of problems considered, advice rendered, referrals made, and documents created as a result of assistance provided.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

5 U.S.C. 301.

PURPOSE(S):

To respond to inquiries and settle issues; for management and statistical reports.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" published at the beginning of the Army's compilation of record system notices also apply to this system.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders.

RETRIEVABILITY:

By client's surname.

SAFEGUARDS:

Records are maintained in secured buildings, accessible only to designated authorized personnel who are properly instructed in the permissible use of the information.

RETENTION AND DISPOSAL:

Destroyed 1 year from the closing date of the case.

SYSTEM MANAGER(S) AND ADDRESS:

Chief, Army Legal Assistance, Office of the Judge Advocate General, HQDA (DAJA-LA), Washington, DC 20310-2200; and the Staff Judge Advocates of organizations listed in the address directory published as an appendix to the Army's compilation of record system notices.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in this record system may inquire of the Staff Judge Advocate of the installation or command where legal assistance was sought.

Individual should provide full name, SSN, and any details that will assist in locating the record.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves contained in this record system may inquire of the Staff Judge Advocate of the installation or command where legal assistance was sought.

Individual should provide full name, SSN, and any details that will assist in locating the record.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340-21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual, his/her attorney, Army records and reports.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027-10aDAJA

System name:

Prosecutorial Files (50 FR 22135, May 29, 1985).

Changes:

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add a new paragraph "Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" published at the beginning of the Army's compilation of record system notices also apply to this system."

* * * * *

A0027-10aDAJA

SYSTEM NAME:

Prosecutorial Files.

SYSTEM LOCATION:

Decentralized at Staff Judge Advocate Offices. Official mailing addresses are published as an appendix to the Army's compilation of record system notices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Any individual who is pending trial by courts-martial.

CATEGORIES OF RECORDS IN THE SYSTEM:

Witness statements; pretrial advice; documentary evidence; exhibits, evidence of previous convictions; personnel records; recommendations as to the disposition of the charges; explanation of any unusual features of the case; charge sheet; and criminal investigation reports.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Executive Order 11476, June 19, 1969, Manual for Courts-Martial, United States; as revised by Executive Order 12473, effective August 1, 1984.

PURPOSE(S):

To prepare for prosecution before courts-martial.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" published at the beginning of the Army's compilation of record system notices also apply to this system.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders.

RETRIEVABILITY:

Retrieved by individual's surname.

SAFEGUARDS:

Records are maintained in file cabinets accessible only to authorized personnel who are properly instructed in the permissible use of the information.

RETENTION AND DISPOSAL:

Records are kept indefinitely.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in this record system should address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

Individual should provide his/her full name, current address and telephone number, case number and office symbol of Army element which furnished correspondence to the individual, other personnel identifying data that would assist in locating the records. The inquiry must be signed.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves contained in this record system should address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

Individual should provide his/her full name, current address and telephone number, case number and office symbol of Army element which furnished correspondence to the individual, other personal identifying data that would assist in locating the records. The inquiry must be signed.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial agency determinations are contained in Army Regulation 340–21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From official Army records and reports, investigative documents, law enforcement agencies.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

Parts of this system may be exempt under 5 U.S.C. § 552a(j)(2) as applicable.

An exemption rule for this exemption has been promulgated in accordance with requirements of 5 U.S.C. 553(b) (1), (2), and (3), (c) and (e) and published in 32 CFR part 505. For additional information contact the system manager.

A0027–10bDAJA

System name:

Courts-Martial Files (50 FR 22139, May 29, 1985)

Changes:

* * * * *

Categories of individuals covered by the system: Delete entry and replace with "All Army personnel tried by courts-martial and certain trial or appellate participants such as counsel and military judges."

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Subparagraph which begins "Information from these records * * *", in the last line, change the words "criminal of civil law" to "criminal or civil law."

Add the following paragraph "Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" published at the beginning of the Army's compilation of record system notices also apply to this system."

* * * * *

Storage:

Add to the end of the entry "; and on a computer database."

Retention and disposal:

In lines 2 and 3, change the "1 to 4" to "1 to 5"; the words "bad conduct" to "bad-conduct"; add a comma after "MD"; change the word "Article(s)" to "Articles." At the end of the paragraph, add the words "or in the computer database."

* * * * *

A0027–10bDAJA

SYSTEM NAME:

Courts-Martial files

SYSTEM LOCATION:

U.S. Army Legal Services Agency, Falls Church, VA 22041–5013; Washington National Records Center, Suitland, MD 20409; National Personnel Records Center, St. Louis, MO 63132; and offices of Staff Judge Advocates of subordinate commands and installations. Official mailing addresses are published as an appendix to the Army's compilation of record system notices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

All Army personnel tried by courts-martial and certain trial or appellate participants such as counsel and military judges.

CATEGORIES OF RECORDS IN THE SYSTEM:

Certain general and all special (BCD) courts-martial records of trial include a verbatim transcript of the trial and allied papers relating to the charged offenses and legal review of the case. General courts-martial examined pursuant to Article 69 and special (non-BCD) and summary courts-martial records of trial include only a summarized transcript of the trial as well as allied papers relating to the charged offenses, but do not necessarily include all records of review pursuant to Articles 69 or 73, Uniform Code of Military Justice.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

10 U.S.C. 801–940 (Uniform Code of Military Justice) and Executive Order 9397.

PURPOSE(S):

This record system is maintained because a verbatim transcript of all general courts-martial trials (except those examined pursuant to Article 69) and special courts-martial trials in which a bad conduct discharge (BCD), was approved, and a summarized transcript of all other courts-martial proceedings is required by law.

Records of trial are required by each office and individual responsible for reviewing the legality of the courts-martial findings and sentence, determining whether clemency consideration is warranted, and answering inquiries from offices and individuals concerning the status of a particular case.

Statistical data obtained from records of trial are used in determining jurisdiction and Army-wide trends on disciplinary infraction in the Armed Forces and serve as a guide for officials responsible for making local and Army-wide policy decisions regarding military justice activities.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Courts-martial records reflect criminal proceedings ordinarily open to the public; therefore, they are normally releasable to the public pursuant to the Freedom of Information Act.

Information from these records may be disclosed to the Department of Justice, the Veterans Administration, and federal, state, and local law enforcement agencies for determination of rights and entitlements of the individuals concerned and for use in the enforcement of criminal or civil law.

Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" published at the beginning of the Army's compilation of record system notices also apply to this system.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Papers in file folders; index cards; computer disk-packs; courts-martial coding sheets; and on a computer database.

RETRIEVABILITY:

By individual's name and Social Security Number, by courts-martial number assigned to the case.

SAFEGUARDS:

All records are protected by systems of personnel screening and hand receipts. During non-duty hours, military police or contract guard patrols ensure protection against unauthorized access.

RETENTION AND DISPOSAL:

With respect to each courts-martial, there is an original record and from 1 to 5 copies. One copy is given to the accused and the remaining copies are used in the review of the case for legal sufficiency. The original record is disposed of as follows:

All records of trial by general courts-martial and those special courts-martial records in which a bad-conduct discharge (BCD) was approved are retained in the Office of the Clerk of the Court, US Army Judiciary, for 1–2 years after completion of appellate review. Thereafter, the records are forwarded to the Washington National Records Center, Suitland, MD, for permanent storage.

Records of trial by special courts-martial (non-BCD) and summary courts-martial are retained in the staff judge advocate office of the general courts-martial authority for 1 year after completion of supervisory review. Thereafter the records are held for 2 years in the record holding area or overseas records center. Records are then sent to National Personnel Records Center (Military Records), St. Louis, MO 63132, where they are retained for 7 years. Thereafter, the records are destroyed and the remaining evidence of conviction is the special (non-BCD) and summary courts-martial promulgating orders maintained in the individual's permanent records and any review(s) of the cases conducted pursuant to Articles 69 or 73, UCMJ.

The original reviews of special (non-BCD) and summary courts-martial cases and a copy of all other reviews pursuant to Articles 69 or 73, UCMJ are maintained for 3 years in the Office of the Chief, Examination and New Trials, US Army Judiciary, Falls Church, VA. They are retained an additional 7 years at the Washington National Records Center, Suitland, MD, and destroyed.

Statistical data obtained from general and special (BCD) permanently on some of the master index cards which serve as a means of listing records of trial sent to storage or in the database.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2210.

NOTIFICATION PROCEDURE:

Requests from individuals as to whether there are any general or special (BCD) courts-martial records in the system pertaining to them should be addressed to the Clerk of the Court (JALS–CC), US Army Judiciary, Nassif Building Falls Church, VA 22041–5013.

Requests for information as to special (non-BCD) and summary courts-martial records should be addressed to the staff judge advocate of the command where the record was reviewed or, if no longer there, to the National Personnel Records Center (Military Records), 9700 Page Boulevard, St. Louis, MO 63132–5200.

Requests for information concerning reviews pursuant to Articles 69 or 73, UCMJ, should be addressed to the Chief, Examination and New Trials Division, US Army Judiciary, Nassif Building, Falls Church, VA 22041–5013.

Written requests should include individual's full name, SSN, the record file number if available, and any other personal information which would assist in locating the records. Personal visits may be made to the Office of the Clerk of the Court or Chief, Examination and New Trials Division; individual must provide identification such as a valid driver's license or verbal information sufficient to permit locating the records.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves contained in this system should address inquiries to the Clerk of the Court (JALS–CC), U.S. Army Judiciary, Nassif Building, Falls Church, VA 22041–5013, if the type of courts-martial or reviewing command is unknown.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial agency determinations are contained in Army Regulation 340–21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

Information from almost any source may be included in the record if it is relevant and material to courts-martial proceedings.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

Parts of this system may be exempt under 5 U.S.C. 552a(j)(2) as applicable.

An exemption rule for this exemption has been promulgated in accordance with requirements of 5 U.S.C. 553(b) (1), (2), and (3), (c) and (e) and published in 32 CFR part 505. For additional information contact the system manager.

A0027–10cDAJA

System name:

Witness Appearance Files (52 FR 32331, Aug. 27, 1987)

Changes:

* * * * *

System location:

Change to read, "Office of the Judge Advocate General, Headquarters, Department of the Army, Litigation Division (DAJA–LT), Washington, DC 20310–2210."

Categories of individuals covered by the system:

Delete entry and replace with "Present and former military personnel and civilian employees requested to appear as witnesses before civil courts, administrative tribunals, and regulatory bodies."

Categories of records in the system:

Delete entry and replace with "Name and address of the witness and official requesting same; name and location of trial or other proceeding."

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add the following paragraph "Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army."

* * * * *

Record source categories:

Change the words "opposing Counsel" to "civilian counsel".

* * * * *

A0027–10cDAJA

SYSTEM NAME:

Witness Appearance Files.

SYSTEM LOCATION:

Office of the Judge Advocate General, Headquarters, Department of the Army, Litigation Division (DAJA–LT), Washington, DC 20310–2210.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Present and former military personnel and civilian employees requested to appear as witnesses before civil courts, administrative tribunals, and regulatory bodies.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name and address of the witness and official requesting same; name and location of trial or other proceeding.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

5 U.S.C. 301.

PURPOSE(S):

To locate and provide witnesses to U.S. attorneys conducting trials on behalf of the Department of the Army.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders and magnetic tapes/discs.

RETRIEVABILITY:

Retrieved by individual's surname.

SAFEGUARDS:

Records are accessible only to authorized personnel who are properly instructed in the permissible use thereof; building housing records are protected by security guards.

RETENTION AND DISPOSAL:

Destroyed after 2 years.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in this records system should address written inquiries to the Judge Advocate General, Chief, Litigation Division (DAJA-LT), Headquarters, Department of the Army, Washington, DC 20310-2210.

Individual should provide his/her full name, current address and telephone number, case number appearing on correspondence, and any other personal identifying data that will assist in locating the record.

RECORD ACCESS PROCEDURE:

Individuals seeking access to records about themselves contained in this record system should address inquiries to the Judge Advocate General, Chief, Litigation Division (DAJA-LT), Headquarters, Department of the Army, Washington, DC 20310-2210.

Individual should provide his/her full name, current address and telephone number, case number appearing on correspondence, and any other personal identifying data that will assist in locating the record.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial agency determinations are contained in Army Regulation 340-21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual, Army records and reports, Department of Justice, U.S. attorneys, civilian counsel, and similar pertinent sources.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027-20aDAJA

System name:

US Army Claims Service Management Information System (50 FR 22136, May 29, 1985)

Changes:

* * * * *

Purpose(s):

In the first sentence, after the word "against" add "or in favor of."

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

In the second paragraph change the words "assistance to" to "assistance in". After the word "against" add "or in favor of."

In the third paragraph after the words "US Claims" add "Court."

Delete eighth paragraph and replace with "Civilian and Government experts for assistance in evaluating the claim. Private insurers with a legal interest in the same case."

Add three new paragraphs: "Potential joint tortfeasors or their representatives for the purpose of prosecuting or defending claims for contribution or indemnity.

Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The Army's "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply to this record system."

* * * * *

Retrievability:

After the word "name" add the words "Social Security Number or claim number."

* * * * *

Retention and disposal:

Delete entry and replace with "Destroyed when no longer needed (claims reports); after 5 years (claims journals); after 6 years, 3 months (investigative reports, except those relating to medical malpractice); or 10 years (medical malpractice investigative reports, claims files)."

Notification procedure:

After "20755" add "-5360."

* * * * *

A0027-20aDAJA

SYSTEM NAME:

U.S. Army Claims Service Management Information System

SYSTEM LOCATION:

U.S. Army Claims Service, Office of the Judge Advocate General, ATTN: JACS-Z, Ft. Meade, MD 20755-5360. Segments exist at subordinate field operating agencies and at Staff Judge Advocate Offices at Army installations throughout the world. Official mailing addresses are published as an appendix to the Army's compilation of record system notices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals, corporations, associations, countries, states, territories, political subdivisions presenting a claim against the United States.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name of claimant, claim file number, type of claim presented, reports of investigation, witness statements, police reports, photographs, diagrams, bills, estimates, expert opinions, medical records and similar reports, copy of correspondence with claimant, potential claimants, third parties, and insurers of claimants or third parties, copies of finance vouchers evidencing payment of claims, and similar relevant information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

10 U.S.C. 939, 2733, 2734, 2734A, 2734B, 2737; 28 U.S.C. 2671-2680; 31 U.S.C. 3711 and 3721; 32 U.S.C. 715; Executive Order 9397.

PURPOSE(S):

To develop and preserve all relevant evidence about incidents which generate claims against or in favor of the Army. Evidence developed is used as a legal basis to support the settlement of claims. Data are also used as a management tool to supervise claims

operations at subordinate commands worldwide.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

To the Internal Revenue Service for tax purposes.

To the Department of Justice for assistance in deciding disposition of claims filed against or in favor of the Government and for considering criminal prosecution, civil court action or regulatory orders.

To the U.S. Claims Court and the Court of Appeals for the Federal Circuit, to support legal actions, considerations or evidence to support proposed legislative or regulatory changes, for budgetary purposes, for quality control or assurance type studies, or to support action against a third party.

To Foreign governments, for use in settlements of claims under the North Atlantic Treaty Organization Status of Forces Agreement or similar international agreements.

To the State governments for use in defending or prosecuting claim by the state or its representatives.

To the Department of Labor, for consideration in determining rights under Federal Employees Compensation Act or similar legislation.

To civilian and Government experts for assistance in evaluating the claim.

To the Office of Management and Budget for preparation of private relief bills for presentation to the Congress.

To Government contractors for use in defending or settling claims filed against them, including recovery actions, arising out of the performance of a Government contract.

To Federal and state workmen's compensation agencies for use in adjudicating claims. To private insurers with a legal interest in the same case.

To potential joint tortfeasors or their representatives for the purpose of prosecuting or defending claims for contribution or indemnity.

Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Index cards, paper records in file folders, computer disc.

RETRIEVABILITY:

By last name, Social Security Number, or claim number.

SAFEGUARDS:

Records are accessible only by authorized personnel who are properly instructed in the permissible use of the information, buildings housing records are locked after normal business hours.

RETENTION AND DISPOSAL:

Destroyed when no longer needed (claims reports); after 5 years (claims journals); after 6 years, 3 months (investigative reports, except those relating to medical malpractice); or 10 years (medical malpractice investigative reports, claims files)."

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, The Pentagon, Washington, DC 20310–2200.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in this record system should address inquiries to the Commander, U.S. Army Claims Service, Fort Meade, MD 20755–5360.

Individual should provide full name, current address and telephone number, claim number if known, date and place of incident giving rise to the claim, and any other personal identifying data which would assist in determining location of the records.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves in this system of records should write to the Commander, U.S. Army Claims Service, Fort Meade, MD 20755–5360.

Individual should provide full name, current address and telephone number, claim number if known, date and place of incident giving rise to the claim, and any other personal identifying data which would assist in determining location of the records.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records contesting contents, and appealing initial determinations are contained in Army Regulation 340–21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual; investigative reports originating in the Department of the Army, Federal Bureau of Investigation, and/or foreign, state, or local law enforcement agencies; medical treatment facilities; Armed Forces Institute of Pathology; relevant records and reports in the Department of Defense.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027–20bDAJA

System name:

Tort Claim Files (52 FR 18800, May 19, 1987)

Changes:

* * * * *

System location:

Delete entry and replace with "Office of the Judge Advocate General, Headquarters, Department of the Army, Litigation Division (DAJA–LT), Washington, DC 20310–2210."

* * * * *

Purpose(s):

Delete entry and replace with "To defend the Army in civil suits filed against it in state or federal courts."

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add a new paragraph "Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army."

* * * * *

A0027–20bDAJA

SYSTEM NAME:

Tort Claim Files

SYSTEM LOCATION:

Office of the Judge Advocate General, Headquarters, Department of the Army, Litigation Division (DAJA–LT), Washington, DC 20310–2210.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have filed a complaint against the U.S. Army in the U.S. District Court under the Federal Tort Claims Act.

CATEGORIES OF RECORDS IN THE SYSTEM:

Pleadings, motions, briefs, orders, decisions, memoranda, opinions, supporting documentation, and allied material, including claims investigation, reports and files involved in representing the U.S. Army in the Federal Court System.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

28 U.S.C. 2671–2680.

PURPOSE(S):

To defend the Army in civil suits filed against it in state or federal courts.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information is disclosed to the Department of Justice and United States Attorneys' offices handling the particular case. Most of the information is filed in some manner in the courts in which the litigation is pending and therefore is a public record. In addition, some of the information will appear in the written orders, opinions, and decisions of the courts which, in turn, are published in the Federal Reporter System under the name or style of the case and are available to individuals with access to a law library.

Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

See "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply.]

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders; magnetic tapes/discs.

RETRIEVABILITY:

Retrieved by claimant's surname and court docket number.

SAFEGUARDS:

Records are maintained in file cabinets within secured buildings and available only to designated authorized individuals who have official need for them.

RETENTION AND DISPOSAL:

Records are destroyed 10 years after final action on the case.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves exists in this record system should address written inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

Individuals should provide full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records and signature.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves contained in this record system should address written inquires to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

Individual should provide full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records and signature.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340-21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual; Army records and reports.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027-20cDAJA

System name:

Army Property Claim Files (52 FR 18800, May 19, 1987)

Changes:

* * * * *

System location:

Delete entry and replace with "Staff Judge Advocate Offices at Army commands, field operating agencies, installations, and activities. A segment of the system is located at U.S. Army Claims Service, Ft. Meade, MD 20755-5360."

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add a new paragraph "Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army."

* * * * *

Retrievability:

After the word "surname" add "Social Security Number".

Safeguards:

Delete last sentence.

* * * * *

A0027-20cDAJA

SYSTEM NAME:

Army Property Claim Files

SYSTEM LOCATION:

Staff Judge Advocate Offices at Army commands, field operating agencies, installations, and activities. A segment of the system is located at U.S. Army Claims Service, Fort Meade, MD 20755-5360.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who, having damaged Government property, were not subject to the collection activities of other agencies or organizations and therefore require litigation on behalf of the Department of the Army.

CATEGORIES OF RECORDS IN THE SYSTEM:

Copies of reports from the claim investigator, accident and police reports relating to damage, and pleadings, motions, briefs, orders, decisions, memoranda, opinions, supporting documentation, and allied material involved in representing the U.S. Army.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

31 U.S.C. 3711 and Executive Order 9397.

PURPOSE(S):

To negotiate with, or to sue, as appropriate, the individual or entity, including insurance carriers, responsible for loss or damage of US Army property.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information may be disclosed to the Department of Justice, U.S. Attorney, and opposing parties and their attorneys as deemed necessary in litigating property claims.

Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply to this system.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file orders; magnetic tapes/discs.

RETRIEVABILITY:

By individual's surname, Social Security Number, and court docket number.

SAFEGUARDS:

Records are accessible only by authorized personnel who are properly instructed in the permissible use of the information.

RETENTION AND DISPOSAL:

Records at the Judge Advocate General's Office are destroyed 10 years after final action; i.e., completion of litigation of determination that case will not be prosecuted. Claims settled by local Staff Judge Advocates are destroyed 5 years after final action.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2210.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves exists in this records system should address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2210.

Individual should provide their full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records, and signature.

RECORD ACCESS PROCEDURES:

Individuals seeking access to information about themselves contained in this record system should address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2210.

Individualsshould provide their full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records, and signature.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial agency determinations are contained in Army Regulation 340–21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual; Army records and reports; Office of Personnel Management; Department of Justice, U.S. Attorney, opposing counsel, and similar pertinent sources.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027–20dDAJA

System name:

Medical Expense Claim Files (52 FR 18800, May 19, 1987)

Changes:

* * * * *

System location:

In the last sentence, change the words "HQDA (DAJA–LT), The Pentagon, Washington, DC 20310–2210" to "U.S. Army Claims Service, Ft. Meade, MD 20755–5360."

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add a new paragraph "Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army."

* * * * *

Retrievability:

After the word "surname" add "Social Security Number".

Safeguards:

Delete last sentence.

* * * * *

A0027–20dDAJA

SYSTEM NAME:

Medical Expense Claim Files

SYSTEM LOCATION:

Staff Judge Advocate Offices at Army commands, field operating agencies, installations and activities. A segment of the system is located at U.S. Army Claims Service, Fort Meade, MD 20755–5360.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have received medical treatment at the expense of the U.S. Army as a result of a tortuous or negligent act of a third party; third parties causing medical care to be furnished to individuals entitled to medical care at Government expense.

CATEGORIES OF RECORDS IN THE SYSTEM:

Copies of medical and personnel records of individuals injured by a third party from whom the U.S. Army is seeking to recover the costs of medical care furnished the injured party; accident and police reports relating to the injury, claims investigation files; correspondence with attorneys representing the Army's interest; court documents; and similar pertinent documents.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

42 U.S.C. 2651–3; Executive Orders 9397 and 11060; and 28 CFR part 43.

PURPOSE(S):

To negotiate with the tortfeasor or an insurance carrier, or to sue the same to collect the value of medical care furnished the injured party.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information may be disclosed to the Department of Justice, appropriate U.S. Attorneys, civilian attorneys representing the injured party who agree also to represent the U.S. Army's claim, and opposing parties and their attorneys.

Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders; magnetic tapes/discs.

RETRIEVABILITY:

By individual's surname, Social Security Number, and court docket number.

SAFEGUARDS:

Records are accessible only by authorized personnel who are properly instructed in the permissible use of the information.

RETENTION AND DISPOSAL:

Records at the Judge Advocate General's Office are destroyed 10 years after final action; i.e., completion of litigation or determination that case will not be prosecuted. Claims settled by local Staff Judge Advocates are destroyed 5 years after final action.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2210.

NOTIFICATION PROCEDURE:

Individuals seeking to determine of information about themselves is contained in this records system should

address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2210.

Individual should provide full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records, and signature.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves contained in this record system should address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310–2210.

Individual should provide full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records, and signature.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340–21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual; Army records and reports; Office of Personnel Management; Department of Justice, U.S. Attorneys, opposing counsel, and similar pertinent sources.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027–40DAJA

System name:

Litigation Case Files (50 FR 22143, May 29, 1985)

Changes:

* * * * *

System location:

Delete entry and replace with "Office of the Judge Advocate General, Headquarters, Department of the Army, Litigation Division (DAJA–LT), Washington, DC 20310–2210, legal offices of other HQDA staff agencies, field operating agencies, major commands, and installations. Official mailing addresses are published as an appendix to the Army's compilation of record system notices."

Categories of individuals covered by the system:

Delete entry and replace with "Any individual who has filed a complaint against the U.S. Army or its personnel in the state or federal courts; military and civilian personnel in the Department of the Army who are named defendants, in their individual or official capacity, in civil litigation initiated by or against the Army."

* * * * *

Purpose(s):

Change the words "Federal Court System" to "state or federal courts."

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add two new paragraphs "Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices."

* * * * *

Retention and disposal:

Change the words "the Judge Advocate General's Office" to "The Office of the Judge Advocate General."

* * * * *

A0027–40DAJA

SYSTEM NAME:

Litigation Case Files

SYSTEM LOCATION:

Office of the Judge Advocate General, Headquarters, Department of the Army, Litigation Division (DAJA–LT), Washington, DC 20310–2210; legal offices of other HQDA staff agencies, field operating agencies, major commands, and installations. Official mailing addresses are published as an appendix to the Army's compilation of record system notices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Any individual who has filed a complaint against the U.S. Army or its personnel in the state or federal courts; military and civilian personnel in the Department of the Army who are named defendants, in their individual or official capacity, in civil litigation initiated by or against the Army.

CATEGORIES OF RECORDS IN THE SYSTEM:

Pleadings, motions, briefs, orders, decisions, memoranda, opinions, supporting documentation, and allied materials involved in representing the U.S. Army in the Federal Court System.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

5 U.S.C. 301.

PURPOSE(S):

To defend the Army in civil suits filed against it in the state or federal courts.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information is disclosed to Department of Justice and U.S. Attorney's offices handling a particular case. Most of the information is filed in some manner in the courts in which the litigation is pending and therefore is a public record. In addition, some of the information will appear in the written orders, opinions, and decisions of the courts which, in turn, are published in Federal Reporter System under the name or style of the case and are available to individuals with access to a law library.

Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders; magnetic tapes/discs.

RETRIEVABILITY:

By individual's surname and court docket number.

SAFEGUARDS:

Records are maintained in file cabinets within secured buildings and available only to designated authorized individuals who have official need therefor.

RETENTION AND DISPOSAL:

Records at the Office of the Judge Advocate General and the Chief of Engineers' office (for civil works) are destroyed after 30 years, except that those cases determined to have precedential, policy, or otherwise significant, value are permanent. Records in other legal offices are destroyed 6 years after completion of litigation.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, The Pentagon, Washington, DC 20310–2210.

NOTIFICATION PROCEDURE:

Individuals seeking to know if information about themselves is contained in this record system should address written inquiries to the Judge Advocate General or the Chief of Engineers (for civil works cases), Headquarters, Department of the Army, The Pentagon, Washington, DC 20310-2210.

Individual should provide full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records, and signature.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves contained in this record system should address written inquiries to the Judge Advocate General or the Chief of Engineers (for civil works cases), Headquarters, Department of the Army, The Pentagon, Washington, DC 20310-2210.

Individual should provide full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records, and signature.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340-21; 35 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

Department of the Army records.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027-50DAJA

System name:

Foreign Jurisdiction Case Files (50 FR 22140, May 29, 1985)

Changes:

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Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add a new paragraph "Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army."

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A0027-50DAJA

SYSTEM NAME:

Foreign Jurisdiction Case Files.

SYSTEM LOCATION:

Office of the Judge Advocate General, Headquarters, Department of the Army, International Affairs Division, Washington, DC 20310-2210. (Copy of record will exist for shorter periods in Office of the Staff Judge Advocate at the command where case originated.)

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Members of the U.S. Army; civilians employed by, serving with, or accompanying the U.S. Army Abroad; and dependents of such individuals who have been subject to the exercise of civil or criminal jurisdiction by foreign courts or foreign administrative agencies and/or sentenced to unsuspended confinement.

CATEGORIES OF RECORDS IN THE SYSTEM:

Individual case reports concerning the exercise of jurisdiction by foreign tribunals, trial observer reports, requests for provision of counsel, records of trials, requests for local authorities to refrain from exercising their jurisdiction; communications with other lawyers, officials within the Department of the Army and/or Defense, diplomatic missions; other selected relevant documents.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

10 U.S.C. 3013.

PURPOSE(S):

To monitor development and status of each individual case to ensure that all rights and protection to which U.S. personnel abroad and their dependents are entitled under pertinent international agreements are accorded such personnel; to obtain information to answer queries regarding the status and disposition of individual cases involving the exercise of civil or criminal jurisdiction by foreign courts or foreign administrative agencies to render management and statistical reports.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders.

RETRIEVABILITY:

By individual's surname.

SAFEGUARDS:

Records are maintained in secured buildings, accessible only to designated authorized personnel who are properly instructed in the permissible use of the information.

RETENTION AND DISPOSAL:

Individual case files are retained for 30 years following completion of the case. Consolidated and summary reports are permanent records at the Office of the Judge Advocate General.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in this records system should address inquiries to either the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210 or the Staff Judge Advocate of the installation or command where legal assistance was sought.

Individual should provide full name, current address and telephone number, case number and office symbol appearing on official correspondence concerning the matter, any other identifying information and signature.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves contained in this record system should address inquiries to either the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210 or the Staff Judge Advocate of the installation or command where legal assistance was sought.

Individual should provide full name, current address and telephone number, case number and office symbol appearing on official correspondence concerning the matter, any other identifying information and signature.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340-21; 32

CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual, his/her attorney, foreign government agencies, Department of State, law enforcement jurisdictions, relevant Army records and reports.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027-60aDAJA

System name:

Patent, Copyright, Trademark, and Proprietary Data Files (52 FR 1880, May 19, 1987).

Changes:

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add a new paragraph "Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army."

* * * * *

A0027-60aDAJA

SYSTEM NAME:

Patent, Copyright, Trademark, and Proprietary Data Files

SYSTEM LOCATION:

Primary: JALS-PC, Nassif Building, Falls Church, VA 22041-5013.

Secondary: Office of the Staff Judge Advocate at major Army commands, field operating agencies, and installations. Official mailing addresses are published as an appendix to the Army's compilation of record system notices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have submitted inventions to the Government; inventors with patents or applications for patents procured on behalf of the Department of the Army or in which the government has an interest; authors of copyrightable or copyrighted material in which the government has an interest; and government employees to whom copyright assistance has been rendered.

CATEGORIES OF RECORDS IN THE SYSTEM:

Documents relating to; disposition of rights in Government employees' inventions; foreign patent filings; licensing of government-owned patents, copyrights, and service marks; government interest in or under patents, applications for patent, and copyrights procured on behalf of the Department of the Army; and invention disclosures including drawings, patentability search reports, evaluation reports, applications, amendments, petitions, appeals, interferences, licenses, assignments, other instruments, and relevant correspondence.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

5 U.S.C. 301.

PURPOSE(S):

To determine the rights in government employee inventions, and to maintain evidence and record of: documents used in filing for foreign patents; invention disclosures submitted to the Department of the Army; patents and applications for patent procured on behalf of the Army or in which the Army has an interest; patent and copyright licensing and assignments; and copyright assistance rendered.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

The U.S. Patent and Trademark Office, Department of Commerce, and/or to the Copyright Office, Library of Congress.

In the event of legal proceedings and litigation, information may be disclosed to the Civil Division, Department of Justice.

For foreign patent filings records are presented to the Director of Patent Administration, Department of National Defense in Ottawa, Ontario, Canada.

Parties to a licensing arrangement have access to the specific files involved.

Concerned contractors and/or Government agencies have access in order to conduct patent investigations and evaluations.

Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders.

RETRIEVABILITY:

By individual's surname.

SAFEGUARDS:

Records are maintained in buildings protected by secured guards, and are accessible only to authorized persons having need therefor in the performance of official duties.

RETENTION AND DISPOSAL:

At the primary location: records pertaining to patent matters are retained for 20 to 25 years depending on the specific case; those concerning copyright matters are retained either for 56 years or an expiration of copyright not renewed, after which they are destroyed by shredding.

Records at the secondary locations are destroyed after 2 years.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210; senior patent attorney at each secondary location.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in this records systems should address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

Individuals should provide full name, current address and telephone number, the case number or other identifying information on correspondence emanating from the Army.

RECORD ACCESS PROCEDURES:

Individuals seeking access to records about themselves contained in this record system should address written inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2210.

Individuals should provide full name, current address and telephone number, the case number or other identifying information on correspondence emanating from the Army.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340-21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual, Army records, the government agency interested in the invention or copyright, research material in libraries, the Patent and Trademark Office, and/or the Copyright Office.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0027-60bDAJA

System name:

Patent, Copyright, and Data License Proffers, Infringement Claims, and Litigation Files (50 FR 22142, May 29, 1985)

Changes.

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Add a new paragraph "Information from this system of records may also be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

* * * * *

A0027-60bDAJA

SYSTEM NAME:

Patent, Copyright, and Data License Proffers, Infringement Claims, and Litigation Files

SYSTEM LOCATION:

Office of the Judge Advocate General, Department of the Army, Patents, Copyrights, and Trademarks Division, Nassif Building, 5611 Columbia Pike, Falls Church, VA 22041-5013.

Segments of this system may exist at the Office, Chief of Engineers, Headquarters, U.S. Army Materiel Command, and/or its major subordinate field commands.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Claimants or defendants in administrative proceedings or litigation with the government for improper use, infringement, enforcement of agreements, or comparable claims concerning patents or copyrights; individuals having copyrights in material in which the Department of the Army is interested; individuals who own patents which they offer to license to Department of the Army; individuals seeking private relief before the Congress because of right in inventions, patents, copyrights, or data licenses.

CATEGORIES OF RECORDS IN THE SYSTEM:

Documents relating to the administrative assertion of claims by and against the government and to ligitation with the government for alleged misuse of patents, copyrights, trademarks, and data, including inquiries, investigations, settlements, communications with claimants or defendants, and related correspondence; documents relating to advice and assistance provided in obtaining licenses for Department of the Army use of copyright material; documents relating to the investigation and disposition of patent license offers; documents relating to investigations in connection with processing proposed legislation or bills for private relief of individuals because of rights of individuals in inventions, patents, copyrights, or data, including reports of investigations, comments or recommendations, and related correspondence.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

5 U.S.C. 301.

PURPOSE(S):

To maintain evidence and record of claims and litigation involving Department of the Army concerning patents, trademarks, copyrights, and data; to maintain evidence and record of Department of the Army attempts to use copyrighted material and to receive the copyright owner's permission for such use; to maintain record and evidence of patent license offers received and investigations and reports pursuant thereto; and to maintain record and evidence of investigations of proposed legislation or bills for private relief.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Government agencies involved in the claims or litigation and the Civil Division, Department of Justice, have access to the records to determine the validity of allegations and to properly prosecute or defend the case; government agencies potentially interested have access to the records of offered licenses to determine actual interest; Congress receives reports on Department of the Army's position on particular bills for private relief.

Information from this system of records may be disclosed to law students participating in a volunteer legal support program approved by the Judge Advocate General of the Army.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders.

RETRIEVABILITY:

By individual's surname.

SAFEGUARDS:

Records are accessible only by authorized personnel who are properly instructed in the permissible use of information therein.

RETENTION AND DISPOSAL:

Destroyed after 25, 30, or 35 years depending on the specific case.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2200.

NOTIFICATION PROCEDURE:

Individuals seeking to determine if information about themselves is contained in this records system should address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2200.

Individual should provide full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records, and signature.

RECORD ACCESS PROCEDURE:

Individuals seeking access to information about themselves is contained in this record system should address inquiries to the Judge Advocate General, Headquarters, Department of the Army, Washington, DC 20310-2200.

Individual should provide full name, current address and telephone number, case number that appeared on documentation, any other information that will assist in locating pertinent records, and signature.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340-21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual, the Army organizational element interested in the copyrighted material or offered license, employment records, pertinent government patent files, Department of Justice and/or the government agencies involved in the claims or litigation.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0215CFSC

System name:

Morale, Welfare, Recreational and Entertainment Records (50 FR 22204, May 29, 1985).

Changes:

System name:

Delete entry and replace with "General Morale, Welfare, Recreation and Entertainment Records"

System location:

Delete entry and replace with "Major Army commands, field operating agencies, installations and activities, Army-wide."

Categories of individuals covered by the system:

Delete entry and replace with "Military personnel, their families, other members of the military community, certain DOD civilian employees and their families overseas, certain military personnel of foreign nations and their families, personnel authorized to use Army-sponsored Morale, Welfare, Recreation (MWR) services, youth services, athletic and recreational services, Armed Forces Recreation Centers, Army recreation machines, and/or to participate in MWR-type activities; professional entertainment groups recognized by the Armed Forces Professional Entertainment Office; Army athletic team members; ticket holders of athletic events; units of national youth groups such as Boy Scouts, Girl Scouts, and 4–H Clubs."

Categories of records in the system:

Delete entry and replace with "Name, address, and other pertinent information of members, participants, partons, and other authorized users. Other ancillary information such as travel vouchers, security check results and orders will be kept in the system."

Authority for maintenance of the system:

Add "Executive Order 9397" to the end of the entry.

Purpose(s):

Delete entry and replace with "To administer programs devoted to the mental and physical well-being of Army personnel and other authorized users; to document the approval and conduct of specific contests, shows, entertainment programs, sports activities/competitions, and other MWR-type activities and events sponsored or sanctioned by the Army. Relevant information on an individual may be disclosed for bona fide purposes such as marketing and promoting MWR, entertainment programs, and to sports, educational, athletic, and similar-related organizations conducting equivalent MWR-type activities."

Routine uses of records maintained in the system, including categories of users and the purpose of such uses:

Delete entry and replace with "None."

* * * * *

Retrievability:

Delete entry and replace with "By name, Social Security Number, or other individual identifying characteristics."

Safeguards:

Delete entry and replace with "Records are kept in building secured during non-duty hours and accessed by only designated persons having official need therefor."

Retention and disposal:

Delete entry and replace with "All documents are destroyed after 2 years, unless required for current operation."

System manager(s) and address:

Delete entry and replace with "Commander, U.S. Army Community and Family Support Center, 2461 Eisenhower Avenue, Alexandria, VA 22331–0521."

Notification procedure:

Delete entry and replace with "Individuals seeking to determine whether information about themselves is contained in this record system should address inquiries to the Morale and Welfare office at the installation or activity where assigned."

Record access procedure:

Delete entry and replace with "Individuals seeking access to records about themselves contained in this record system should address inquiries to the Morale and Welfare office at the installation or activity where assigned.

Individuals must provide name, rank, SSN, proof of identification, and any other pertinent information necessary."

* * * * *

A0215CFSC

SYSTEM NAME:

General Morale, Welfare, Recreation and Entertainment Records

SYSTEM LOCATION:

Major Army commands, field operating agencies, installations and activities, Army-wide.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Military personnel, their families, other members of the military community, certain DoD civilian employees and their families overseas, certain military personnel of foreign nations and their families, personnel authorized to use Army-sponsored Morale, Welfare, Recreation (MWR) services, youth services, athletic and recreational services, Armed Forces Recreation Centers, Army recreation machines, and/or to participate in MWR-type activities; professional entertainment groups recognized by the Armed Forces Professional Entertainment Office; Army athletic team members; ticket holders of athletic events; units of national youth groups such as Boy Scouts, Girl Scouts, and 4–H Clubs.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, and other pertinent information of members, participants, patrons, and other authorized users. Other ancillary information such a travel vouchers, security check results and orders will be kept in the system.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

5 U.S.C. 301 and Executive Order 9397.

PURPOSE(S):

To administer programs devoted to the mental and physical well-being of Army personnel and other authorized users; to document the approval and conduct of specific contests, shows, entertainment programs, sports activities/competitions, and other MWR-type activities and events sponsored or sanctioned by the Army. Relevant information on an individual may be disclosed for bona fide purposes such as marketing and promoting MWR, entertainment programs, and to sports, educational, athletic, and similar-related organizations conducting equivalent MWR-type activities.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSE OF SUCH USES:

None.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders, cards, magnetic tapes, discs, computer printouts, and similar media.

RETRIEVABILITY:

By name, social security number, or other individual identifying characteristics.

SAFEGUARDS:

Records are kept in buildings secured during non-duty hours and accessed by only designated persons having official need therefor.

RETENTION AND DISPOSAL:

All documents are destroyed after 2 years, unless required for current operation.

SYSTEM MANAGER(S) AND ADDRESS:

Commander, U.S. Army Community and Family Support Center, 2461 Eisenhower Avenue, Alexandria, VA 22331-0521.

NOTIFICATION PROCEDURE:

Individuals seeking to determine whether information about themselves is contained in this record system should address inquiries to the Morale and Welfare office at the installation or activity where assigned.

RECORD ACCESS PROCEDURE:

Individuals seeking access to records about themselves contained in this record system should address inquiries to the Morale and Welfare office at the installation or activity where assigned.

Individuals must provide name, rank, SSN, proof of identification, and any other pertinent information necessary.

CONTESTING RECORD PROCEDURE:

The army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 343-21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

From the individual or group receiving the service.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

A0715DAJA

System name:

Procurement Misconduct Files (50 FR 22245, May 29, 1985)

Changes:

* * * * *

System location:

Delete entry and replace with "HQDA (DAJA-PF), The Pentagon, Washington, DC 20310-2217."

* * * * *

Categories of records in the system:

Delete entry and replace with "Criminal and administrative investigations of fraudulent, criminal or other misconduct in connection with government procurement activities and the List of Parties Excluded from Procurement Programs."

* * * * *

Purpose(s):

Delete entry and replace with "To determine whether criminal, administrative, or civil proceedings should be initiated against the contractor with the government or government procurement officials for criminal conduct in connection with procurement activities and to maintain and distribute a list of contractors determined to be ineligible to participate in Government procurement activities."

* * * * *

Notification procedure:

Delete entry and replace with "Individuals seeking to determine if information about themselves is contained in this records system should address inquiries to the Office of the Judge Advocate General, Chief, Procurement Fraud Division, HQDA, DAJA-PF, Washington, DC 20310-2217.

Individual should provide full name, current address and telephone number, specific details that will enable locating the record, and signature."

* * * * *

A715DAJA

SYSTEM NAME:

Procurement Misconduct Files

SYSTEM LOCATION:

HQDA (DAJA-PF), The Pentagon, Washington, DC 20310-2217.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals or legal entities investigated for alleged procurement misconduct, such as fraudulent activities in securing or performing a government contract.

CATEGORIES OF RECORDS IN THE SYSTEM:

Criminal and administrative investigations of fraudulent, criminal or other misconduct in connection with government procurement activities and the List of Parties Excluded from Procurement Programs.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

10 U.S.C. 3013.

PURPOSE(S):

To determine whether criminal, administrative, or civil proceedings should be initiated against the contractor with the government or government procurement officials for criminal conduct in connection with procurement activities and to maintain and distribute a list of contractors determined to be ineligible to participate in Government procurement activities.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Information may be disclosed to the Department of Justice and United States attorneys.

The "Blanket Routine Uses" set forth at the beginning of the Army's compilation of record system notices also apply.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Paper records in file folders.

RETRIEVABILITY:

By last name.

SAFEGUARDS:

Records are maintained in file cabinets accessible only by authorized personnel who are properly instructed in the permissible use of the information.

RETENTION AND DISPOSAL:

Destroyed 15 years after final action on the case.

SYSTEM MANAGER(S) AND ADDRESS:

The Judge Advocate General, Headquarters, Department of the Army, The Pentagon, Washington, DC 20310-2210.

NOTIFICATION PROCEDURE:

Indivduals seeking to determine if information about themselves is contained in this record system should address inquiries to the Office of the Judge Advocate General, Chief, Procurement Fraud Division, HQDA, DAJA-PF, Washington, DC 20310-2217.

Individual should provide full name, current address and telephone number, specific details that will enable locating the record, and signature.

RECORD ACCESS PROCEDURES:

Individuals seeking access to information about themselves contained in this record system should address inquiries to the Office of the Judge Advocate General, Chief, Procurement Fraud Division, HQDA, DAJA-PF, Washington, DC 20310-2217.

Individual should provide full name, current address and telephone number, specific details that will enable locating the record, and signature.

CONTESTING RECORD PROCEDURES:

The Army's rules for accessing records, contesting contents, and appealing initial determinations are contained in Army Regulation 340-21; 32 CFR part 505; or may be obtained from the system manager.

RECORD SOURCE CATEGORIES:

Department of the Army staff agencies, Army records and reports, Department of Justice, U.S. Attorneys,

opposing counsel, and similar relevant sources.

EXEMPTIONS CLAIMED FOR THE SYSTEM:

None.

[FR Doc. 90-29293 Filed 12-13-90; 8:45 am]

BILLING CODE 3810-01-M

Defense Logistics Agency

Privacy Act of 1974; Computer Matching Program Between the Department of Veterans Affairs and the Department of Defense

AGENCY: Defense Logistics Agency, DoD.

ACTION: Notice of a computer matching program between the Department of Veterans Affairs (VA) and the Department of Defense (DoD) for any public comment.

SUMMARY: The DoD, as the matching agency under the Privacy Act of 1974, as amended (5 U.S.C. 552a), is hereby giving constructive notice in lieu of direct notice to the record subjects of a computer matching program between VA and DoD that their records are being matched by computer. The record subjects are VA delinquent debtors who are current or former military members or current DoD employees receiving Federal salary or benefit payments and indebted and delinquent in their payment of debts owed to the United States Government under certain programs administered by VA so as to permit VA to pursue and collect the debt by voluntary repayment or by administrative or salary offset procedures under the provisions of the Debt Collection Act of 1982.

DATES: This proposed action will become effective January 14, 1991, and the computer matching will proceed accordingly without further notice, unless comments are received which would result in a contrary determination or if the Office of Management and Budget or Congress objects thereto. Any public comment must be received before the effective date.

ADDRESSES: Any interested party may submit written comments to the Director, Defense Privacy Office, 400 Army Navy Drive, room 205, Arlington, VA 22202-2884. Telephone (703) 614-3027.

SUPPLEMENTARY INFORMATION: Pursuant to subsection (o) of the Privacy Act of 1974, as amended (5 U.S.C. 552a), VA and DoD have concluded an agreement to conduct a computer matching program between the agencies. The purpose of the match is to exchange personal data between the agencies for debt collection from defaulters of obligations held by VA under the Debt Collection Act of 1982. The match will yield the identity and location of the debtors within the Federal government so that VA can pursue recoupment of the debt by voluntary payment or by administrative or salary offset procedures. Computer matching appeared to be the most efficient and effective manner to accomplish this task with the least amount of intrusion of personal privacy of the individuals concerned. It was therefor concluded and agreed upon that computer matching would be the best and least obtrusive manner and choice for accomplishing this requirement.

A copy of the computer matching agreement between VA and DoD is available to the public upon request. Requests should be submitted to the address caption above or to the Chief, Debt Management Section (20B), Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420.

Set forth below is a pubic notice of the establishment of the computer matching program required by paragraph (e)(12) of the Privacy Act.

The matching agreement, as required by 5 U.S.C. 552a(r) of the Privacy Act, and an advance copy of this notice was submitted on November 30, 1990, to the Committee on Government Operations of the House of Representatives, the Committee on Governmental Affairs of the Senate, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget pursuant to paragraph 4b of Appendix I to OMB Circular No. A-130, "Federal Agency Responsibilities for Maintaining Records about Individuals," dated December 12, 1985 (50 FR 52738, December 24, 1985). This matching program is subject to review by OMB and Congress and shall not become effective until that review period of 30 days has elapsed.

Dated: December 10, 1990.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

Computer Matching Program Between the Department of Veterans Affairs and the Department of Defense for Debt Collection

A. *Participating agencies:* Participants in this computer matching program are the Debt Management section (20B) of the Department of Veterans Affairs (VA) and the Defense Manpower Data Center (DMDC), Department of Defense (DoD). VA is the source agency, i.e., the agency disclosing the records for the purpose of the match. DMDC is the specific recipient or matching agency, i.e., the agency that actually performs the computer matching.

B. *Purpose of the match:* The purpose of the match is to identify the locate VA delinquent debtors who are current or former military members or current DoD employees receiving any Federal salary or benefit payments and indebted and delinquent in their repayment of debts to the United States Government under certain programs administered by VA so as to permit VA to pursue and collect the debt by voluntary repayments or by administrative or salary offset procedures under the provisions of the Debt Collection Act of 1982.

C. *Authority for conducting the match:* The legal authority for conducting the matching program is contained in the Debt Collection Act of 1982 (Pub. L. 97-365), 31 U.S.C. chapter 37, subchapter I (General) and subchapter II (Claims of the United States Government), 31 U.S.C. 3711 Collection and Compromise, 31 U.S.C. 3716-3718 Administrative Offset, 5 U.S.C. 5514 Installment Deduction for Indebtedness (Salary Offset); 10 U.S.C. 136, Assistant Secretaries of Defense, Appointment Powers and Duties; section 206 of Executive Order 11222; 4 CFR Chapter II, Federal Claims Collection Standards (General Accounting Office—Department of Justice); 5 CFR 550.1101-550.1108 Collection by Offset from Indebted Government Employees (OPM); 38 U.S.C. 3006 Furnishing of Information by Other Agencies; 38 CFR 1.980-1.994 (VA).

D. *Records to be matched:* The systems of records maintained by the respective agencies under the Privacy Act of 1974, is amended, 5 U.S.C. 552a, from which records will be disclosed for the purpose of this computer match are as follows:

1. VA will use records from a system of records identified as 58 VA 21/22/28, "Compensation, Pension, Education and Rehabilitation Records—VA", appearing at page 908 of the document entitled Privacy Act Issuances, 1987 Comp., Volume V, and as amended at 52 FR 4078, February 9, 1987; 54 FR 36933, September 5, 1989; and 55 FR 28508, July 11, 1990. The first cited amendment changed the identification of the record system to 58 VA 21/22. The exchange of data under this agreement is consistent with routine uses 9 and 12 of 58 VA 21/22. VA will also use records from a system of records identified as 55 VA 26, "Loan Guaranty Home, Condominium and Manufactured Home Loan Applicant Records, Specially Adapted Housing Applicant Records, and Vendee Loan Applicant Records—VA", appearing at page 804 of the document

entitled Privacy Act Issuances, 1987 Comp., Volume V, and as amended at 53 FR 49818, December 9, 1988. The exchange of data under this agreement is consistent with routine use 19 of 55 VA 26.

2. DMDC will use records from a system of records identified as S322.10 DMDC, entitled "Defense Manpower Data Center Data Base", last published at 55 FR 42755 on October 23, 1990.

The categories of records in the VA systems are delinquent debtors. The categories of records in the DoD system to be used consists of active and retired military members, including the Reserve and Guard, and current DoD civilian employees. The record systems contain appropriate routine use disclosure provisions required by the Privacy Act permitting the interchange of the affected personal information between VA and DoD. The routine uses are compatible with the purpose for collecting the information and establishing and maintaining the record system.

E. *Description of computer matching program:* A magnetic computer page provided by VA will contain data elements of the debtor's name, SSN, date of birth, and total amount owed on approximately 500,000 delinquent debtors. The DMDC computer category database file contains approximately 6 million records of active duty and retired military members, including the Reserve and the Guard, and current DoD civilian employees. DMDC will match the SSN on the VA tape by computer against the DMDC database. Matching records, hits based on SSNs, will automatically produce data elements of the individual's name, SSN, date of birth, service or agency, and current work or home address on each hit.

F. *Individual notice and opportunity to contest:* Due process procedures will be provided by VA to those individuals matched (hits) consisting of VA's verification of debt. VA will always seek voluntary payment of a debt before considering enforced collection. Before salary offset is sought, at least three separate attempts will be made by VA to notify debtors of their obligations and their rights to seek waiver of collection, compromise or otherwise dispute the debt. Provisions are also made for payment of a debt on an installment plan. If a matching subject requests a waiver of collection, compromise of the debt amount, exercises his or her appellate rights or enters into a voluntary repayment plan, literally years may pass before VA seeks offset of salary or retired pay if the waiver request or compromise offer is denied, an appeal is unsuccessful or if the debtor fails to continue to fulfill his or her voluntary obligation under a repayment agreement.

If the voluntary collection effort is unsuccessful, VA will send the matching subject 30-day written notice of VA's intent to request offset of salary or retired pay. That notice will include an explanation of the debtor's rights and opportunity for a hearing before an individual who is not under the supervision or control of VA. The notice gives the debtor a toll-free telephone number to call VA for further information.

If the notice of intent to request offset is returned by the Postal Service as undeliverable, VA does not request offset, but will enter an indicator in the debtor's record that the listed address may not be current. Periodically, VA will send DMDC a computer listing of those matching subjects whose addresses are unknown. DMDC will conduct a match under this agreement for the purpose of updating debtors' locations in VA's debtor file. After completion of the match, VA may attempt a second delivery of notice of intent to offset. If this attempt is unsuccessful, VA will seek other means of locating the debtor or alternative resolution of the debt.

Only when all of the steps indicated above have been taken will VA make a disclosure pursuant to a routine use to effect an administrative or salary offset. Unless the individual notifies VA otherwise within 30 days from the date of the notice, VA will conclude that the data provided to the individual is correct and will take the next necessary action to recoup the debt. Failure to respond to the notice will be construed as acquiescence on the part of the debtor as to the correctness of the notice and justification for taking the next step to collect the debt under the law.

After independent verification and notice under subsection (p) of the Privacy Act, VA will make all final determinations as to the specific amount of the debt owed, whether offset is feasible and not otherwise prohibited. VA will establish the standards and procedures applicable to the offset from disposable pay of current or retired military members or current DoD employees, or from amounts payable from the Federal retirement account of former Federal employees, to recover a debt owed the United States through VA. Prior to requesting that an employing agency take action to offset the salary of an employee identified through the match, VA will certify, over signature of an authorized VA official, that all due process procedures prescribed by the Debt Collection Act have been followed.

G. *Inclusive dates of the matching program:* This computer matching program is subject to review by the Office of Management and Budget and Congress. If no objections are raised by either, and the mandatory 30 day public notice period for comment has expired for this **Federal Register** notice with no significant adverse public comments in receipt resulting in a contrary determination, then this computer matching program becomes effective and the respective agencies may begin the exchange of data 30 days after the date of this published notice at a mutually agreeable time and will be repeated to an annual basis, unless OMB or the Treasury Department requests a match more often. Under no circumstances shall the matching program be implemented before this 30 day public notice period for comment has elapsed as this time period cannot be waived. By agreement between VA and DoD, the matching program will be in effect and continue for 18 months with an option to renew for 12 additional months unless one of the parties to the agreement advises the other by written request to terminate or modify the agreement.

H. *Address for receipt of public comments or inquiries:* Director, Defense Privacy Office, 400 Army Navy Drive, room 205, Arlington, VA 22202-2884. Telephone (703) 614-3027.

[FR Doc. 90-29295 Filed 12-13-90; 8:45 am]
BILLING CODE 3810-01-M

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

[Recommendation 90-6]

Implementation Plan for Recommendation 90-6 at the Department of Energy's (DOE) Rocky Flats Plant, CO

AGENCY: Defense Nuclear Facilities Safety Board.

ACTION: Implementation plan; acceptance.

SUMMARY: The Defense Nuclear Facilities Safety Board has received DOE's implementation plan for Recommendation 90-6 and has concluded that it satisfies the Board's criteria for judging the adequacy of DOE's implementation plan and that the plan is acceptable (55 FR 23584).

FOR FURTHER INFORMATION CONTACT: Robert M. Andersen, General Counsel, Defense Nuclear Facilities Safety Board,

625 Indiana Avenue, NW., suite 700, Washington, DC 20004, or telephone (202) 208–6387, (FTS) 268–6387.

Dated: December 11, 1990.

Robert M. Andersen,

General Counsel.

December 3, 1990

The Honorable James D. Watkins,
Secretary of Energy, Washington, DC 20585

Dear Mr. Secretary: By letter dated November 29, 1990, you forwarded the Department of Energy's (DOE) implementation plan for Recommendation 90–6 which calls for preparation of a written program to address accumulation of fissile materials in ventilation ducts and related systems at the Rocky Flats Plant. The Board has carefully considered DOE's proposed implementation plan for Recommendation 90–6. We have concluded that it satisfies the Board's criteria for judging the adequacy of DOE's implementation plan and that the plan is acceptable.

We understand that, because the execution of this plan is expected to extend beyond one year, you will communicate the schedule to the appropriate congressional committees.

Sincerely,

John T. Conway,

Chairman.

[FR Doc. 90–29372 Filed 12–13–90; 8:45 am]

BILLING CODE 6820-KD-M

DEPARTMENT OF EDUCATION

National Assessment Governing Board; Teleconference Meeting

AGENCY: National Assessment Governing Board; Education.

ACTION: Notice of meeting.

SUMMARY: This notice sets forth the schedule and proposed agenda of a forthcoming teleconference meeting of the Reporting and Dissemination Committee of the National Assessment Governing Board. Notice of this meeting is required under section 10(a)(2) of the Federal Advisory Committee Act. This document is intended to notify the general public of their opportunity to attend.

DATES: January 10, 1991.

TIME: 11 a.m. e.s.t.

PLACE: National Assessment Governing Board, suite 7322, 1100 L Street, NW., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Roy Truby, Executive Director, National Assessment Governing Board, suite 7322, 1100 L Street, NW., Washington, DC, 20005–4013. Telephone: (202) 357–6938.

SUPPLEMENTARY INFORMATION: The National Assessment Governing Board is established under section 406(i) of the General Education Provisions Act (GEPA) as amended by section 3403 of the National Assessment of Educational Progress Improvement Act (NAEP Improvement Act), title III–C of the Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988 (Pub. L. 100–297), (20 USC 1221e–1).

The Board is established to formulate policy guidelines for the National Assessment of Educational Progress. It is responsible for developing specifications for test design and methodology and for developing guidelines and standards for analysis plans and for reporting and disseminating results. The Board also has responsibility for selecting subject areas to be assessed, identifying achievement goals for each age and grade tested, and establishing standards and procedures for interstate, regional, and national comparisons. The Reporting and Dissemination Committee of the National Assessment Governing Board will meet via teleconference on January 10, 1991, from 11 a.m. e.s.t., until the completion of business. Because this is a teleconference meeting, facilities will be provided so the public will have access to the Committee's deliberations. The purpose of this meeting is to approve a plan submitted by the Commissioner for Education Statistics for reporting and dissemination of the 1990 NAEP mathematics results, including state-by-state data.

Records are kept of all Board proceedings and are available for public inspection at the U.S. Department of Education, National Assessment Governing Board, Suite 7322, 1100 L Street, NW., Washington, DC, from 8:30 a.m. to 5 p.m., Monday through Friday.

Dated: December 10, 1990.

Christopher T. Cross,

Assistant Secretary for Educational Research and Improvement.

[FR Doc. 90–29321 Filed 12–13–90; 8:45 am]

BILLING CODE 4000-01-M

DEPARTMENT OF ENERGY

Morgantown Energy Technology Center; Cooperative Research and Development Agreements

AGENCY: Morgantown Energy Technology Center, Department of Energy (DOE).

ACTION: Notice of desire to enter into Cooperative Research and Development Agreements.

FOR FURTHER INFORMATION CONTACT: L. Carol Roberson, Technology Communications Manager, Department of Energy, Morgantown Energy Technology Center, P.O. Box 880, Morgantown, West Virginia 26507–0800.

SUMMARY: The Morgantown Energy Technology Center (METC), a federally operated fossil energy research and development facility of the U.S. Department of Energy, is seeking offers from private industry, educational institutions and other organizations as a basis for entering into joint research and development projects which would result in the transfer of fossil energy technologies into the private sector for commercial deployment. Joint projects would be formulated by a Cooperative Research and Development Agreement under the authority of the Federal Technology Transfer Act of 1986 (Pub. L. 99–502). Under this law, METC may contribute personnel, equipment and facilities—but no direct funding—to the cooperative research program. Contributions from the participating partner(s) are required and may include funding, personnel, facilities and equipment.

The Federal Technology Transfer Act encourages joint research and development projects and is quite flexible regarding disposition of rights to inventions made under such agreements. METC is expected to be able to negotiate directly with the partners on intellectual property issues including the exclusive licensing of METC inventions, protection of proprietary data, and allocation of patent rights developed under the agreement. Patented METC inventions that are available for further development and commercialization are listed at the end of this announcement. METC resources and expertise are available to assist partners in further research and development of their ideas. METC's lead areas of fossil energy research and development include coal gasification, hot gas cleanup, shale oil, "mild" gasification to produce liquids and high value solid products, instrumentation, solid waste recovery/disposal, fluidized-bed combustion, coal-fueled combustion turbines and diesel engines, clean-up systems for coal-fueled cells, and unconventional gas recovery. METC's facilities include specialized engineering test facilities as well as extensive research and development laboratories and state-of-the-art instrumentation.

METC will consider the role of the proposed project in achieving METC's goal of commercializing technologies which utilize domestic fossil fuel supplies cleanly, economically and efficiently. Special consideration will be given to small business firms. Preference will be given to business units located in the United States which agree that

products embodying the METC inventions and/or inventions made under the cooperative research and development agreement or produced through the use of such inventions will be manufactured substantially in the United States. In the case of any industrial organization or other person subject to the control of a foreign company or government, as appropriate, METC will take into consideration whether or not such foreign government permits United States agencies, organizations, or other persons to enter into cooperative research and development agreements and licensing agreements.

SUPPLEMENTARY INFORMATION: METC is under no obligation to accept projects which are proposed in response to this announcement. Projects will be undertaken based on factors which include, but are not limited to, the considerations identified above, resources offered, METC resources available and the specific contribution of the project to METC's R&D program.

Issued: December 6, 1990.

John S. Wilson,

Deputy Director, METC.

METC Issued Patents

Title	Number	Issue date
Underground gasification of coal	3,933,447	01/20/76
Method for removal of methane from coalbeds	3,934,649	01/26/76
Automatic control and detector for three-terminal resistance measurement	3,988,669	10/26/76
Mutiple channel coincidence detector and controller for microseismic data analysis	3,992,672	11/16/76
High voltage pulse generator	4,011,463	03/08/77
Apparatus for providing directional permeability measurements in subterranean earth formations	4,043,192	08/23/77
Electronmagnetic wave method for mapping subterranean earth formations	4,045,724	08/30/77
Portable device and method for determining permeability characteristics of earth formations	4,052,885	10/11/77
Method for describing fractures in subterranean earth formations	4,057,780	11/08/77
Method for in situ combustion	4,062,404	12/13/77
Cyclic flow underground coal gasification process	4,069,867	01/14/78
Regenerable sorbent and method for removing hydrogen sulfide from hot gas mixtures	4,089,809	05/16/78
Method for increasing the calorific value of gas produced by the in situ combustion of coal	4,095,650	06/20/78
In situ gasification process for producing product gas enriched in carbon monoxide and hydrogen	4,122,897	10/31/78
Catalytic hydrotreating process	4,128,473	12/05/78
Apparatus and method for feeding coal into a coal gasifier	4,153,427	05/08/79
Wellbore pressure transducer	4,157,528	06/05/79
Solid handling valve	4,173,327	11/06/79
Single transmission line interrogated multiple channel data acquisition system	4,196,417	04/01/80
Signal processor for processing ultrasonic receiver signals	4,213,184	07/15/80
Method for enhanced oil recovery	4,224,992	09/30/80
Energy recovery system	4,234,423	11/18/80
Coal-feeding mechanism for a fluidized bed combustion chamber	4,270,469	06/02/81
Appartus for installing condition-sensing means in subterranean earth formations	4,279,299	07/21/81
Capacitance-level density monitor for fluidized-bed combustor	4,350,040	09/21/82
Oil shale retorting and combustion system	4,373,454	02/15/83
Combined fluidized bed retort and combustor	4,447,297	05/08/84
Single transmission line data acquisition system	4,451,826	05/29/84
Air-flow regulation system for a coal gasifier	4,453,948	06/12/84
Ash bed level control system for a fixed-bed coal gasifier	4,454,949	06/12/84
Coal gasification system with a modulated on/off control system	4,453,950	06/12/84
Fire flood method for recovering petroleum from oil reservoirs of low permeability and temperature	4,465,135	08/14/84
Loop-bed combustion apparatus	4,466,360	08/12/84
Ash level meter for a fixed-bed coal gasifier	4,466,747	08/21/84
Reversed flow fluidized-bed combustion apparatus	4,475,884	10/09/84
Wireless remote liquid level detector and indicator for well testing	4,523,465	06/18/85
Sliding-gate valve for use with abrasive materials	4,524,796	06/25/85
Optical emission line monitor with background observation and cancellation	4,616,137	10/07/86
Compensated vibrating optical fiber pressure measuring device	4,667,097	05/19/87
Pulse-excited, auto-zeroing multiple channel data transmission system	4,680,585	07/14/87
Method and apparatus for the selective separation of gaseous coal gasification products by pressure swing adsorption	4,696,680	09/29/87
Low temperature pyrolysis of coal or oil shale in the presence of calcium compounds	4,747,938	05/31/88
Method for the desulfurization of hot product gases from coal gasifier	4,769,045	09/06/88
Method for increasing steam decomposition in a coal gasification process	4,786,219	11/22/88
Method for enhancing the desulfurization of hot coal gas in a fluid-bed gasifier	4,832,704	05/23/89
Method of inducing surface ensembles on a metal catalyst	4,840,931	06/20/89
Combustor with multistage internal vortices	4,867,079	09/19/89
Hydrogen production with coal using a pulverization device	4,876,080	10/24/89
Method and apparatus for hydrocarbon recovery from tar sands	4,880,528	11/14/89
Decaking of coal or oil shale during pyrolysis in the presence of iron oxides	4,886,521	12/12/89
Real-time alkali monitoring system	4,896,965	01/30/90
Combined coal gasifier and fuel cell system and method	4,921,765	05/01/90
3-D capacitance density imaging system	4,926,112	05/15/90
Light collection device for flame emission detectors	4,939,376	07/31/90
An in-bed tube bank for a fluidized-bed combustor	4,955,942	09/11/90

Office of Conservation and Renewable Energy

[Case No. F-023]

Energy Conservation Program for Consumer Products; Decision and Order Granting; Waiver from Furnace Test Procedures to Inter-City Products Corporation

AGENCY: Office of Conservation and Renewable Energy, Department of Energy.

ACTION: Decision and order.

SUMMARY: Notice is given of the Decision and Order (Case No. F-023) granting Inter-City Products Corporation (Inter-City) a waiver for its model NUGV(-) condensing gas furnaces from existing Department of Energy (DOE) test procedures regarding blower time delay for determining the model's energy efficiency.

FOR FURTHER INFORMATION CONTACT:
Cyrus H. Nasseri, U.S. Department of Energy, Office of Conservation and Renewable Energy, Mail Station CE-43, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-9127
Eugene Margolis, Esq., U.S. Department of Energy, Office of General Counsel, Mail Station GC-12, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-9507

SUPPLEMENTARY INFORMATION: In accordance with 10 CFR 430.27(g), notice is hereby given of the issuance of the Decision and Order as set out below. In the Decision and Order Inter-City has been granted a waiver for its model NUGV(-) condensing gas furnaces, permitting the company to use an alternate test method in determining the Annual Fuel Utilization Efficiency (AFUE).

Issued in Washington, DC, December 10, 1990.

J. Michael Davis,
Assistant Secretary, Conservation and Renewable Energy.

Decision and Order

In the matter of: Inter-City Products Corporation (Case No. F-023).

The Energy Conservation program for Consumer Products (other than automobiles) established pursuant to the Energy Policy and Conservation Act (EPCA), Public Law 94-163, 89 Stat. 917, as amended by the National Energy Conservation Policy Act (NECPA), Public Law 95-619, 92 Stat. 3266, the National Appliance Energy Conservation Act of 1987 (NAECA), Public Law 100-12, and the National Appliance Energy Conservation Amendments of 1988 (NAECA 1988), Public Law 100-357, requires DOE to prescribe standardized test procedures to measure the energy consumption of certain consumer products, including furnaces. The intent of the test procedures is to provide a comparable measure of energy consumption that will assist consumers in making purchasing decisions. These test procedures appear at 10 CFR part 430, subpart B.

DOE amended the prescribed test procedures by adding 10 CFR 430.27 to create a waiver process. 45 FR 64108, September 26, 1980. Thereafter DOE further amended its appliance test procedure waiver process to allow the Assistant Secretary for Conservation and Renewable Energy (Assistant Secretary) to grant an interim waiver from test procedure requirements to manufacturers that have petitioned DOE for a waiver of such prescribed test procedures. 51 FR 42823, November 26, 1986.

The waiver process allows the Assistant Secretary to waive temporarily test procedures for a particular basic model when a petitioner shows that the basic model contains one or more design characteristics which prevent testing according to the prescribed test procedures or when the prescribed test procedures may evaluate the basic model in a manner so unrepresentative of its true energy consumption as to provide materially inaccurate comparative data. Waivers generally remain in effect until final test procedure amendments become effective, resolving the problem that is the subject of the waiver.

Inter-City filed a "Petition for Waiver" dated May 1, 1990, in accordance with § 430.27 of 10 CFR part 430. DOE published in the **Federal Register** on July 31, 1990, Inter-City's petition and solicited comments, data and information respecting the petition. 55 FR 31099. Inter-City also filed an "Application for Interim Waiver" under § 430.27(g) which DOE granted on July 23, 1990. 55 FR 31099, July 31, 1990.

No comments were received concerning either the "Petition for Waiver" or the "Interim Waiver." DOE consulted with Federal Trade Commission (FTC) concerning the Inter-City petition. The FTC did not have any objections to the issuance of a waiver to Inter-City.

Assertions and Determinations

Inter-City's Petition seeks a waiver from the DOE test provisions that require a 1.5-minute time delay between the ignition of the burner and the starting of the circulating air blower. Inter-City requests the allowance to test using a 30-second blower time delay when testing its NUGV(-) series condensing gas furnaces. Inter-City states that since the 30-second delay is indicative of how this model actually operates and since such a delay results in an improvement in efficiency of approximately 1.0 percent, the waiver should be granted.

Under specific circumstances, the DOE test procedures contain exceptions which allow testing with blower delay times of less than the prescribed 1.5-minute delay. Inter-City indicates that it is unable to take advantage of any of these exceptions for the NUGY(-) series.

Since the blower controls incorporated on the Inter-City furnace are designated to imposes a 30-second blower delay in every instance of start-up, and since the current provisions do not specifically address this type of control, DOE agrees that a waiver should be granted to allow the 30-second blower time delay when testing the inter-City NUGV(-) series furnace. Accordingly, with regard to testing the NUGV(-) series furnace only, today's Decision and Order exempts Inter-City from the existing provisions regarding blower controls and allows testing with the 30-second delay.

It is therefore, ordered: that—

(1) The "Petition for Waiver" filed by the Inter-City Products Corporation (Case No. F-023) is hereby granted set forth in paragraph (2) below, subject to the provisions of paragraphs (3), (4) and (5).

(2) Not withstanding any contrary provisions of appendix N of 10 CFR part 430, subpart B, the Inter-City Products Corporation shall be permitted to test its NUGV(-) series condsening gas furnace on the basis of the test procedure specified in 10 CFR part 430, with modifications set forth below:

(i) Section 3.0 in appendix N is deleted and replaced with the following paragraph:

3.0 Test Procedure. Testing and measurements shall be a specified in section 9 in ANSI/ASHRAE 103-82 with the exception of sections 9.2.2, 9.3.1, and 9.3.2, and the inclusion of the following additional procedures:

(ii) Add a new paragraph 3.10 in appendix N as follows:

3.10 Gas- and Oil-Fueled Central Furnaces. The following paragraph is in lieu of the requirement specified in section 9.3.1 in ANSI/ASHRAE 103-82. After equilibrium conditions are

achieved following the cool-down test and the required measurements performed, turn on the furnace and measure the flue gas temperature, using the thermocouple grid described above, at 0.5 and 2.5 minutes after the main burner(s) come on. After the burner start-up, delay the blower start-up by 1.5 minutes (t–), unless: (1) The furnace employs a single motor to drive the power burner and the indoor air circulating blower, in which case the burner and blower shall be started together; or (2) the furnace is designed to operate using an unvarying delay time that is other than 1.5 minutes, in which case the fan control shall be permitted to start the blower; or (3) the delay time results in the activation of a temperature safety device which shuts off the burner, in which case the fan control shall be adjustable, set it to start the blower at the highest temperature. If the fan control is permitted to start the blower, measure time delay, (t–), using a stop watch. Record the measured temperatures. During the heat-up test for oil-fueled furnaces, maintain the draft in the flue pipe within ±0.01 in. of water gauge of the manufacturer's recommended on-period draft.

(iii) With the exception of the modification set forth in subparagraph (ii) above, Inter-City Products Corporation shall comply in all respects with the test procedures specified in appendix N of 10 CFR part 430 subpart B.

(3) The waiver shall remain in effect from the date of issuance of this Order until DOE prescribes final test procedures appropriate to the NUGV(–) series condensing gas furnace manufactured by Inter-City Products Corporation.

(4) This waiver is based upon the presumed validity of statements, allegations, and documentary materials submitted by the petitioner. This waiver may be revoked or modified at any time upon a determination that the factual basis underlying the petition is incorrect.

(5) Effective (Insert Date of Issuance), this Waiver supersedes the Interim Waiver Granted Inter-City Products on July 23, 1990. 55 FR 31099, July 31, 1990. (Case No. F–023).

Issued In Washington, DC, December 10, 1990.

J. Michael Davis,

Assistant Secretary, Conservation and Renewable Energy.

[FR Doc. 90–29302 Filed 12–13–90; 8:45 am]

BILLING CODE 6450–01–M

Federal Energy Regulatory Commission

[Docket Nos. ER90–577–000, et al.]

Montaup Electric Co., et al.; Electric Rate, Small Power Production, and Interlocking Directorate Filings

Take notice that the following filings have been made with the Commission:

1. Montaup Electric Co.

[Docket No. ER90–577–000]

December 6, 1990.

Take notice that on November 28, 1990, Montaup Electric Company (Montaup) filed a letter agreement for the sale of Canal No. 2 and Millstone No. 3 capacity and energy to Boston Edison Company (Boston Edison) for the period November 1, 1989 through April 30, 1990. The enclosed letter agreement supersedes a letter agreement filed by Montaup on September 6, 1990 in Docket No. ER90–577–000 for the sale of capacity and energy from the Canal No. 2 oil-fired unit covering the same period.

The demand charge in the new agreement is reduced from $120 per kw/year to $114.10 per kw/year, which will result in a total dollar reduction in Montaup's demand revenues from the six-month sale of $44,100. The new letter agreement leave the amount of capacity negotiated in the original letter agreement unchanged; however, instead of consisting of 15 megawatts of Canal No. 2 capacity and energy and 1.32 megawatts of Millstone No. 3 capacity and energy. The inclusion of Millstone No. 3 nuclear energy in the sale reduces Montaup's energy revenues from the sale by approximately $82,000 and reduces Boston Edison's energy costs by the same amount.

Montaup requests that the notice requirement be waived in order to permit the agreement to become retroactively effective.

Comment date: December 20, 1991, in accordance with Standard Paragraph E at the end of this notice.

2. Dayton Power and Light Co.

[Docket No. ER91–140–000]

December 6, 1990.

Take notice that the Dayton Power and Light Company (DP&L) tendered for filing on November 30, 1990, a proposed modification to the Interconnection Agreement dated as of May 10, 1972, between DP&L and the City of Piqua, Ohio (Piqua).

The proposed modification revises Piqua Wheeling Agreement Schedule E to increase contract demand from 1,000 KW to 2,000 KW. Piqua has consented to the modification. A December 1, 1990, effective date has been requested.

A copy of the filing was served upon Piqua and the Public Utilities Commission of Ohio.

Comment date: December 20, 1990, in accordance with Standard Paragraph E at the end of this notice.

3. Catalyst Old River Hydroelectric Limited Partnership

[Docket No. ER91–138–000]

December 6, 1990.

Take notice on November 30, 1990, Catalyst Old River Hydroelectric Limited Partnership (Catalyst) tendered for filing, in accordance with 18 CFR 35.11, 35.13 and 385.207 (1990) of the Commission's Rules and Regulations, an Application to Supplement Filed Rate Schedules and for Waiver of Filing and Notice Requirements. Catalyst's filing seeks to supplement its filed rate schedules with Louisiana Power & Light Company and the Town of Vidalia, Louisiana, by submitting a supplement to the Vidalia power sales agreement, an assignment of contracts, permits and licenses executed in connection with a construction loan financing, as well as the consents, assignments and municipal ordinances executed, ratified or enacted in connection with the sale and leaseback of the Old River Hydroelectric Project No. 2854, that was authorized by the Commission on August 20, 1990. Catalyst requests effective dates in accordance with the terms of the filed documents. Thus, the rate schedules would be deemed to have been amended as of June 28, 1988, to reflect the supplement to the Vidalia power sales agreement and the construction financing assignment and consents, and then further amended to reflect the documents executed in connection with the closing of the sale and leaseback transaction as of August 25, 1990.

Copies of this filing have been served upon the Louisiana Public Service Commission, the Louisiana Power & Light Company and the Town of Vidalia, Louisiana.

Comment date: December 20, 1990, in accordance with Standard Paragraph E at the end of this notice.

4. Tucson Electric Power Co.

[Docket No. ER91–137–000]

December 6, 1990.

Take notice that on November 29, 1990, Tucson Electric Power Company (Tucson) tendered for filing pursuant to 18 CFR 35.12, an agreement entitled "1991 Power Sale Agreement Between

Tucson Electric Power Company And Imperial Irrigation District."

The parties request an effective date of January 1, 1991, and therefore request waiver of the Commission's regulations regarding filing.

Copies of this filing have been served upon all parties affected by this proceeding.

Comment date: December 20, 1990, in accordance with Standard Paragraph E at the end of this notice.

5. Travis H. Petty

[Docket No. ID-2515-000]

December 6, 1990.

Take notice that on November 30, 1990, Travis H. Petty (Applicant) tendered for filing an application under section 305(b) to hold the following positions:

Director—Texas Commerce Bancshares, Inc.

Director—Texas Commerce Bank, N.A., El Paso

Director—El Paso Electric Company

Comment date: December 20, 1990, in accordance with Standard Paragraph E at the end of this notice.

6. Wisconsin Power and Light Co.

[Docket No. ER91-139-000]

December 6, 1990.

Take notice that on November 30, 1990, Wisconsin Power and Light Company (WPL) tendered for filing a Wholesale Power Agreement dated November 7, 1990, between the City of Schullsburg and WPL. WPL states that this new Wholesale Power Agreement revises the previous agreement between the two parties which was dated June 6, 1978, and designated Rate Schedule No. 120 by the Commission.

The purpose of this new agreement is to revise the terms of service. Terms of service for this customer will be on a similar basis to the terms of service for other W-3 wholesale customers.

WPL requests that an effective date concurrent with the contract effective date be assigned. WPL states that copies of the agreement and the filing have been provided to the City of Schullsburg and the Wisconsin Public Service Commission.

Comment date: December 20, 1990, in accordance with Standard Paragraph E at the end of this notice.

7. South Carolina Electric & Gas Co.

[Docket No. ES91-10-000]

December 7, 1990.

Take notice that on December 4, 1990, South Carolina Electric & Gas Company ("Applicant") filed an application with the Federal Energy Regulatory Commission, pursuant to section 204 of the Federal Power Act, for authority to issue up to $160 million of unsecured promissory notes in the form of bank loans and commercial paper during the period commencing January 1, 1991 and ending December 31, 1992.

Comment date: December 21, 1990, in accordance with Standard Paragraph E at the end of this notice.

8. JMC West Lynn, Inc.

[Docket No. QF91-16-000]

December 7, 1990.

On November 20, 1990, JMC West Lynn, Inc., of One Bowdoin Square, Boston, Massachusetts, submitted for filing an application for certification of a facility as a qualifying cogeneration facility pursuant to § 292.207 of the Commission's regulations. No determination has been made that the submittal constitutes a complete filing.

The topping-cycle cogeneration facility will be located in Lynn, Massachusetts. The facility will consist of a combustion turbine generator, a supplementary fired heat recovery boiler and a non-condensing steam turbine generator. The net electric power production capacity of the facility will be approximately 122.8 MW. The primary source of energy will be natural gas. Construction of the facility is expected to begin on or about January 15, 1991, with completion expected by January, 1993.

Comment date: Thirty days from publication in the **Federal Register** in accordance with Standard Paragraph E at the end of this notice.

Standard Paragraph

E. Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such motions or protests should be filed on or before the comment date. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 90-29281 Filed 12-13-90; 8:45 am]

BILLING CODE 6717-01-M

Docket Nos. CP90-316-000, and CP90-317-000, et al.

Empire State Pipeline, et al.; Intent To Prepare an Environmental Assessment for the Proposed Empire State Project and Request for Comments on Its Scope

December 7, 1990.

Notice is hereby given that the staff of the Federal Energy Regulatory Commission (FERC or Commission) will prepare an environmental assessment (EA) on the natural gas facilities proposed in the above-referenced dockets. The proposal will be referred to as the *Empire State Project.*

The Empire State Project, as currently configured, is a joint proposal by Empire State Pipeline (Empire), Great Lakes Gas Transmission Corporation (Great Lakes), and National Fuel Gas Supply Corporation (NFG) as explained in detail below. NFG's present filing, in coordination with Empire, replaces its previous alternative to a portion of the Empire proposal. Overall the proposal involves 176.46 miles of pipeline, both jurisdictional and nonjurisdictional, in the states of Michigan and New York.

The Empire State Project

Empire State Pipeline

Pursuant to § 153.10 through 153.12 of the Commission's regulations, Empire State Pipeline (Empire) seeks the issuance of a Presidential Permit to connect a natural gas facility at a point of entry on the United States/Canadian border near the town of Grand Island, New York. Empire also seeks Natural Gas Act section 3 authorization from the Commission to construct, operate, and maintain such facilities at the point of entry for the importation of natural gas.

The jurisdictional point of importation into the United States would be located on the Chippewa Channel of the Niagara River in the town of Grand Island, midway between Staley Road and Love Road, Erie County, New York. A meter station would be constructed east of and adjacent to West River Parkway Road on land owned by ANR Pipeline Company, an Empire affiliate.

The proposed facilities would consist of 24-inch-diameter pipeline designed to transport an average daily volume of 150,000 Mcf of natural gas with a peak day delivery capacity of 270,000 Mcf. Both domestic and Canadian gas supplies would be transported to various "shippers" within the state of New York. The proposed facilities are summarized in table 1. Other proposed facilities, filed as alternatives to the

Empire proposal, are summarized in table 2.

Maps showing the location of the pertinent facilities are contained in appendix 1.[1]

The shippers for whom Empire would be transporting gas consist of one local distribution company (Rochester Gas and Electric), two industrial users (Alcan Rolled Products and U.S. Gypsum), six cogenerators (Fulton Cogeneration Associates, Kamine/Besicorp Carthage LP, Kamine-LCP, Pentech Energy Inc., PG&E/Bechtel, and Hydra-Co.), four marketers (Appalachian Gas Sales, Bishop, Goetz Energy Corp., and Harrison Energy), and the three "cogeneration customers" served by National Fuel Gas Supply Corporation as discussed below.

Additional Facilities Required by Empire

Additional nonjurisdictional facilities related to this proposal would consist of 155 miles of 24-inch-diameter pipeline (Empire Pipeline) which would be connected to the proposed point of importation and would be constructed, owned and operated by Empire. This proposed pipeline would be used to transport natural gas for the shippers listed above for ultimate consumption within the state of New York. Certain unspecified nonjurisdictional facilities would also be required to transport the gas from the proposed Empire Pipeline to the various customers' facilities.

The Empire Pipeline would cross 8 counties and 27 municipalities in the state of New York, beginning at Grand Island in Erie County and ending in Schroeppel, Oswego County. In order to avoid duplication, any state or local approval or ongoing environmental analysis of the nonjurisdictional facilities will be utilized by the Commission staff in conducting its National Environmental Policy Act review. See appendix 2 for additional information on Empire's facilities and on facilities required by TransCanada Pipelines Limited (TransCanada).

National Fuel Gas Supply Corporation (NFG)

In Docket No. CP90-854-001, NFG proposes to provide firm transportation service of 38.8 MMcf of gas per day for three "cogeneration customers" not served by Empire—Encogen, Four Partners, LP (EDC-4); Indeck Energy Services of Ilion, Inc. (Indeck-Ilion); and Indeck Energy Services of Corinth, Inc. (Indeck-Corinth). In order to provide the proposed transportation service, NFG would utilize a portion of Empire's proposed pipeline that crosses Grand Island and construct a total of 5.46 miles of pipeline in two segments.

The northern pipeline segment (Line XM-5-1) would connect NFG's existing Line X at Nash Road in Wheatfield with the Empire Pipeline. The segment would be 3.24 miles long and be located in Niagara County, New York.

The southern pipeline segment (Line XM-5-2) would connect the Empire Pipeline on Grand Island with NFG's existing Line UM-2 in the town of Tonawanda. This segment would be 2.22 miles long.

NFG also proposes to establish a delivery point to its distribution affiliate, National Fuel Gas Distribution Company (NFG Distribution), off of its proposed Line XM-5-2 on Grand Island which would include valves, meters, and regulators. NFG also proposes to establish a delivery point to this affiliate at the existing Fire Tower Lane Regulator Station (where Line XM-5-2 and existing Line UM-2 would interconnect). Additional metering and regulating equipment would be required.

Great Lakes Gas Transmission Company

To facilitate the upstream transportation of natural gas, Great Lakes Gas Transmission Company (Great Lakes) proposes to construct a total of 16 miles of 36-inch-diameter pipeline looping in two sections within the state of Michigan. The requested facilities and the requested transportation service of 102,500 Mcf of natural gas per day would be used to provide Rochester Gas and Electric Corporation (RG&E) with natural gas needed to meet its system supply needs.

RG&E has requested that Great Lakes receive the requested volume of natural gas from ANR Pipeline Company (ANR) at various points of interconnection between the facilities of ANR and Great Lakes in Michigan. The gas would be transported through the facilities of Great Lakes and delivered to TransCanada at the St. Clair delivery point in St. Clair County, Michigan for the account of RG&E. The gas would then flow through the facilities of TransCanada for redelivery to Empire at the proposed interconnection with Empire at Grand Island.

Alternatives to the Empire Proposal

The staff's EA will analyze alternatives to the Empire proposal filed by NFG and CNG Transmission Corporation (CNG). The EA will also analyze system alternatives developed by the Commission staff.

National Fuel Gas Supply Corporation

NFG as noted above, originally filed a competitive alternative to the westernmost 32 miles of the Empire pipeline. That alternative proposal was filed by NFG in Docket Nos. CP90-854-000, CP90-920-000, CP90-967-000, and CP90-968-000 as further discussed below. At present NFG has requested to withdraw these applications in lieu of its joint facilities with Empire. This EA will evaluate the reasonableness of this alternative as it was originally proposed.

NFG was proposing 22.5 miles of pipeline in 3 segments to replace part of the Empire proposal. A portion of this alternative also serves the purpose of connecting NFG's Line X in Wheatfield, to its Line UM-2 in Tonawanda, which would improve the integrity of its system and provide added capacity for load growth in the Buffalo and Grand Island areas.

The previously proposed segments were 9.9 miles of pipeline in Docket No. CP90-854-000 (Line XM-5 from Wheatfield to Tonawanda) and two sections of pipeline in Docket No. CP90-920-000 (Lines XM-6, 5.0 miles long, from the St. Lawrence River border crossing to Grand Island and XM-7, 7.6 miles long, from Royalton to Clarence).

The currently proposed Lines XM-5-1 (3.24 miles) and XM-5-2 (2.22 miles) are the same as the northern and southern segments of the originally proposed Line XM-5.

CNG Gas Transmission Corporation

In conjunction with NFG's original alternative proposal discussed above CNG filed an alternative to the easternmost 122 miles of the Empire pipeline.

In Docket No. CP90-1989-000, CNG proposes, pursuant to section 7 of the NGA and the Commission's regulations, to construct various facilities, transport 235,104 Dt of natural gas per day for the Empire shippers, and to transport 24,467 Dt per day for Indeck-Ilion and Indeck-Corinth (two of the three shippers proposed to be served by NFG in Docket No. CP90-920-000 not served by Empire). CNG states that this filing should be considered in conjunction with NFG's filing in Docket No. CP90-920-000 as they are integrated as one complete project.

CNG's proposal in Docket No. CP90-1989-000 would replace the need for the 122 miles of the Empire Pipeline that is not obviated by NFG's proposal in Docket No. CP90-920-000. In place of

[1] The appendices are not being printed in the **Federal Register**. Copies are available from the Commission's Public Reference Branch, telephone (202) 208-1371.

the 122 miles of 24-inch-diameter pipeline CNG would be required to construct 52.6 miles of pipeline looping, 16.1 miles of new pipeline on new right-of-way, and add various compression and metering facilities. See table 2 for a detailed summary of the facilities requested by CNG.

The 16.1 miles of new 24-inch-diameter pipeline was previously studied in the FERC staff's *SS-2 Storage Service Project Environmental Assessment*, issued by the Commission in July 1989. The subject 16.1 miles of pipeline was a portion of an alternative filed by CNG in Docket No. CP88-183-000 to NFG's storage service facilities in that proceeding. CNG's facilities were never built and will be re-addressed in this EA.

Current Environmental Issues

The Commission's EA will address the environmental concerns that have been and will be identified by the FERC staff, interveners, and by concerned resource agencies and individuals. Subject to the condition noted under *Comment Procedures*, the EA will address the entire 155 miles of the Empire Pipeline. In addition, the EA will address the potential environmental impact of the alternatives that have been proposed by NFG and CNG. The following issues have been identified for consideration in the EA:

Cultural Resources
- —Effect of the project on properties listed or eligible for listing on the National Register of Historic Places.

Biological Resources
- —Impact of the project on threatened and endangered species.
- —Impact on wetlands and fisheries.
- —Habitat alteration.

Land Use
- —Utilization of existing right-of-way.
- —Consistency with approved coastal zone management plans.
- —Impact of the facilities at the point of importation on land use and aesthetics.

Alternatives
- —Alternative import points and route variations to avoid environmentally sensitive areas.
- —Filed alternatives to the Empire proposal.
- —Staff-developed system alternatives.
- —An Empire Pipeline border crossing at Lewiston, NY near Tennessee's Niagara Spur right-of-way.

Comment Procedures

Comments from Federal, state, and local agencies and the public are requested to help identify significant issues or concerns related to the proposed action, to determine the scope of issues that need to be analyzed, and to identify and eliminate from detailed review the issues which are not significant. All comments on specific environmental issues should contain supporting documentation or rationale.

If no significant issues are raised concerning Empire State Pipeline facilities and the cogeneration facilities associated with these facilities, which are mostly nonjurisdictional, and the facilities have been approved or are under environmental review at the state or local level, the Commission staff intends to rely on such analyses in order to take advantage of existing data and not duplicate effort. However, in this case, the review would still address the potential effects on federally listed or proposed threatened and endangered species, cultural resources, and consistency with approved coastal zone management plans.

Comments should be submitted on or before *January 9, 1991*, reference Docket Nos. CP90-316-000, *et al.* and should be addressed to the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. A copy of the comments should also be sent to Mr. Howard Wheeler, Project Manager, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., room 7312, Washington, DC 20426.

The EA will be based on the FERC staff's independent analysis of the proposal and together with the comments received will comprise part of the record to be considered by the Commission in this proceeding.

The EA may be offered as evidentiary material if an evidentiary hearing is held in this proceeding. In the event that an evidentiary hearing is held, anyone not previously a party to this proceeding and wishing to present evidence on environmental or other matters must first file with the Commission a motion to intervene pursuant to Rule 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.214).

Linwood A. Watson, Jr.,
Acting Secretary.

TABLE 1.—SUMMARY OF PROPOSED PIPELINE FACILITIES

Proposed facilities	Pipe diameter (inches)	Approximate length (miles)	State	County
Empire:				
Docket Nos. CP90-316-000 and CP90-317-000	24	[1]	NY	Erie.
Related nonjurisdictional facilities	24	155	NY	Erie, Niagara, Genesee, Monroe, Ontario, Wayne, Cayuga, Onondaga, Oswego.
Great Lakes (Docket No. CP90-1389-000):				
Loop 1	36	9.2	MI	Saginaw, Genesee.
Loop 2	36	6.8	MI	St. Clair, Macomb.
NFG (Docket No. CP90-854-001):				
Line XM5-1	24	3.24	NY	Niagara.
Line XM5-2	16	2.22	NY	Erie.

[1] Border facilities consisting of a short section of pipeline, valves, pig launcher, and a meter station to be used for the importation of natural gas.

TABLE 2—PROPOSED ALTERNATIVES TO THE EMPIRE STATE FACILITIES

Proposed facilities	Pipe diameter (inches)	Approximate length (miles)	State	County
NFG (would replace the westernmost 32 miles of the Empire proposal—however, as stated in this notice, NFG no longer proposes this alternative):				
Docket Nos. CP90-967-000 and CP90-968-000	24	([1])	NY	Erie.
Docket No. CP90-854-000, Line XM-5 (new)	24	9.9	NY	Niagara, Erie.
Docket No. CP90-920-000, Line XM-6 (new)	24	5.0	NY	Erie.

TABLE 2—PROPOSED ALTERNATIVES TO THE EMPIRE STATE FACILITIES—Continued

Proposed facilities	Pipe diameter (inches)	Approximate length (miles)	State	County
Line XM-7 (new)	24	7.6	NY	Niagara.
CNG (would replace the easternmost 122 miles of the Empire proposal):				
Docket No. CP90-1989-000, TL-478 (parallel to Niagara Spur)	24	17.7	NY	Erie.
TL-456 (looping)	20	28.4	NY	Erie, Wyoming.
TL-453 (new)	24	16.1	PA	Potter.
			NY	Steuben.
TL-475, Extension 3 (looping)	30	6.5	NY	Chemung.
TL-Syracuse Compressor Station (existing metering site)		4,390 hp	NY	Onondaga.
Genesee Compressor Station (new)		4,500 hp	NY	Genesee.

[1] Border facilities consisting of 24-inch-diameter pipeline at the international border to be used for the importation of gas.

[Docket No. CP89-1281-006]

Natural Gas Pipeline Company of America; Changes in FERC Gas Tariff

December 6, 1990.

Take notice that on November 30, 1990, Natural Gas Pipeline Company of America (Natural) tendered for filing tariff sheets to be a part of its FERC Gas Tariff, Third Revised Volume No. 1 and First Revised Volume No. 1A, to be effective December 1, 1990.

Natural states that the tariff sheets are submitted in compliance with the Commission's order issued November 19, 1990, at the Docket Nos. CP89-1281-000 and TA90-1-26-000. The order authorized Natural to implement a Gas Inventory Demand Charge tariff provision and other tariff changes effective December 1, 1990.

Natural requested waiver of the Commission's Regulations to the extent necessary to permit the tariff sheets to become effective December 1, 1990.

Natural notes copy of the filing is being mailed to Natural's jurisdictional customers, interested state regulatory agencies, and all parties set out on the official service lists at Docket Nos. CP89-1281-000 and TA90-1-26-000.

Any person desiring to protest said filing should file a protect with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with rules 214 and 211 of the Commission's Rules of Practice and Procedure (18 CFR 385.214, 385.211 (1990). All such protests should be filed on or before December 13, 1990. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Persons that are already parties to this proceeding need not file a motion to intervene in this matter. Copies of this filing are on file with the Commission and are available for public inspection.

Linwood A. Watson, Jr.,

Acting Secretary.

[FR Doc. 90-29282 Filed 12-13-90; 8:45 am]

BILLING CODE 6717-01-M

Office of Fossil Energy

[FE Docket No. 90-102-NG]

CanStates Petroleum Marketing; Application to Import Natural Gas From Canada

AGENCY: Office of Fossil Energy, Department of Energy.

ACTION: Application for blanket authorization to import natural gas from Canada.

SUMMARY: The Office of Fossil Energy of the Department of Energy (DOE) gives notice of receipt of an application filed on November 28, 1990, and amended December 3, 1990, by CanStates Petroleum Marketing (CanStates), for blanket authority to import up to 180 Bcf of Canadian natural gas over a two-year period beginning on the date of the first delivery. CanStates intends to utilize existing pipeline facilities for the transportation of the proposed imports and states that it will notify DOE of the date of first delivery and submit quarterly reports detailing each transaction. CanStates also requests that an import authorization be granted on an expedited basis.

The application was filed under section 3 of the Natural Gas Act and DOE Delegation Order Nos. 0204-111 and 0204-127. Protests, motions to intervene, notices of intervention and written comments are invited.

DATES: Protests, motions to intervene, or notices of intervention, as applicable, requests for additional procedures and written comments are to be filed at the address listed below no later than 4:30 p.m., e.s.t., January 14, 1991.

ADDRESSES: Office of Fuels Programs, Fossil Energy, U.S. Department of Energy, Forrestal Building, room 3F-056, FE-50, 1000 Independence Avenue SW., Washington, DC 20585.

FOR FURTHER INFORMATION CONTACT:

Thomas Dukes, Office of Fuels Programs, Fossil Energy, U.S. Department of Energy, Forrestal Building, room 3F-056, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586-9590.

Lot Cooke, Natural Gas and Mineral Leasing, Office of General Counsel, U.S. Department of Energy, Forrestal Building, room 6E-042, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586-0503.

SUPPLEMENTARY INFORMATION:

CanStates is a partnership formed under the laws of the State of Michigan between Rankin Petroleum, Inc., and Polysar Hydrocarbons, Inc., both Michigan Corporations, with its principal place of business in Port Huron, Michigan. CanStates is engaged in the business of purchasing, marketing and reselling hydrocarbons, including natural gas. Under the instant proposal, CanStates intends to purchase up to 250,000 Mcf per day of natural gas from various Canadian suppliers for resale to local distribution companies and other end-users in the U.S. under contracts of two years or less. In support of its application, CanStates states that the proposed blanket import will provide it the opportunity to bring competitively priced Canadian gas supplies to U.S. markets for the benefit of U.S. customers.

The decision on the application for import authority will be made consistent with DOE's natural gas import policy guidelines, under which the competitiveness of an import arrangement in the markets served is the primary consideration in determining whether it is in the public interest (49 FR 6684, February 22, 1984). Parties that may oppose this application should

comment in their responses on the issue of competitiveness as set forth in the policy guidelines for the requested import authority. The applicant asserts that imports made under this requested arrangement will be competitive. Parties opposing the arrangement bear the burden of overcoming the assertion.

All parties should be aware that DOE may permit the import of gas at any entry point on the international border where existing pipeline facilities are located and that a total term volume may be designated, rather than a daily or annual limit, in order to provide the applicant with maximum flexibility of operation. With respect to CanStates' request for expedited treatment of its application, no decision will be made until all responses of this notice have been received and evaluated.

NEPA Compliance

The National Environmental Policy Act (NEPA), 42 U.S.C. 4321 *et seq.*, requires DOE to give appropriate consideration to the environmental effects of its proposed actions. No final decision will be issued in this proceeding until DOE has met its NEPA responsibilities.

Public Comment Procedures

In response to this notice, any person may file a protest, motion to intervene or notice of intervention, as applicable, and written comments. Any person wishing to become a party to the proceeding and to have the written comments considered as the basis for any decision on the application must however, file a motion to intervene or notice of intervention, as applicable. The filing of a protest with respect to this application will not serve to make the protestant a party to the proceeding, although protests and comments received from persons who are not parties will be considered in determining the appropriate action to be taken on the application. All protests, motions to intervene, notices on intervention, and written comments must meet the requirements that are specified by the regulations in 10 CFR part 590. Protests, motions to intervene, notices of intervention, requests for additional procedures, and written comments should be filed with the Office of Fuels Programs at the above address.

It is intended that a decisional record will be developed on the application through responses to this notice by parties, including the parties' written comments and replies thereto. Additional procedures will be used as necessary to achieve a complete understanding of facts and issues. A party seeking intervention may request that additional procedures be provided, such as additional written comments, an oral presentation, a conference, or trial-type hearing. Any request to file additional written comments should explain why they are necessary. Any request for an oral presentation should identify the substantial question of fact, law, or policy at issue, show that it is material and relevant to a decision in the proceeding, and demonstrate why an oral presentation is needed. Any request for a conference should demonstrate why the conference would materially advance the proceeding. Any request for a trial-type hearing must show that there are factual issues genuinely in dispute that are relevant and material to a decision and that a trial-type hearing is necessary for a full and true disclosure of the facts.

If an additional procedure is scheduled, a notice will be provided to all parties. If no party requests additional procedures, a final opinion and order may be issued based on the official record, including the application and responses filed by parties pursuant to this notice, in accordance with 10 CFR 590.316.

A copy of CanStates' application is available for inspection and copying in the Office of Fuels Programs Docket room, 3F–056, at the above address. The docket room is open between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

Issued in Washington, DC, December 10, 1990.

Clifford P. Tomaszewski,

Acting Deputy Assistant Secretary for Fuels Programs, Office of Fossil Energy.

[FR Doc. 90–29303 Filed 12–13–90; 8:45 am]

BILLING CODE 6450–01–M

[FE Docket No. 90–97–NG]

City of Warroad, MN; Application to Import Natural Gas from Canada

AGENCY: Office of Fossil Energy, Department of Energy.

ACTION: Notice of application to import natural gas from Canada.

SUMMARY: The Office of Fossil Energy (FE) of the Department of Energy (DOE) gives notice of receipt on November 13, 1990, of an application filed by the City of Warroad, Minnesota (Warroad) to import from Canada up to 550 MMcf of natural gas annually (365 MMcf on a firm basis and 185 MMcf for overrun supplies) gas from the date on which gas flows under the unbundling of Inter-City Minnesota Pipelines Ltd. (Inter-City) sales and transportation service through October 31, 1995. The gas will be imported at a point on the international border near Sprague, Manitoba. Existing facilities would be used for the importation and transportation of the proposed imports.

The application was filed under section 3 of the Natural Gas Act and DOE Delegation Order Nos. 0204–111 and 0204–127. Protests, motions to intervene, notices of intervention, and written comments are invited.

DATES: Protests, motions to intervene or notices of intervention, as applicable, requests for additional procedures, and written comments are to be filed at the address listed below no later than 4:30 p.m., e.s.t., January 14, 1991.

ADDRESSES: Office of Fuels Programs, Fossil Energy, U.S. Department of Energy, Forrestal Building, Room 3F–056, FE–50, 1000 Independence Avenue, SW., Washington, DC 20585.

FOR FURTHER INFORMATION CONTACT:

Linda Silverman, Office of Fuels Programs, Fossil Energy, U.S. Department of Energy, Forrestal Building, Room 3H–087, 1000 Independence Avenue, SW, Washington, DC 20585 (202) 586–7249

Diane Stubbs, Natural Gas and Mineral Leasing, Office of General Counsel, U.S. Department of Energy, Forrestal Building, Room 6E–042, 1000 Independence Avenue, SW., Washington, DC 20585 (202) 586–6667

SUPPLEMENTARY INFORMATION: Warroad, which is a municipal corporation of the State of Minnesota, owns and operates gas distribution facilities. It presently purchases all of its gas supply from Inter-City pursuant to a gas purchase contract dated November 1, 1970. Warroad is filing this application for authority to import natural gas to replace the authorization previously granted to Inter-City [1], which is in the process of unbundling its gas sales arrangements to become solely a transporter rather than a reseller of gas.

Warroad has entered into a precedent agreement to purchase gas with Western Gas Marketing Limited (WGML), a subsidiary of TransCanada Pipelines Limited (TransCanada). The agreement requires WGML to supply Warroad with a daily firm contract quantity of 1000 Mcf per day together with overrun volumes on an "if and as available" basis. The contract will become effective on the date that all governmental approvals for sales and

[1] The Federal Power Commission granted Minnesota Pipelines authority to import natural gas on August 10, 1970 (44 FPC 262), as amended 50 FPC 868 (1973), 54 FPC 191 (1975), 54 FPC 391 (1975), 59 FPC 1462 (1977) and 1 ERA paragraph 70,555 (1983).

transportation are received and will terminate on October 31, 1995.

The price to be paid by Warroad for the gas consists of a demand and commodity charge. The demand charge will be the sum of the National Energy Board of Canada's (NEB) approved monthly demand toll per Mcf for transportation on TransCanada's system and the demand charge equivalent per Mcf for transportation by NOVA Corporation of Alberta. The agreement imposes a minimum bill equal to the total monthly demand charge.

The initial commodity charge under the agreement will be $1.99/MMBtu, subject to annual renegotiation. If renegotiation, other than renegotiation concerning the price for overrun gas, does not result in resolution, the agreement provides for arbitration to determine whether the price of the gas should be modified in order to achieve a price that is competitive with the price of comparable supplies available to Warroad and with prices paid by purchasers in other North American gas markets for gas service from Alberta supplies. The total charge for deliveries of overrun gas are to be agreed upon from time to time.

Warroad also has entered into a transportation agreement with ICG Transmission Holdings Ltd. (ICG) to transport the gas from the interconnection with TransCanada at Spruce, Manitoba, to a point on the international border near Sprague, Manitoba. Inter-City will transport the gas from its interconnection with ICG at Sprague to Warroad.

The decision on the application for import authority will be made consistent with DOE's natural gas import policy guidelines, under which the competitiveness of an import arrangement in the markets served is the primary consideration in determining whether it is in the public interest (49 FR 6684, February 22, 1984). Parties that may oppose this application should comment in their responses on the issues of competitiveness as set forth in the policy guidelines. The applicant asserts that imports made under this requested arrangement would be competitive. Parties opposing the arrangement bear the burden of overcoming this assertion.

NEPA Compliance

The National Environmental Policy Act (NEPA), 42 U.S.C. 4321, *et seq.*, requires DOE to give appropriate consideration to the environmental effects of its proposed actions. No final decision will be issued in this proceeding until DOE has met its NEPA responsibilities.

Public Comment Procedures

In response to this notice, any person may file a protest, motion to intervene or notice of intervention, as applicable, and written comments. Any person wishing to become a party to the proceeding and to have the written comments considered as the basis for any decision on the application must, however, file a motion to intervene or notice of intervention, as applicable. The filing of a protest with respect to this application will not serve to make the protestant a party to the proceeding, although protests and comments received from persons who are not parties will be considered in determining the appropriate action to be taken on the application. All protests, motions to intervene, notices of intervention, and written comments must meet the requirements that are specified by the regulations in 10 CFR Part 590. Protests, motions to intervene, notices of intervention, requests for additional procedures, and written comments should be filed with the Office of Fuels Programs at the above address.

It is intended that a decisional record will be developed on the application through responses to this notice by parties, including the parties' written comments and replies thereto. Additional procedures will be used as necessary to achieve a complete understanding of the facts and issues. A party seeking intervention may request that additional procedures be provided, such as additional written comments, an oral presentation, a conference, or trial-type hearing. Any request to file additional written comments should explain why they are necessary. Any request for an oral presentation should identify the substantial questions of fact, law, or policy at issue, show that it is material and relevant to a decision in the proceeding, and demonstrate why an oral presentation is needed. Any request for a conference should demonstrate why the conference would materially advance the proceeding. Any request for a trial-type hearing must show that there are factual issues genuinely in dispute that are relevant and material to a decision and that a trial-type hearing is necessary for a full and true disclosure of the facts.

If an additional procedure is scheduled, a notice will be provided to all parties. If no party requests additional procedures, a final opinion and order may be issued based on the official record, including the application and responses filed by parties pursuant to this notice, in accordance with 10 CFR section 590.316.

A copy of Warroad's application is available for inspection and copying in the Office of Fuels Programs docket Room, 3F-056, at the above address. The docket room is open between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, except Federal Holidays.

Issued in Washington, DC on December 6, 1990.

Clifford P. Tomaszewski,

Acting Deputy Assistant Secretary for Fuels Programs, Office of Fossil Energy.

[FR Doc. 90-29301 Filed 12-13-90; 8:45 am]

BILLING CODE 6450-01-M

Office of Hearing and Appeals

Cases Filed During the Week of September 21 through September 28, 1990

During the Week of September 21 through September 28, 1990, the appeals and applications for exception or other relief listed in the Appendix to this Notice were filed with the Office of Hearings and Appeals of the Department of Energy. Submissions inadvertently omitted from earlier lists have also been included.

Under DOE procedural regulations, 10 CFR part 205, any person who will be aggrieved by the DOE action sought in these cases may file written comments on the application within ten days of service of notice, as prescribed in the procedural regulations. For purposes of the regulations, the date of service of notice is deemed to be the date of publication of this Notice or the date of receipt by an aggrieved person of actual notice, whichever occurs first. All such comments shall be filed with the Office of Hearings and Appeals, Department of Energy, Washington, DC 20585.

Dated: December 10, 1990.

George B. Breznay,

Director, Office of Hearings and Appeals.

LIST OF CASES RECEIVED BY THE OFFICE OF HEARINGS AND APPEALS

[Week of September 21 through September 28, 1990]

Date	Name and location of applicant	Case No.	Type of submission
July 21, 1990	Economic Regulatory Administration, Washington, D.C.	LRZ-0009	Interlocutory Order. If granted: The Economic Regulatory Administration would receive documents and file a supplemental Response to the Statement of Objections filed by Robert J. Martin *et al.* (Case No. LRO-0001).
September 28, 1990.	Erickson Refining Corporation, Washington, D.C.	LEF-0023	Implementation of Special Refund Procedures. If granted: The Office of Hearings and Appeals would implement Special Refund Procedures pursuant to 10 C.F.R., Part 205, Subpart V, in connection with the May 7, 1990 Settlement Agreement that the DOE entered into with Erickson Refining Corporation.
September 28 1990.	Kern Oil & Refining and Larry D. Delpit, Washington, D.C..	LEF-0022	Implementation of Special Refund Procedures. If granted: The Office of Hearings and Appeals would implement Special Refund Procedures pursuant to 10 C.F.R., Part 205, Subpart V, in connection with the April 19, 1990 Consent Order that the DOE entered into with Kern Oil & Refinery and Larry D. Delpit.
September 26, 1990.	Texaco/Mac's Texaco, Ballwin, Missouri	RR321-19	Request for Modification/Rescission in the Texaco Refund Proceeding. If granted: The September 12, 1990 Decision and Order (Case Nos. RF321-5250 and RF321-7220) issued to Mac's Texaco would be modified regarding the firm's application for refund in the Texaco refund proceeding.

REFUND APPLICATIONS RECEIVED

Date received	Name of refund proceeding/name of refund application	Case No.
9/21/90 thru 09/28/90	Crude oil refund, applications received	RF272-81886 thru RF272-82203
9/21/90 thru 09/28/90	Texaco refund, applications received	RF321-9706 thru RF321-9900
9/21/90 thru 09/28/90	Gulf oil refund, applications received	RF300-12280 thru RF300-12456
9/24/90	Williamson's ARCO	RF304-12024
9/24/90	Alaimo Fuel Co.	RF323-26
9/24/90	C.W.&P.J. Brown Oil	RF313-323
9/24/90	Perimeter Petroleum	RF313-324
9/24/90	B.E.&H. Oil	RF313-325
9/24/90	Lawley Oil Company	RF313-326
9/24/90	Gene's ARCO #1	RF304-12025
9/24/90	Dan's Shell	RF315-10051
9/24/90	Pine Brook Service Centers	RF315-10052
9/24/90	Lopilato & Chioccariello	RF315-10053
9/25/90	Hometown, Inc.	RF304-12026
9/25/90	Shannon Oil Company, Inc.	RF304-12027
9/25/90	Keplers Fuel Company	RF304-12028
9/25/90	C&L Super Shell	RF315-10054
9/26/90	Universe Oil	RF324-5
9/26/90	Cedar Lane Corp.	RF324-6
9/26/90	Clarks Petroleum Service, Inc.	RF324-7
9/26/90	Schmitt Sales, Inc.	RF324-8
9/26/90	Arrow Marts, Inc.	RF32400-9
9/26/90	Griffith Oil	RF324-10
9/26/90	F.P. Young Co.	RF324-11
9/26/90	Highway Petroleum Sales	RF324-12
9/26/90	Clinard Oil Co., Inc.	RF324-13
9/26/90	Etheridge Oil Co., Inc.	RF324-14
9/26/90	Blue Flame Fuels, Inc.	RF324-15
9/26/90	Mooring Oil Co.	RF324-16
9/26/90	Dilmar Oil Co., Inc.	RF324-17
9/26/90	Gorin & Lobb Oil Co., Inc.	RF324-18
9/26/90	O'Clan Oil Company	RF304-12029
9/28/90	6 Mile Wyoming Shell	RF315-10055
9/28/90	6 Mile Wyoming Shell	RF315-10056

[FR Doc. 90-29298 Filed 12-13-90; 8:45 am]

BILLING CODE 6450-01-M

Office of Hearings and Appeals

Cases Filed During the Week of September 28 Through October 5, 1990

During the week of September 28 through October 5, 1990, the appeals and applications for exception or other relief listed in the appendix to this Notice were filed with the Office of Hearings and Appeals of the Department of Energy.

Under DOE procedural regulations, 10 CFR part 205, any person who will be aggrieved by the DOE action sought in these cases may file written comments on the application within ten days of service of notice, as prescribed in the procedural regulations. For purposes of the regulations, the date of service of notice is deemed to be the date of publication of this Notice or the date of receipt by an aggrieved person of actual notice, whichever occurs first. All such comments shall be filed with the Office of Hearings and Appeals, Department of Energy, Washington, DC 20585.

Dated: December 10, 1990.

George B. Breznay,

Director, Office of Hearings and Appeals.

List of Cases Received by the Office of Hearings and Appeals

[Week of September 28 through October 5, 1990]

Date	Name and location of applicant	Case No.	Type of submission
October 1, 1990	Surface Mining Research Library, Charleston, WV	LFA-0072	Appeal of an information request denial. If granted: The August 27, 1990 Freedom of Information Request Denial issued by the Office of Placement and Administration would be rescinded and the Surface Mining Research Library would receive access to site plans and alternative site plans for proposals submitted by CRSS, Inc. and Westmoreland Energy/Energotechnology Corporation.
October 1, 1990	Texaco/Dixon's Texaco, Pine Bluff, AR	RR321-21	Request for modification/rescission in the Texaco Refund Proceeding. If granted: The August 28, 1990 Decision and Order (Case Nos. RF321-976 and RF321-8420) issued to Dixon's Texaco would be modified regarding the firm's application for refund submitted in the Texaco refund proceeding.
October 10, 1990	Texaco/Tumwater Texaco, Olympia, WA	RR321-20	Request for modification/rescission in the Texaco Refund Proceeding. If granted: The September 10, 1990 Decision and Order (Case Nos. RF321-3872 and RF321-6087) issued to Tumwater Texaco would be modified regarding the firm's application for refund submitted in the Texaco refund proceeding.
October 2, 1990	Bill J. Graham, Midland, TX	LEF-0024	Implementation of special refund procedures. If granted: The Office of Hearings and Appeals would implement Special Refund Procedures pursuant to 10 CFR part 205, Subpart V, in connection with the March 28, 1990 Remedial Order issued to Bill J. Graham (Case No. DRO-0216).
October 2, 1990	Texaco/Baker's Texaco, Baton Rouge, LA	RR321-22	Request for modification/rescission in the Texaco refund proceeding. If granted: The Septemter 13, 1990 Decision and Order (Case Nos. RF321-4248 and RF321-4567) would be modified regarding the firm's application for refund submitted in the Texaco refund proceeding.

Refund Applications Received

[Week of September 28 to October 5, 1990]

9/28/90 thru 10/5/90	Gulf oil refund, applications received	RF300-12457 thru RF300-12619
9/28/90 thru 10/5/90	Crude oil refund, applications received	RF272-82204 thru RF272-82408
9/28/90 thru 10/5/90	Texaco refund, applications received	RF321-9901 thru RF321-9988
10/02/90	Robert W. McGee, Inc.	RF304-12030
10/02/90	Dodge County Highway Dept.	RA272-31
10/02/90	Reid Petroleum Corporation	RF324-19
10/04/90	Mills Service Station	RF324-20
10/04/90	New Lakewood Truck Stop	RF324-21
10/04/90	Terrell Bait Shop	RF324-22
10/04/90	Eddie's Service Station	RF324-23
10/04/90	Wood's Service Station	RF324-24
10/04/90	Gib's Service	RF324-25
10/04/90	Sharlow's Service Station	RF324-26
10/04/90	Asaro's Service Station	RF324-27
10/04/90	Davis Oil Co.	RF324-28
10/04/90	Jessie Watts' Service	RF324-29
10/04/90	Mull's Service Station	RF324-30
10/04/90	Pennell's Service	RF324-31
10/04/90	Bryant's Market	RF324-32
10/04/90	Andrew Gulledge	RF324-33
10/04/90	Trexler Grocery	RF324-34
10/04/90	901 Gran Prix Fuels	RF324-35
10/04/90	Surplus & Salvage	RF324-36
10/04/90	Harrington Service Station	RF324-37
10/04/90	Dwight Elmore	RF324-38
10/04/90	Wooten's Grocery	RF324-39
10/04/90	Coward's Service Station	RF324-40
10/04/90	Tommy's Market	RF324-41
10/04/90	Aldridge & Love Service	RF324-42
10/04/90	Sam's Hi-Val-U	RF324-43
10/04/90	Little Farm Market	RF324-44
10/04/90	V-Point Service	RF324-45
10/04/90	Brooks Hi-Val-U	RF324-46
10/04/90	Solon Prevette	RF324-47
10/04/90	Pine Ridge Grocery	RF324-48
10/04/90	Stan's Shell Service	RF315-10057
10/05/90	Krupa Oil Co.	RF323-27
10/05/90	Carlos R. Leffler, Inc.	RF325-2

[FR Doc. 90-29299 Filed 12-13-90; 8:45 am]

BILLING CODE 6450-01-M

ENVIRONMENTAL PROTECTION AGENCY

[FRL-3859-6]

Agency Information Collection Activities Under OMB Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), this notice announces that the Information Collection Request (ICR) abstracted below has been forwarded to the Office of Management and Budget (OMB) for review and comment. The ICR describes the nature of the information collection and its expected cost and burden; where appropriate, it includes the actual data collection instrument.

DATES: Comments must be submitted on or before January 14, 1991.

FOR FURTHER INFORMATION CONTACT: Sandy Farmer at EPA, (202) 382-2740.

SUPPLEMENTARY INFORMATION:

Office of Solid Waste and Emergency Response

Title: Trade Secret Claims for Community Right-to-Know and Emergency Planning Information (EPA) ICR# 1428.02; OMB# 2050-0078). This ICR requests renewal of the existing clearance.

Abstract: Section 322 of the Emergency Planning and Community Right-to-Know Act (EPCRA) allows a facility to withhold the specific chemical identity from the EPCRA reports if the facility asserts a claim of trade secrecy for that chemical identity. Facilities requesting trade secrecy protection must submit to EPA, in conjunction with their EPCRA report, an explanation showing that their claim for the chemical identity meets the four statutory criteria for trade secrecy enumerated in section 322(b)(1)-(4):

- The facility has not disclosed the chemical identity to any other person not bound by a confidentiality agreement (except for certain Federal, State or local government officials);
- The information is not required to be disclosed or otherwise made available to the public under any other Federal or State law;
- Disclosure of the information is likely to cause substantial harm to the competitive position of the facility; and
- The chemical identity is not readily discoverable through reverse engineering.

A standardized claim substantiation form was developed to help submitters more easily determine if they have sufficient bases to make the trade secrecy claim, and to ensure that all submissions are evaluated on the basis of comparable information.

Section 322(d) of EPCRA also provides for a public petition process to request the disclosure of the chemical identities claimed as trade secret. The necessary elements for a petition are described in the information collection.

Burden Statement: The estimated public reporting burden for this collection of information is 38 hours per facility to prepare a trade secrecy substantiation. This estimate includes time to read the instructions, gather existing information, and prepare and submit the form. The estimated burden for the public petition process is 10 hours per petitioner and includes time to identify the facility, chemical and submission the petitioner is concerned with.

Respondents: Owners/operators of fixed facilities required to report to State and local authorities, and EPA the presence, use and release of extremely hazardous substances (described in sections 302 and 304) and hazardous and toxic chemicals (described in sections 311, 312 and 313).

Estimated no. of Respondents: 797 (787 facilities, 10 petitioners).

Estimated Total Annual Burden on Respondents: 29,831 hours.

Frequency of Collection: On occasion, when needed to protect the chemical identity of an EPCRA submission.

Send comments regarding the burden estimate, or any other aspect of this information collection, including suggestions for reducing the burden, to:

Sandy Farmer, U.S. Environmental Protection Agency, Information Policy Branch (PM-223), 401 M Street, SW., Washington, DC 20460

and

Tim Hunt, Office of Management and Budget, Office of Information and Regulatory Affairs, 725 17th Street, NW., Washington, DC 20530

Dated: December 7, 1990.

Paul Lapsley,

Director, Regulatory Management Division.

[FR Doc. 90-29331 Filed 12-13-90; 8:45 am]

BILLING CODE 6560-50-M

[ER-FRL-3869-8]

Environmental Impact Statements and Regulations; Availability of EPA Comments

Availability of EPA comments prepared November 26, 1990 through November 30, 1990 pursuant to the Environmental Review Process (ERP), under section 309 of the Clean Air Act and section 102(2)(c) of the National Environmental Policy Act as amended. Requests for copies of EPA comments can be directed to the Office of Federal Activities at (202) 382-5076.

An explanation of the ratings assigned to draft environmental impact statements (EISs) was published in FR dated April 13, 1990 (55 FR 15969).

Draft EISs

ERP No. D-BLM-K61111-CA Rating EC2, South Fork Eel Wild and Scenic River Management Plan, Implementation, Arcata Resource Area, Ukiah District, Mendocino County, CA.

Summary: EPA expressed environmental concerns with two alternatives and the proposed action due to potential adverse impacts to water quality, anadromous fisheries, and threatened and endangered species from timber harvesting activities, the use of the herbicides, and other multiple use actions on lands adjacent to the Eel Wild and Scenic River. EPA also expressed concerns with the impacts of prescribed burns on air quality in designated wilderness areas.

ERP No. D-USN-L11012-WA Rating EC2, Naval Station Puget Sound (NSPS) Sand Point Realignment to NSPS Everett, Implementation, City of Seattle, WA.

Summary: EPA has environmental concerns based on the potential degradation of the ambient air quality at Sand Point. Additional information and clarification is needed on quantification of project-related emissions and associated ambient impacts for both present and future conditions.

Final EISs

ERP No. F-BLM-J60007-MT

Bull Mountains Land Exchange, Federal Coal Lands for High Values Recreational and Wildlife Lands, Carbon County, MT.

Summary: EPA has no objections to the preferred alternative (A).

ERP No. F-BLM-J61062-WY

Grass Creek/Cody Resource Area Wilderness Designation, Suitability or

Nonsuitability, Owl Creek, Bobcat Draw Badlands, Sheep Mountain, Red Butte and McCullough Peaks WSAs, Several Counties, WY.

Summary: EPA has no objections to the proposed actions.

ERP No. F-MMS-K67007-00

Hawaiian Archipelago and Johnston Island Exclusive Economic Zones, Marine Mineral Sale (Non-Oil and Gas Minerals), Leasing, Possible 404 Permit, Hawaii and Pacific.

Summary: Review of the final EIS was not deemed necessary. No formal letter was sent to the agency.

ERP No. F-SCS-K36095-CA

Upper Penitencia Creek Watershed Flood Damage Reduction Plan, Funding, Implementation and 404 Permit, Cities of San Jose and Milpitas, Santa Clara County, CA.

Summary: Review of the final EIS was not deemed necessary. No formal letter was sent to the agency.

ERP No. F-USN-K11039-CA

San Diego Navy Broadway Complex Redevelopment, Implementation, CA.

Summary: Review of the final EIS has been completed and the project found to be satisfactory. No formal letter was sent to the agency.

ERP No. FS-AFS-K61092-CA

MT. Shasta Ski Area Development Selecting National Forest System Land for Alpine Skiing, Implementation, Siskiyou County, CA.

Summary: EPA expressed continuing concerns with indirect and cumulative impacts to groundwater, air quality and noise levels. EPA requested that the Forest Service reconsider the selection of a preferred alternative to one which would be more protective of wetlands, riparian areas and air quality.

ERP No. FS-NOA-K90007-00

Pacific Coast Groundfish Fishery Management Plan (FMP), Approval and Implementation of FMP Amendment No. 4, CA, OR and WA.

Summary: Review of the final EIS was not deemed necessary. No formal letter was sent to the agency.

Dated: December 11, 1990.

William D. Dickerson,

Deputy Director, Office of Federal Activities.

[FR Doc. 90-29377 Filed 12-13-90; 8:45 am]

BILLING CODE 6560-50-M

[ER-FRL-3868-4]

Intent to Prepare an Environmental Impact Statement (EIS) on the Pulp Processing/rayon Manufacturing Facility Proposed by Formosa Plastics Corp., USA Near Wallace, LA in St. John the Baptist Parish

AGENCY: U.S. Environmental Protection Agency (EPA).

ACTION: Issuance of a new source National Pollutant Discharge Elimination System (NPDES) permit to Formosa Plastics Corporation, USA for the proposed pulp/rayon facility near Wallace, Louisiana.

PURPOSE: EPA has determined that the issuance of an NPDES permit to Formosa Plastics (PE4) to operate the proposed pulp/rayon facility represents a major Federal action that may significantly affect the quality of the human environment. Therefore, an EIS will be prepared to assess the potential environmental consequences of EPA's permit action.

FOR FURTHER INFORMATION OR TO BE PLACED ON THE PROJECT MAILING LIST CONTACT: Mr. Norm Thomas; Chief, Federal Activities Branch; U.S. EPA, Region VI (E-FF); 1445 Ross Avenue; Dallas, Texas 75202-2733. Telephone: (Commercial) 214-655-2260 or (FTS) 255-2260.

SUMMARY: The proposed facility will produce 1000 metric tons per day of rayon grade pulp. The raw materials will consist of hardwood chips and chemicals to convert the wood to pulp. The proposed acid bisulfite process will use the latest technology and state of the art equipment. Proposed facilities include the processing plant on approximately 1,740 acres and a docking facility on the Mississippi river for shipment of materials.

ALTERNATIVES: Alternatives available to EPA are to issue the NPDES permit for the project; to issue the NPDES permit for the project with certain modifications to minimize adverse impacts; or to deny the permit.

SCOPING: EPA encourages agency and public participation in the decisionmaking process on this proposed permit action. Federal, State and local agencies and the public are invited to participate in the process for determining the scope of issues to be addressed and for identifying the major issues related to the proposed action. A public meeting to receive input to this scoping process will be held at 7:00 p.m. on January 3, 1991 in the St. John the Baptist Parish Courthouse located on East 3rd Street in Edgard, Lousisiana.

ESTIMATED DATE OF DRAFT EIS RELEASE: July, 1991.

RESPONSIBLE OFFICIAL: Robert E. Layton Jr., P.E. Regional Administrator.

Dated: December 7, 1990.

Richard E. Sanderson,

Director, Office of Federal Activities.

[FR Doc. 90-29379 Filed 12-13-90; 8:45 am]

BILLING CODE 6560-50-M

[ER-FRL-3868-5]

Designation of an Ocean Dredged Material Disposal Site (ODMDS) Offshore Port Isabel, Texas; Intent to Prepare an Environmental Impact Statement (EIS)

AGENCY: U.S. Environmental Protection Agency, Region 6.

ACTION: Notice of Intent to prepare an EIS on the designation of an ODMDS offshore Port Isabel, Texas.

PURPOSE: In accordance with section 102 of the Marine Protection, Research and Sanctuaries Act of 1972 and 40 CFR 228 (Criteria for the Management of Disposal Sites for Ocean Dumping), the Environmental Protection Agency (EPA) will prepare a Draft Environmental Impact Statement (EIS) on the designation of an ODMDS offshore Port Isabel, Texas

FOR FURTHER INFORMATION AND TO BE PLACED ON THE PROJECT MAILING LIST CONTACT: Mr. Norm Thomas, Chief, Federal Activities Branch (6E-F), EPA, 1445 Ross Avenue; Dallas, Texas 75202-2733. Telephone: 214/655-2260 or FTS 255-2260.

SUMMARY: The Corps of Engineers (COE), Galveston District, proposes to enlarge the Brazos Island Harbor (BIH) Entrance Channel. The main channel and turning basin would be deepened and widened generating approximately 1,325,000 cubic yards of construction material to be discharged offshore. This proposal is called the BIH 42-Foot Project.

NEED FOR ACTION: The COE has requested that EPA designate an offshore disposal site for the one-time disposal of virgin construction material from the proposed BIH project when ocean disposal is the preferred disposal alternative. An EIS is required to provide the necessary information to evaluate alternatives and designate an ocean disposal site.

ALTERNATIVES: Alternatives to be considered in the Draft EIS include no action, upland disposal and ocean disposal.

SCOPING: A scoping meeting will not be held. However, EPA encourages Federal, state and local agencies as well as interested parties to identify significant issues to be addressed in the EIS at this time. Comments and concerns should be sent to Norm Thomas at the above address.

ESTIMATED DATE OF RELEASE: The Draft EIS should be available in February 1991.

RESPONSIBLE OFFICIAL: Mr. Robert E. Layton Jr., P.E. Regional Administrator.

Dated: December 7, 1990.

Richard E. Sanderson,

Director, Office of Federal Activities.

[FR Doc. 90-29378 Filed 12-13-90; 8:45 am]

BILLING CODE 6560-50-M

[ER-FRL-3869-7]

Environmental Impact Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 382-5073 or (202) 382-5075. Availability of Environmental Impact Statements iled December 03, 1990. Through December 07, 1990 Pursuant to 40 CFR 1506.9.

EIS No. 900315, FINAL EIS, AFS, WY, Little Bighorn River, Wild and Scenic River Study, National Wild and Scenic Rivers System, Designation, Bighorn National Forest, Sheridan County, WY, Due: January 14, 1991, Contact: Arthur Bauer (307) 672-0751. Publichsed FR 8-31-90. This final statement was inadvertently filed with EPA 8-23-90.

EIS No. 900446, DRAFT EIS, FHW, CA, I-880 Cypress Replacement, I-980 Interchange to I-80/I-580/I-880 Cypress Structure, Funding and Section 404 Permit, City of Oakland, Alameda County, CA, Due: January 28, 1991, Contact: C. Glenn Clinton (916) 551-1314.

EIS No. 900447, FINAL EIS, AFS, CO, Willow Mountain Area, Multiple-Use Management Projects, Implementation, Special Use Permit, Rio Grande National Forest, CO, Due: January 14, 1991, Contact: James Webb (719) 852-5941.

EIS No. 900448, SECOND DRAFT SUPPLE, COE, OR, Elk Creek Lake Project, Construction and Operation, Implementation, Rogue River, Jackson County, OR, Due: January 28, 1991, Contact: David Kurkoski (503) 326-6094.

EIS No. 900449, SECOND FINAL EIS, BLM, CO, UT, San Juan and San Miguel Planning Area Wilderness Recommendation, Designation or Nondesignation, Cahone Canyon, Cross Canyon, Dolores River Canyon, McKenna Peak, Menefee Mountain, Squaw/Papoose Canyons, Tabequache Creek and Weber Mountain WSAs', Montezuma, Dolores, San Miguel and Montrose Counties, CO and San Juan County, UT, Due: January 14, 1991, Contact: Allen Belt (303) 249-6047.

EIS No. 900450, DRAFT EIS, FHW, PA, Morgantown Connector Construction, I-176 between Pennsylvania Turnpike at relocated I-22, Funding, Berks County, PA, Due: January 28, 1991, Contact: Manuel A. Marks (717) 782-2222.

EIS No. 900451, FINAL EIS, COE, KY, Mayfield Creek Flood Damage Reduction Plan, Implementation, Graves, McCracken, Ballard and Carlisle Counties, KY Due: January 14, 1991, Contact: Richard Hite (901) 544-3857.

Amended Notices

EIS No. 90445, DRAFT EIS, FHW, OR, Salem-Dayton Highway/OR-221/ Wallace Road Widening, Orchard Heights Road to Oakcrest Drive, Funding, Section 404 Permit, Polk County, OR, Due: January 31, 1991, Contact: Al Steger (503) 399-5749. Published FR 12-07-90—EIS status correction and change of contact person.

Dated: December 11, 1990.

William D. Dickerson,

Deputy Director, Office of Federal Activities

[FR Doc. 90-29380 Filed 12-13-90; 8:45 am]

BILLING CODE 6560-50-M

FEDERAL COMMUNICATIONS COMMISSION

December 7, 1990.

Public Information Collection Requirement Submitted to Office of Management and Budget for Review

The Federal Communications Commission has submitted the following information collection requirement to OMB for review and clearance under the Paperwork Reduction Act of 1980 (44 U.S.C. 3507).

Copies of this submission may be purchased from the Commission's copy contractor, International Transcription Service, (202) 857-3800, 2100 M Street NW., suite 140, Washington, DC 20037. For further information on this submission contact Judy Boley, Federal Communications Commission, (202) 632-7513. Persons wishing to comment on this information collection should contact Jonas Neihardt, Office of Management and Budget, Room 3235 NEOB, Washington, DC 20503, (202) 395-3785.

OMB Number: 3060-0288.

Title: Section 78.33, Special Temporary Authority (Cable Television Relay Stations).

Action: Revision.

Respondents: Businesses or other for-profit (including small businesses).

Frequency of Response: On occasion.

Estimated Annual Burden: 125 responses; 4 hours average burden per response; 500 hours total annual burden.

Needs and Uses: Section 78.33 permits Cable Television Relay Service stations to file informal requests for special temporary authority to install and operate equipment in a manner different from that authorized in the station license. Special temporary authority may also be filed to conduct equipment, program, service and path tests. The data is used by FCC staff to assure that grant of temporary authority would not cause interference to established stations and meets Commission standards.

Federal Communications Commission.

Donna R. Searcy,

Secretary.

[FR Doc. 90-29376 Filed 12-13-90; 8:45 am]

BILLING CODE 6712-01-M

FEDERAL EMERGENCY MANAGEMENT AGENCY

Agency Information Collection Submitted to the Office of Management and Budget for Clearance

The Federal Emergency Management Agency (FEMA) has submitted to the Office of Management and Budget the following information collection package for clearance in accordance with the Paperwork Reduction Act (44 U.S.C. chapter 35).

Type: New Collection.

Title: Survey of Flood Victims Regarding the Usefulness of the Flood Recovery Handbook "Following a Flood: Steps to Recovery".

Abstract: A major aspect of reducing flood losses is to make the general public aware of the steps that they can take to make their homes less vulnerable to flood damage. A handbook has been drafted that will provide homeowners with information on how to clean up and repair a flooded house. Other topics covered include the usefulness of flood insurance; preparing for an imminent flood and for evacuation; financial assistance available; and ways that future flood

damage can be reduced by individuals and the community.

During the spring of 1991, copies of the draft flood recovery handbook "Following a Flood: Steps to Recovery" will be distributed to flood victims who show an interest in looking over the handbook and a willingness to participate in the survey. Distribution of the handbooks will be made at Red Cross disaster service facilities following a flood event. Eight hundred flood victims will be asked to read the handbook. Of the 800, 150 will be surveyed by telephone. A written survey will be included in each handbook to give those victims who are not included in the telephone survey a means of providing their feedback. The number of respondents for the written survey is estimated to be 228. Both the telephone and written survey forms will test the usefulness of the handbook to flood victims. The information will be used to determine (a) if the information in the handbook is presented well, and (b) what additional needs flood victims have that the handbook could meet. The results of the survey will be used to revise and publish the handbook.

Type of Respondents: Individuals or households.

Estimate of Total Annual Reporting and Recordkeeping Burden: 918 Hours.

Number of Respondents: Handbook Reviewers—800; Telephone Survey Respondents—150; Written Survey Respondents—228.

Estimated Average Burden Hours Per Response: Handbook Reviewers—65 minutes; Telephone Survey—10 minutes; Written Survey—7 minutes.

Frequency of Response: One-time.

Copies of the above information collection request and supporting documentation can be obtained by calling or writing the FEMA Clearance Officer, Linda Borror, (202) 646-2624, 500 C Street, SW., Washington, DC 20472.

Direct comments regarding the burden estimate or any aspect of this information collection, including suggestions for reducing this burden, to: the FEMA Clearance Officer at the above address; and to Gary Waxman, (202) 395-7340, Office of Management and Budget, 3235 New Executive Office Building, Washington, DC 20503 within four weeks of this notice.

Dated: December 4, 1990.

Wesley C. Moore,

Director, Office of Administrative Support.

[FR Doc. 89-29335 Filed 12-13-89; 8:45 am]

BILLING CODE 6718-01-M

[FEMA-884-DR]

Arizona; Major Disaster and Related Determinations

AGENCY: Federal Emergency Management Agency.

ACTION: Notice.

SUMMARY: This is a notice of the Presidential declaration of a major disaster for the State of Arizona (FEMA-884-DR), dated December 6, 1990, and related determinations.

DATES: December 6, 1990.

FOR FURTHER INFORMATION CONTACT: Neva K. Elliott, Disaster Assistance Programs, Federal Emergency Management Agency, Washington, DC 20472 (202) 646-3614.

Notice

Notice is hereby given that, in a letter dated December 6, 1990, the President declared a major disaster under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 *et seq.*, Public Law 93-288, as amended by Public Law 100-707), as follows:

I have determined that the damage in certain areas of the State of Arizona, resulting from severe storms and flooding on July 8 through September 14, 1990, is of sufficient severity and magnitude to warrant a major disaster declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act ("the Stafford Act"). I, therefore, declare that such a major disaster exists in the State of Arizona.

In order to provide Federal assistance, you are hereby authorized to allocate from funds available for these purposes, such amounts as you find necessary for Federal disaster assistance and administrative expenses.

You are authorized to provide Public Assistance in the designated areas. Consistent with the requirement that Federal assistance be supplemental, any Federal funds provided under the Stafford Act for Public Assistance will be limited to 75 percent of the total eligible costs.

The time period prescribed for the implementation of section 310(a), Priority to Certain Applications for Public Facility and Public Housing Assistance, shall be for a period not to exceed six months after the date of this declaration.

Notice is hereby given that pursuant to the authority vested in the Director of the Federal Emergency Management Agency under Executive Order 12148, I hereby appoint William M. Medigovich of the Federal Emergency Management Agency to act as the Federal Coordinating Officer for this declared disaster.

I do hereby determine the following areas of the State of Arizona to have been affected adversely by this declared major disaster:

The counties of Coconino, Gila, Graham, Maricopa, Mohave, Pima, Pinal, and Yavapai, and the Havasupai and Gila River Indian Reservations for Public Assistance.

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance)

Wallace E. Stickney,

Director, Federal Emergency Management Agency.

[FR Doc. 90-29336 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-02-M

[FEMA-885-DR]

Indiana; Major Disaster and Related Determinations

AGENCY: Federal Emergency Management Agency.

ACTION: Notice.

SUMMARY: This is a notice of the Presidential declaration of a major disaster for the State of Indiana (FEMA-885-DR), dated December 6, 1990, and related determinations.

DATES: December 6, 1990.

FOR FURTHER INFORMATION CONTACT: Neva K. Elliott, Disaster Assistance Programs, Federal Emergency Management Agency, Washington, DC 20472 (202) 646-3614.

Notice

Notice is hereby given that, in a letter dated December 6, 1990, the President declared a major disaster under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 *et seq.*, Pub. L. 93-288, as amended by Pub. L. 100-707), as follows:

I have determined that the damage in certain areas of the State of Indiana, resulting from severe storms and flooding beginning on November 27, 1990, is of sufficient severity and magnitude to warrant a major disaster declaration under the Robert T. Stafford Disaster Relief and Emergency Assistance Act ("the Stafford Act"). I, therefore, declare that such a major disaster exists in the State of Indiana.

In order to provide Federal assistance, you are hereby authorized to allocate from funds available for these purposes, such amounts as you find necessary for Federal disaster assistance and administrative expenses.

You are authorized to provide Individual Assistance in the designated areas. Public Assistance may be provided at a later date, if damage assessments warrant. Consistent with the requirement that Federal assistance be supplemental, any Federal funds provided under the Stafford Act for Public Assistance will be limited to 75 percent of the total eligible costs.

The time period prescribed for the implementation of section 310(a), Priority to Certain Applications for Public Facility and Public Housing Assistance, shall be for a period not to exceed six months after the date of this declaration.

Notice is hereby given that pursuant to the authority vested in the Director of the Federal Emergency Management Agency under Executive Order 12148, I hereby appoint Phil Zaferopulos of the Federal Emergency Management Agency to act as the Federal Coordinating Officer for this declared disaster.

I do hereby determine the following areas of the State of Indiana to have been affected adversely by this declared major disaster:

Lake County for Individual Assistance.

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance)

Wallace E. Stickney,

Director, Federal Emergency Management Agency.

[FR Doc. 90-29337 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-01-M

[FEMA-881-DR]

South Carolina; Amendment to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster for the State of South Carolina (FEMA-881-DR), dated October 22, 1990, and related determinations.

DATES: December 4, 1990.

FOR FURTHER INFORMATION CONTACT: Neva K. Elliott, Disaster Assistance Programs, Federal Emergency Management Agency, Washington, DC 20472 (202) 646-3614.

Notice

The notice of a major disaster for the State of South Carolina, dated October 22, 1990, is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of October 22, 1990:

Lancaster County for Individual Assistance and Public Assistance.

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance)

Grant C. Peterson,

Associate Director, State and Local Programs and Support, Federal Emergency Management Agency.

[FR Doc. 90-29338 Filed 12-3-90; 8:45 am]

BILLING CODE 6718-02-M

[FEMA-883-DR]

Washington; Amendment to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster for the State of Washington (FEMA-883-DR), dated November 26, 1990, and related determinations.

DATES: December 1, 1990.

FOR FURTHER INFORMATION CONTACT: Neva K. Elliott, Disaster Assistance Programs, Federal Emergency Management Agency, Washington, DC 20472 (202) 646-3614.

Notice

The notice of a major disaster for the State of Washington, dated November 26, 1990, is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of November 26, 1990:

The countries of Grays Harbor, Lewis, Mason, Pacific, Pierce, Thurston, and Wahkiakum for Individual Assistance.

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance)

Grant C. Peterson,

Associate Director, State and Local Programs and Support, Federal Emergency Management Agency.

[FR Doc. 90-29339 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-02-M

Fee Charge System for Flood Maps; Correction

AGENCY: Federal Emergency Management Agency.

ACTION: Notice of intent; correction.

SUMMARY: This document corrects a clerical error in the notice of intent published in the **Federal Register** on November 29, 1990 (55 FR 49573).

FOR FURTHER INFORMATION CONTACT: John Matticks, Telephone (202) 646-2767.

This technical amendment corrects a clerical error which appeared in the Summary section, line 6. The date should read October 1, 1991 instead of October 1, 1992.

Issued: November 30, 1990.

C.M. "Bud" Schauerte,

Administrator, Federal Insurance Administration.

[FR Doc. 90-29340 Filed 12-13-90; 8:45 am]

BILLING CODE 6718-03-M

FEDERAL MARITIME COMMISSION

Agreement(s) Filed

The Federal Maritime Commission hereby gives notice of the filing of the following agreement(s) pursuant to section 5 of the Shipping Act of 1984.

Interested parties may inspect and obtain a copy of each agreement at the Washington, DC Office of the Federal Maritime Commission, 1100 L Street, NW., room 10325. Interested parties may submit comments on each agreement to the Secretary, Federal Maritime Commission, Washington, DC 20573, within 10 days after the date of the **Federal Register** in which this notice appears. The requirements for comments are found in § 572.603 of title 46 of the Code of Federal Regulations. Interested persons should consult this section before communicating with the Commission regarding a pending agreement.

Agreement No.: 203-011290-004

Title: Vessel Operators Hazardous Materials Association Agreement

Parties:

- America-Africa-Europe Line GmbH
- Atlantic Container Line B.V.
- Evergreen Marine Corporation (Taiwan), Ltd.
- Farrell Lines, Inc.
- Hamburg-Sudamerikanische Dampfshifffahrts Gesellschaft Eggert & Amsinck (Columbus Line)
- Hapag-Lloyd AG
- Independent Container Line Ltd.
- Kawasaki Kisen Kaisha Ltd.
- Mitsui O.S.K. Lines, Ltd.
- A.P. Moller-Maersk Line
- Nedlloyd Lijnen B.V.
- Nippon Yusen Kaisha Line
- P&O Containers, Ltd.
- Sea-Land Service, Inc.
- Wilh. Wilhelmsen Ltd. AS
- Zim Israel Navigation Shipping Co., Ltd.

Synopsis: The proposed amendment would add Compagnie Generale Maritime and A/S Ivarans Rederi as parties to the Agreement. The parties have requested a shortened review period.

Dated: December 10, 1990.

By order of the Federal Maritime Commission.

Joseph C. Polking,

Secretary.

[FR Doc. 90-29288 Filed 12-13-90; 8:45 am]

BILLING CODE 6750-01-M

Agreement(s) Filed; Alabama State Docks Department/Cooper/T. Smith Stevedoring Terminal

The Federal Maritime Commission hereby gives notice of the filing of the following agreement(s) pursuant to section 5 of the Shipping Act of 1984.

Interested parties may inspect and obtain a copy of each agreement at the Washington, DC Office of the Federal Maritime Commission, 1100 L Street, NW., room 10220. Interested parties may submit comments on each agreement to the Secretary, Federal Maritime Commission, Washington, DC 20573, within 10 days after the date of the **Federal Register** in which this notice appears. The requirements for comments are found in § 572.603 of title 46 of the Code of Federal Regulations. Interested persons should consult this section before communicating with the Commission regarding a pending agreement.

Agreement No.: 224-200451.

Title: Alabama State Docks Department/Cooper/T. Smith Stevedoring Terminal Agreement.

Parties: Alabama State Docks Department, Cooper/T. Smith Stevedoring (CTSS).

Synopsis: The Agreement provides that CTSS will handle 350,000 short tons of export steel cargo during the 1-year term of the Agreement and receive certain wharfage incentive rates.

Dated: December 10, 1990.

By Order of the Federal Maritime Commission.

Joseph C. Polking,

Secretary.

[FR Doc. 90-29261 Filed 12-13-90; 8:45 am]

BILLING CODE 6730-01-M

Security for the Protection of the Public Financial Responsibility To Meet Liability Incurred for Death or Injury to Passengers or Other Persons on Voyages; Issuance of Certificate (Casualty)

Notice is hereby given that the following have been issued a Certificate of Financial Responsibility To Meet Liability Incurred for Death or Injury to Passengers or Other Persons on Voyages pursuant to the provisions of section 2, Public Law 89-777 (46 U.S.C. 817(d)) and the Federal Maritime Commission's implementing regulations at 46 CFR part 540, as amended:

SeaEscape Cruises Limited and Ferry Charter Florida, Ltd., 1080 Port Blvd., Miami, FL 33132.

Vessel: SCANDINAVIAN SONG

Dated: December 10, 1990.

Joseph C. Polking,

Secretary.

[FR Doc. 90-29287 Filed 12-13-90; 8:45 am]

BILLING CODE 6730-01-M

Ocean Freight Forwarder License Revocations

Notice is hereby given that the following ocean freight forwarder licenses have been revoked by the Federal Maritime Commission pursuant to section 19 of the Shipping Act of 1984 (46 U.S.C. app. 1718) and the regulations of the Commission pertaining to the licensing of ocean freight forwarders, 46 CFR part 510.

License Number: 2616R.

Name: Kerr International Limited.

Address: P.O. Box 16085, Philadelphia, PA 19114-0085.

Date Revoked: November 13, 1990.

Reason: Surrendered license voluntarily.

License Number: 3297.

Name: Daniel C. Griffith (Samplers & Analysts) U.S.A., Inc.

Address: P.O. Box 1558, Pasadena, TX 77501.

Date Revoked: November 14, 1990.

Reason: Surrendered license voluntarily.

License Number: 163.

Name: Fillette, Green & company, Inc.

Address: 5323 West Highway 98, suite 115, Panama City, FL 32401.

Date Revoked: November 15, 1990.

Reason: Failed to furnish a valid surety bond.

License Number: 2179R.

Name: Toomey International, Inc.

Address: P.O. Box 571856, Houston, TX 77257.

Date Revoked: November 19, 1990.

Reason: Surrendered license voluntarily.

Bryant L. VanBrakle,

Acting Director, Bureau of Domestic Regulation.

[FR Doc. 90-29268 Filed 12-13-90; 8.45 am]

BILLING CODE 6730-01-M

[Fact Finding Investigation No. 19]

Passenger Vessel Financial Responsibility Requirements; Erratum to Order of Investigation

The Federal Maritime Commission is correcting the Order of Investigation of Fact Finding Investigation No. 19, Passenger Vessel Financial Responsibility Requirements, published August 23, 1990, 55 FR 34,610, to invoke section 43 of the Shipping Act, 1916, and section 3(d) of Public Law 89-777 for authority to implement regulations.

Accordingly, the first ordering paragraph of the Order of Investigation in the above-captioned proceeding is corrected to begin as follows:

Therefore, it is ordered, That pursuant to section 43 of the Shipping Act, 1916, 46 U.S.C. app. 841a, section 3(d) of Public Law 89-777, 46 U.S.C. app. 817e(d), and subpart R, part 502 of title 46 of the Code of Federal Regulations, * * *.

By the Commission.

Joseph C. Polking,

Secretary.

[FR Doc. 90-29260 Filed 12-13-90; 8:45 am]

BILLING CODE 6730-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control

National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control (CDC), Scientific Workshop on the Health Effects of Electromagnetic Radiation on Workers; Meeting

Name: Scientific Workshop on the Health Effects of Electromagnetic Radiation on Workers.

Time and date: 8 a.m.-12:30 p.m., January 31, 1991.

Place: Omni Netherland Plaza Hotel, 5th and Race Streets, Cincinnati, Ohio 45202.

Status: Open to the public, limited only by the space available. The meeting room accommodates 250 people.

Purpose: To review current data and new findings regarding electromagnetic radiation which may have relevance for occupational exposures; identify knowledge gaps that might be filled by directed research; and recommend a national research agenda which, if implemented, would close the gaps and permit reliable recommendations for protecting workers. The workshop will emphasize electric and magnetic fields of frequencies up to 1000Hz, excluding static fields; and carcinogenic, reproductive, and neurologic health effects.

Additional information and registration forms may be obtained from: Electromagnetic Workshop, Project Coordinator, NIOSH,

CDC, 4676 Columbia Parkway, Mailstop R-2, Cincinnati, Ohio 45226, telephone 513/841-4321 or FTS 684-4321.

Dated: December 7, 1990.

Elvin Hilyer,

Associate Director for Policy Coordination, Centers for Disease Control.

[FR Doc. 90-29357 Filed 12-13-90; 8:45 am]

BILLING CODE 4160-19-M

Current Status of the Restructured Vessel Sanitation Program and Experience to Date with Program Operations; Meeting

The Center for Environmental Health and Injury Control (CEHIC) of the Centers for Disease Control (CDC) announces the following meeting.

Name: Current Status of the Restructured Vessel Sanitation Program and Experience to Date with Program Operations.

Time and date: 9 a.m.-12 noon, Tuesday, January 15, 1991. If warranted, the meeting will continue until 5 p.m.

Place: Miami Port Authority Passenger Terminal No. 10, 1007 North America way, Miami, Florida 33132.

Status: Open to the public, limited only by the space available, for participation, comment, and observation. The meeting room accommodates approximately 100 people.

Matters to be discussed: Current status of the restructured Vessel Sanitation Program and experience to date with program operations. during the past 4 years, as part of the revised Vessel Sanitation Program, CDC has conducted a series of public meetings with members of the cruise ship industry, private sanitation consultants, and other interested parties. This meeting is a continuation of that series of public meetings.

For a period of 15 days following the meeting, through January 30, 1991, the official record of the meeting will remain open so that additional material or comments may be submitted to be made part of the record of the meeting.

Contact person for further information: Linda W. Anderson, Chief, Special Programs Group (F29) CEHIC, CDC, 1600 Clifton Road, NE, Atlanta, Georgia 30333, telephone 404/488-4595 or FTS 236-4505.

Dated: December 10, 1990.

Elvin Hilyer,

Associate Director for Policy Coordination, Centers for Disease Control.

[FR Doc. 90-29358 Filed 12-13-90; 8:45 am]

BILLING CODE 4160-18-M

Health Resources and Services Administration

Advisory Council; Meeting

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463), announcement is made of the following National Advisory body scheduled to meet during the month of February 1991:

Name: National Advisory Committee on Rural Health.

Date and Time: February 4-6, 1991, 8:15 a.m.

Place: Omni Georgetown Hotel, 2121 P Street, NW., Washington, DC.

The meeting is open to the public.

Purpose: The Committee provides advice and recommendations to the Secretary with respect to the delivery, financing, research, development and administration of health care services in rural areas.

Agenda: During this meeting, the Committee intends to follow-up on many of the issues raised in its first two years. Thus, it will continue to monitor implementation of hospital, physician, and mid-level practitioner payment reform. The Committee will issue recommendations as appropriate. Some portion of the meeting is expected to be devoted to an examination of the Medicaid program.

Anyone requiring information regarding the subject Council should contact Mr. Jeffrey Human, Executive Secretary, National Advisory Committee on Rural Health, Health Resources and Services Administration, room 14-22, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20857, telephone (301) 443-0835.

Persons interested in attending any portion of the meeting should contact Ms. Arlene Granderson, director of Operations, Office of Rural Health Policy, Health Resources and Services Administration, telephone (301) 443-0835.

Agenda Items are subject to change as priorities dictate.

Dated: December 10, 1990.

Jackie E. Baum,

Advisory Committee Management Officer, HRSA.

[FR Doc. 90-29304 Filed 12-13-90; 8:45 am]

BILLING CODE 4160-15-M

Social Security Administration

Agency Forms Submitted to the Office of Management and Budget for Clearance

Each Friday the Social Security Administration publishes a list of information collection packages that have been submitted to the Office of Management and Budget (OMB) for clearance in compliance with Public Law 96-511, The Paperwork Reduction Act. The following clearance packages have been submitted to OMB since the last list was published in the **Federal Register** on December 7, 1990.

(Call Reports Clearance Officer on (301) 965-4149 for copies of package)

1. Marital Relationship Questionnaire—0960-0460—The information collected on the form SSA-4178 is used by the Social Security Administration to determine whether or not two unrelated individuals of the opposite sex who are living together are considered married and qualify for Supplemental Security Income (SSI) benefits as a couple. The affected public is comprised of applicants for and recipients of SSI benefits who hold themselves out to be married under the doctrine of common law.

Number of Respondents: 5,100.

Frequency of Response: 1.

Average Burden Per Response: 5 minutes.

Estimated Annual Burden: 425 hours.

2. Letter To Employer Requesting Wage Information—0960-0138—The information collected on the form SSA-L-4201 is used by the Social Security Administration to verify earnings information for applicants seeking benefits under the provisions of the Supplemental Security Income program when he/she does not have the necessary evidence. The affected public consists of employers who verify the applicants eligibility by completing the wage information.

Number of Respondents: 133,000.

Frequency of Response: 1.

Average Burden Per Response: 5½ minutes.

Estimated Annual Burden: 12,192.

OMB Desk Officer: Laura Oliven.

Written comments and recommendations regarding these information collections should be sent directly to the appropriate OMB Desk Officer designated above at the following address: OMB Reports Management Branch, New Executive Office Building, room 3208, Washington, DC 20503.

Dated: December 10, 1990.

Ron Compston,

Social Security Administration, Reports Clearance Officer.

[FR Doc. 90-29259 Filed 12-13-90; 8:45 am]

BILLING CODE 4190-11-M

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Assistant Secretary for Community Planning and Development

[Docket No. N-90-1917; FR-2934-N-03]

Federal Property Suitable as Facilities To Assist the Homeless

AGENCY: Office of the Assistant Secretary for Community Planning and Development, HUD.

ACTION: Notice.

SUMMARY: This Notice identifies unutilized and underutilized Federal property determined by HUD to be suitable for possible use for facilities to assist the homeless.

EFFECTIVE DATE: December 14, 1990.

ADDRESSES: For further information, contact James Forsberg, room 7262, Department of Housing and Urban Development, 451 Seventh Street SW., Washington, DC 20410; telephone (202) 708-4300; TDD number for the hearing- and speech-impaired (202) 708-2565. (These telephone numbers are not toll-free.)

SUPPLEMENTARY INFORMATION: In accordance with the December 12, 1988 Court Order in *National Coalition for the Homeless* v. *Veterans Administration*, No. 88-2503-OG (D.D.C.), HUD is publishing this Notice to identify Federal buildings and real property that HUD has determined are suitable for use for facilities to assist the homeless. The properties were identified from information provided to HUD by Federal landholding agencies regarding unutilized and underutilized buildings and real property controlled by such agencies or by GSA regarding its inventory of excess or surplus Federal property.

The Order requires HUD to take certain steps to implement section 501 of the Stewart B. McKinney Homeless Assistance Act (42 U.S.C. 11411), which sets out a process by which unutilized or underutilized Federal properties may be made available to the homeless. Under section 501(a), HUD is to collect information from Federal landholding agencies about such properties and then to determine, under criteria developed in consultation with the Department of Health and Human Services (HHS) and the Administrator of General Services (GSA), which of those properties are suitable for facilities to assist the homeless. The Order requires HUD to publish, on a weekly basis, a Notice in the **Federal Register** identifying the properties determined as suitable.

The properties identified in this Notice may ultimately be available for use by the homeless, but they are first subject to review by the landholding agencies pursuant to the court's Memorandum of December 14, 1988 and section 501(b) of the McKinney Act. Section 501(b) requires HUD to notify each Federal agency about any property of such agency that has been identified as suitable. Within 30 days from receipt of such notice from HUD, the agency must transmit to HUD: (1) Its intention to declare the property excess to the agency's need or to make the property available on an interim basis for use as facilities to assist the homeless; or (2) a statement of the reasons that the property cannot be declared excess or made available on an interim basis for use as facilities to assist the homeless.

First, if the landholding agency decides that the property cannot be declared excess or made available to the homeless for use on an interim basis the property will no longer be available.

Second, if the landholding agency declares the property excess to the agency's need, that property may, if subsequently accepted as excess by GSA, be made available for use by the homeless in accordance with applicable law and the December 12, 1988 Order and December 14, 1988 Memorandum, subject to screening for other Federal use.

Homeless assistance providers interested in any property identified as suitable in this Notice should send a written expression of interest to HHS, addressed to Judy Breitman, Division of Health Facilities Planning, U.S. Public Health Service, HHS, room 17A-10, 5600 Fishers Lane, Rockville, MD 20857; (301) 443-2265. (This is not a toll-free number.) HHS will mail to the interested provider an application packet, which will include instructions for completing the application. In order to maximize the opportunity to utilize a suitable property, providers should submit such written expressions of interest within 30 days from the date of this Notice. For complete details concerning the timing and processing of applications, the reader is encouraged to refer to HUD's **Federal Register** Notice on June 23, 1989 (54 FR 26421), as corrected on July 3, 1989 (54 FR 27975).

For more information regarding particular properties identified in this Notice (*i.e.*, acreage, floor plan, existing sanitary facilities, exact street address), providers should contact the appropriate landholding agencies at the following addresses: *U.S. Army:* HQ-DA, Attn: DAEN-ZCI-P-Robert Conte; room 1E671 Pentagon, Washington, DC 20360-2600; (202) 693-4583; *GSA:* Ronald Rice, Federal Property Resources Services; GSA, 18th and F Streets NW., Washington, DC 20405; (202) 501-0067; *U.S. Air Force:* Bob Menke, Bolling AFB, HQ-USAF/LEER, Washington, DC 20332-5000; (202) 767-4191; *Dept. of Energy:* Tom Knox, Facility Management Specialist, MA222, room 5B020, 1000 Independence Ave. SW., Washington, DC 20303; (202) 586-1191. (These are not toll-free numbers.)

Dated: December 6, 1990.

Paul Roitman Bardack,

Deputy Assistant Secretary for Economic Development.

Suitable Land (by State)

Guam

Anderson Admin Annex
AKA Andy South
Yigo, GU, Co: [See City]
Location: Located 8 miles from AAFB proper
Landholding Agency: Air Force
Property Number: 189040869
Status: Underutilized
Comment: Portion of 80 acres; most recent use—recreational activities and training exercises; access restriction.

Kansas

Parcel 5
Fort Leavenworth
Combined Arms Center
Fort Leavenworth, KS, Co: Leavenwort
Location: Area located in the center of the installation in training Area A
Landholding Agency: Army
Property Number: 219040433
Status: Underutilized
Comment: 250+ acres; steep/wooded area; selected periods are reserved for military training exercises.

New York

Tibbetts Point Light Station
Cape Vincent, NY, Co: Jefferson
Landholding Agency: Air Force
Property Number: 189040861
Status: Excess
Comment: 3.27 acres; black top; easement restrictions.
GSA NO. 2-U-NY-799

Suitable Buildings (by State)

Georgia

Bldg. 4617
Fort Benning
Fort Benning, GA, Co: Muscogee
Landholding Agency: Army
Property Number: 219040434
Status: Unutilized
Comment: 1770 sq. ft.; 2 story; needs major rehab; most recent use—barracks.

Bldg. 4619
Fort Benning
Fort Benning, GA, Co: Muscogee
Landholding Agency: Army
Property Number: 219040435
Status: Unutilized
Comment: 784 sq. ft.; 1 story; needs major rehab; most recent use—storehouse.

Bldg. 4622

Fort Benning
Fort Benning, GA, Co: Muscogee
Landholding Agency: Army
Property Number: 219040436
Status: Unutilized
Comment: 784 sq. ft.; 1 story; needs major rehab; most recent use—storehouse.

Bldg. 4916
Fort Benning
Fort Benning, GA, Co: Muscogee
Landholding Agency: Army
Property Number: 219040437
Status: Unutilized
Comment: 810 sq. ft.; 1 story; needs major rehab; most recent use—storehouse.

Guam

Harmon VOR Site (Portion)
Dededo, GU, Co: (See City)
Location: Approximately 12 miles southwest of AAFB proper
Landholding Agency: Air Force
Property Number: 189040868
Status: Excess
Comment: 550 sq. ft.; 1 story concrete bldg; needs rehab; on 71 acres.

Idaho

Storage and Training Facility
INEL DOE-ID
Idaho Falls, ID, Co: Bonneville
Landholding Agency: Energy
Property Number: 419040001
Status: Excess
Comment: 2072 sq. ft.; 1 story wood frame; needs major rehab; off-site use only.

Maine

Ellsworth Federal Building
Corner of Main and Water Streets
Ellsworth, ME, Co; Hancock
Landholding Agency: GSA
Property Number: 549040008
Status: Excess
Comment: 4904 sq. ft.; 1 story steel frame/brick concrete exterior; most recent use—office; scheduled to be vacated in 6 months.
GSA NO. 2-G-ME-622

New York

Dwelling #1
Tibbetts Point Light Station
Cape Vincent, NY, Co: Jefferson
Landholding Agency: Air Force
Property Number: 189040862
Status: Excess
Comment: 460 sq. ft.; 2 story wood frame; good condition; lease restrictions.
GSA NO. 2-U-NY-799

Dwelling #2,
Tibbetts Point Light Station
Cape Vincent, NY, Co: Jefferson
Landholding Agency: Air Force
Property Number: 189040863
Status: Excess.
Comment: 360 sq. ft.; 2 story wood frame; good condition; lease restrictions.
GSA NO. 2-U-NY-799

Barn,
Tibbetts Point Light Station
Cape Vincent, NY, Co: Jefferson
Landholding Agency: Air Force
Property Number: 189040864
Status: Excess
Commnet: 204 sq. ft.; 1 story wood frame; good condition; lease restriction.
GSA NO. 2-U-NY-799.

3-Car Garage,
Tibbetts Point Light Station
Cape Vincent, NY, Co: Jefferson
Landholding Agency: Air Force
Property Number: 189040865
Status: Excess
Comment: 660 sq. ft.; 1 story wood frame; good condition; lease restrictions.
GSA NO. 2-U-NY-799.

Paint Locker,
Tibbetts Point Light Station
Cape Vincent, NY, Co: Jefferson
Landholding Agency: Air Force
Property Number: 189040866
Status: Excess
Comment: 55 sq. ft.; 1 story metal on concrete slab; most recent use tool shed; lease restriction.
GSA NO. 2-U-NY-799.

Fog Signal Building
Tibbetts Point Light Station
Cape Vincent, NY, Co: Jefferson
Landholding Agency: Air Force
Property Number: 189040867
Status: Excess
Comment: 792 sq. ft.; 1 story brick; most recent use—power house; lease restriction.
GSA NO. 2-U-NY-799.

Texas

Bldg. 1128,
Fort Hood,
Old Park Avenue.
Fort Hood, TX, Co: Bell.
Landholding Agency: Army.
Property Number: 219040429.
Status: Unutilized.
Comment: 3150 sq. ft.; 2 story; potential utilities; needs major rehab; most recent use—storage.

Blag. 2232
Fort Hood
Battalion Avenue
Fort Hood, TX, Co: Coryell
Landholding Agency: Army
Property Number: 219040430
Status: Unutilized
Comment: 3378 sq. ft.; 1 story; potential utilities; needs major rehab; most recent use—office/classroom.

Bldg. 2335,
Fort Hood,
Battalion Avenue.
Fort Hood, TX, Co: Coryell.
Landholding Agency: Army.
Property Number: 219040431.
Status: Unutilized.
Comment: 1575 sq. ft.; 1 story; potential utilities; needs major rehab; most recent use—storage.

Bldg. 2336,
Fort Hood,
Battalion Avenue.
Fort Hood, TX, Co: Coryell.
Landholding, Agency: Army.
Property Number: 219040432.
Status: Unutilized.
Comment: 2025 sq. ft.; 1 story; potential utilities; needs major rehab; most recent use—storage.

Universe of Properties:

Total=33.
Suitable=20.
Suitable Buildings=17.
Suitable Land=3.
Unsuitable=13.
Unsuitable Buildings=13.
Unsuitable Land=0.
Number of Resubmissions=0.

[FR Doc. 90-29153 Filed 12-13-90; 8:45 am]

BILLING CODE 4210-29-M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[WY-010-00-4332-09; FES 90-35]

Availability of Final Wilderness Environmental Impact Statement (EIS), Wyoming

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of availability of Rock Springs Final Wilderness Environmental Impact Statement, Wyoming.

SUMMARY: The Rock Springs Wilderness Environmental Impact Statement assesses the environmental consequences of managing 13 wilderness study areas as wilderness or nonwilderness. The alternatives assessed include: (1) A "No Wilderness Alternative" for each wilderness study area; (2) an "All Wilderness Alternative" for each wilderness study area; and (3) a "Partial Wilderness Alternative for three wilderness study areas.

The names of the wilderness study areas, their total acreage and the acreage recommended suitable and nonsuitable under the Proposed Action are:

Lake Mountain—13,865 acres, 13,865 acres nonsuitable.
Raymond Mountain—32,936 acres, 13,936 acres suitable.
Buffalo Hump—10,300 acres, 6,080 acres suitable, 4,220 acres nonsuitable.
Sand Dunes—27,109 acres, 21,304 acres suitable, 5,805 acres nonsuitable.
Alkali Draw—16,990 acres, 16,990 acres nonsuitable.
South Pinnacles—10,800 acres, 10,800 acres nonsuitable.
Alkali Basin/East Sand Dunes—12,800 acres, 12,800 acres nonsuitable.
Red Lake—9,515 acres, 9,515 acres nonsuitable.
Honeycomb Buttes—41,188 acres, 37,287 acres suitable, 3,901 acres nonsuitable.
Oregon Buttes—5,700 acres, 5,700 acres suitable.
Whitehorse Creek—4,002 acres, 4,002 acres nonsuitable.
Devils Playground/Twin Buttes—23,841 acres, 23,841 acres suitable.

Red Creek Badlands—8,020 acres, 8,020 acres nonsuitable.

The Bureau of Land Management wilderness proposals will ultimately be forwarded by the Secretary of the Interior to the President and by the President to Congress. The final decision on wilderness designation rests with Congress.

In any case, no action on these proposals can be taken by the Secretary of the Interior during the 30 days following the filing of this EIS. This complies with the Council on Environmental Quality Regulations, 40 CFR 1506.10b(2).

SUPPLEMENTARY INFORMATION: Copies of the environmental impact statement may be obtained from the District Manager, Bureau of Land Management, Rock Springs District, P.O. Box 1869, Rock Springs, Wyoming 82902.

Copies are also available for inspection at the following locations:

Department of the Interior, Bureau of Land Management, Office of Public Affairs, 1849 C Street, NW., Washington, DC 20240.

Bureau of Land Management, Wyoming State Office, 2515 Warren Avenue, Cheyenne, Wyoming 82001.

Bureau of Land Management, Rock Springs District Office, U.S. 191 North, Rock Springs, Wyoming 82902.

Bureau of Land Management, Pinedale Resource Area, 431 West Pine Street, Pinedale, Wyoming 82941.

Bureau of Land Management, Kemmerer Resource Area, Kemmerer, Wyoming 83101.

Bureau of Land Management, Green River Resource Area, 79 Winston Drive, P.O. Box 1170, Rock Springs, Wyoming 82901.

FOR FURTHER INFORMATION CONTACT: Alan Stein, EIS Team Leader, Bureau of Land Management, P.O. Box 1869, Rock Springs, Wyoming 82902 (307) 382-5350.

Dated: November 28, 1990.

John H. Farrell,

Acting Director, Office of Environmental Affairs.

[FR Doc. 90-28946 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-22-M

[CO-010-01-4332-09, FES 90-36]

Availability of Final Wilderness Environmental Impact Statement (EIS) for the Uncompahgre Basin Resource Area and the San Juan Resource Area, Montrose District, CO

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of availability of the San Juan/San Miguel Planning Area Final Wilderness Environmental Impact Statement, Colorado.

SUMMARY: The San Juan/San Miguel Planning Area Wilderness Environmental Impact Statement assesses the environmental consequences of managing eight wilderness study areas as wilderness or nonwilderness. The alternatives assessed include: (1) A "No Wilderness Alternative" for each wilderness study area; (2) an "All Wilderness Alternative" for each wilderness study area; and (3) a "Partial Wilderness Alternative" for six wilderness study areas.

The names of the wilderness study areas, their total acreage and the acreage recommended suitable and nonsuitable under the Proposed Action are:

Wilderness study area	Total acres	Acres recommended suitable	Acres recommended nonsuitable
Cahone Canyon	8,960	0	8,960
Cross Canyon	12,588	0	12,588
Dolores River Canyon	28,668	[1] 29,415	200
McKenna Peak	19,398	0	19,398
Menefee Mountain	7,129	0	7,129
Squaw/Papoose Canyon	11,287	0	11,287
Tabeguache Creek	7,743	[2] 7,748	21
Weber Mountain	6,303	0	6,303

[1]—Includes 947 acres recommended as suitable outside the WSA.

[2]—Includes 26 acres recommended as suitable outside the WSA.

The Bureau of Land Management wilderness proposals will ultimately be forwarded by the Secretary of the Interior to the President and by the President to Congress. The final decision on wilderness designation rests with Congress.

In any case, no action on these proposals can be taken by the Secretary of the Interior during the 30 days following the filing of this EIS. This complies with the Council on Environmental Quality Regulations, 40 CFR 1506.10b(2).

SUPPLEMENTARY INFORMATION: Copies of the environmental impact statement may be obtained from the Area Manager, San Juan Resource Area, Bureau of Land Management, 701 Camino del Rio, Durango, Colorado 81301 or the Area Manager, Uncompahgre Basin Resource Area, Bureau of Land Management, 2505 South Townsend Avenue, Montrose, Colorado 81401.

Copies are also available for inspection at the following locations:

Department of the Interior, Bureau of Land Management, Office of Public Affairs, 1849 C Street, NW., Washington, DC 20240.

Department of the Interior, Bureau of Land Management, Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215-7076.

FOR FURTHER INFORMATION CONTACT: Alan Kesterke, District Manager, Bureau of Land Management, Montrose District Office, 2465 Townsend Avenue, Montrose, Colorado 81401.

Dated: December 5, 1990.

Jonathan P. Deason,

Director, Office of Environmental Affairs.

[FR Doc. 90-28945 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-JB-M

[CA-940-01-5410-10-B010; CACA 27692]

Conveyance of Mineral Interests in California

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of segregation.

SUMMARY: The private lands described in this notice, aggregating 15.00 acres, are segregated and made unavailable for filings under the general mining laws and the mineral leasing laws to determine their suitability for conveyance of the reserved mineral interest pursuant to section 209 of the Federal Land Policy and Management Act of October 21, 1976.

The mineral interests will be conveyed in whole or in part upon favorable mineral examination.

The purpose is to allow consolidation of surface and subsurface of minerals ownership where there are no known mineral values or in those instances where the reservation interferes with or precludes appropriate nonmineral development and such development is a more beneficial use of the land than the mineral development.

FOR FURTHER INFORMATION CONTACT: Judy Bowers, California State Office, Federal Office Building, 2800 Cottage Way, room E-2845, Sacramento, California 95825, (916) 978-4820. Serial No. CACA 27692.

T. 11 N., R. 13 W., San Bernardino Meridian
Sec. 4, W½NW¼NW¼SE¼, SE¼SE¼SE¼.
County—Kern.

Minerals Reservation—All coal and other minerals.

Upon publication of this notice of segregation in the **Federal Register** as provided in 43 CFR 2720.1-1(b), the mineral interests owned by the United States in the private lands covered by the applications shall be segregated to the extent that they will not be subject

to appropriation under the mining and mineral leasing laws. The segregative effect of the applications shall terminate by publication of an opening order in the **Federal Register** specifying the date and time of opening; upon issuance of a patent or other document of conveyance to such mineral interests; or two years from the date of publication of this notice, whichever occurs first.

Dated: December 5, 1990.

Nancy J. Alex,

Chief, Lands Section.

[FR Doc. 90-29271 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-40-M

[CA-940-01-5410-10-B011; CACA 27689]

Conveyance of Mineral Interests in California

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of segregation.

SUMMARY: The private lands described in this notice, aggregating 130.85 acres, are segregated and made unavailable for filings under the general mining laws and the mineral leasing laws to determine their suitability for conveyance of the reserved mineral interest pursuant to section 209 of the Federal Land Policy and Management Act of October 21, 1976.

The mineral interests will be conveyed in whole or in part upon favorable mineral examination.

The purpose is to allow consolidation of surface and subsurface of minerals ownership where there are no known mineral values or in those instances where the reservation interferes with or precludes appropriate nonmineral development and such development is a more beneficial use of the land than the mineral development.

FOR FURTHER INFORMATION CONTACT: Judy Bowers, California State Office, Federal Office Building, 2800 Cottage Way, room E-2845, Sacramento, California 95825, (916) 978-4820. Serial No. CACA 27689.

T. 11 N., R. 13 W., San Bernardino Meridian
Sec. 4, E½W½ lot 1 NW¼, E½E½E½ lot 1 NW¼, E½E½ lot 2 NE¼, W½E½W½ lot 2 NE¼, E½NE¼SW¼SW¼, SE¼ SW¼SW¼, NE¼SE¼SW¼, E½SE¼ SE¼SW¼, E½NE¼SE¼, E½NW¼ SE¼.

County—Kern.

Minerals Reservation—All coal and other minerals.

Upon publication of this Notice of Segregation in the **Federal Register** as provided in 43 CFR 2720.1-1(b), the mineral interests owned by the United States in the private lands covered by the application shall be segregated to the extent that they will not be subject to appropriation under the mining and mineral leasing laws. The segregative effect of the application shall terminate by publication of an opening order in the **Federal Register** specifying the date and time of opening; upon issuance of a patent or other document of conveyance to such mineral interests; or two years from the date of publication of this notice, whichever occurs first.

Dated: December 5, 1990.

Nancy J. Alex,

Chief, Lands Section.

[FR Doc. 90-29272 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-40-M

[CA-940-01-5410-10-B006; CACA 27687]

Conveyance of Mineral Interests in California

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of segregation.

SUMMARY: The private lands described in this notice, aggregating 22.70 acres, are segregated and made unavailable for filings under the general mining laws and the mineral leasing laws to determine their suitability for conveyance of the reserved mineral interest pursuant to section 209 of the Federal Land Policy and Management Act of October 21, 1976.

The mineral interests will be conveyed in whole or in part upon favorable mineral examination.

The purpose is to allow consolidation of surface and subsurface of minerals ownership where there are no known mineral values or in those instances where the reservation interferes with or precludes appropriate nonmineral development and such development is a more beneficial use of the land than the mineral development.

FOR FURTHER INFORMATION CONTACT: Judy Bowers, California State Office, Federal Office Building, 2800 Cottage Way, room E-2845, Sacramento, California 95825, (916) 978-4820. Serial No. CACA 27687.

T. 11 N., R. 13 W., San Bernardino Meridian
Sec. 4. NW¼NW¼W½ lot 2 NE¼, SW¼SE¼E½ lot 2 NW¼, NW¼ SE¼W½ lot 2 NW¼, W½NW¼ E½ lot 1 NW¼, E½SW¼E½ lot 1 NW¼, W½NE¼SW¼SE¼.

County—Kern.

Minerals Reservation—All coal and other minerals.

Upon publication of this Notice of Segregation in the **Federal Register** as provided in 43 CFR 2720.1-1(b), the mineral interests owned by the United States in the private lands covered by the application shall be segregated to the extent that they will not be subject to appropriation under the mining and mineral leasing laws. The segregative effect of the application shall terminate by publication of an opening order in the **Federal Register** specifying the date and time of opening; upon issuance of a patent or other document of conveyance to such mineral interests; or two years from the date of publication of this notice, whichever occurs first.

Dated: December 6, 1990.

Nancy J. Alex,

Chief, Lands Section.

[FR Doc. 90-29273 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-40-M

[NM-030-01-4212-14]

Sale of Public Land in Sierra County, NM

AGENCY: Bureau of Land Management (BLM), Interior.

ACTION: Notice of realty action.

SUMMARY: The following described parcels of land have been examined and identified as suitable for disposal by sale under section 203 of the Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2750; 43 U.S.C. 1713) at no less than the appraised fair market value shown. The parcels are isolated, difficult and uneconomical to manage as part of the public land, and are not suitable for management by another Federal department or agency. The sale is consistent with the BLM's planning efforts, and the public interest will be served by offering this land for sale.

Sale Method

Parcels 1, 2, 3, and 5 will be offered through direct sale procedures (43 CFR 2711.3-3). Parcel 4 will be offered for sale using competitive bidding procedures (43 CFR 2711.3-1).

Parcel No.	Serial No.	Legal description	Acreage	Appraised value	Method of sale
1	NM NM 77537	T. 11 S., R. 6 W., sec. 2, lot 7	0.29	$300.00	Direct.
2	NM NM 77536	T. 11 S., R. 6 W., sec. 2, lot 8	0.77	800.00	Direct.
3	NM NM 77538	T. 11 S., R. 6 W., sec. 2, lot 9	1.78	1,800.00	Direct.
4	NM NM 77592	T. 11 S., R. 6 W., sec. 2, lot 5	36.95	11,100.00	Competitive.
5	NM NM 77606	T. 11 S., R. 6 W., sec. 2, lot 6	0.21	25.00	Direct.

Sales Procedures

The sale of Parcel 4 will be by competitive sealed bids. Sealed bids will be considered only if received in the BLM Caballo Resource Area Office, 1800 Marquess, Las Cruces, New Mexico 88005, before 10 a.m. MST on March 4, 1991, the date of the sale. Bids of less than fair market value will be rejected. In the event that two or more sealed bids are received containing valid bids of the same amount, the determination of which is to be considered the highest designated bid will be by supplemental bidding. In such a case, the high bidders will be allowed to submit sealed bids as designated by the Authorized Officer. Bidders must be 18 years of age or over and United States citizens. Corporations must be subject to the laws of any state or of the United States. Apparent high bidders must submit proof of these requirements within 15 days after the sale date. Bids must be made by the principal or his duly qualified agent.

Each sealed bid must be written or typed and accompanied by certified check, postal money order, bank draft, or cashier's check made payable to the Department of the Interior, BLM, for not less than 10 percent or more than 30 percent of the amount of the bid. Successful bidders will be required to pay the remainder of the sale price prior to expiration of 180 days from the date of the sale. Failure to submit the full sale price within the above specified time will result in cancellation of the sale of the specific parcel and the deposit will be forfeited and disposed of as other receipts of sale. The sealed bid envelope containing the bid and the required amount must be marked in the lower left-hand corner as follows:

Public Sale Bid Parcel 4
Serial No. NM NM 77592
Sale held March 4, 1991

All sealed bids will be either returned, accepted, or rejected within 30 days of the sale date. If the parcel is not sold on the day of the sale, it will be offered every first Tuesday of each month, same time and place, on a competitive sealed bid basis until sold, or until June 14, 1991.

Parcels 1, 2, 3, and 5 will be offered directly as listed below not less than 60 days from date of this notice. If unsold, they will be offered for sale by the competitive procedure.

Parcel 1—Catholic Diocese of Las Cruces, P.O. Box 16086, Las Cruces, New Mexico 88004.

Parcel 2—Cora Bierner, 2528 Camelia Court, SW., Albuquerque, New Mexico, 87105.

Parcel 3—James L. Markel, Jr., 8 Date Street, Truth or Consequences, New Mexico 87901.

Parcel 5—Sierra County, 300 Date Street, Truth or Consequences, New Mexico 87901.

EFFECTIVE DATES: Interested parties may submit comments regarding the proposed action to the Caballo Resource Area Manager on or before January 28, 1991.

ADDRESSES: Comments should be sent to BLM, Caballo Resource Area, 1800 Marquess, Las Cruces, New Mexico 88005.

FOR FURTHER INFORMATION CONTACT: Bernie Creager at the above address or at 505-525-8228 (FTS 476-8200).

SUPPLEMENTARY INFORMATION: The land will be conveyed subject to:

1. Reservations to the United States for ditches and canals and all minerals, together with the right to prospect for, mine, and remove same.

2. All patents will be issued subject to valid existing rights.

3. On parcel 4, the patent will be issued subject to right-of-way NM NM 44852 to Continental Telephone Company of the West for buried telephone cable.

Comments must reference specific parcel numbers. Adverse comments received on specific parcels will not affect the sale of any other parcel. Any adverse comments will be evaluated by the State Director who may sustain, vacate, or modify this realty action. In the absence of any objections, this realty action will become the final determination of the Department of the Interior.

Upon publication in the **Federal Register**, the land described above will be segregated from appropriation under the public land laws, including the mining laws. The segregative effect of this notice of realty action shall terminate upon issuance of patent, upon publication in the **Federal Register** of a termination of the segregation or 270 days from the date of publication, whichever occurs first.

The BLM may accept or reject any or all offers, or withdraw any land or interest in land for sale, if, in the opinion of the Authorized Officer, consummation of the sale would not be fully consistent with FLPMA or other applicable law.

Dated: December 6, 1990.

H. James Fox,

District Manager.

[FR Doc. 90-29274 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-FB-M

[WY-060-4212-14; WYW-115073]

Realty Action; Direct Sale, Wyoming

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of realty action, direct sale of public lands in Johnson County.

SUMMARY: The following public surface estate has been determined to be suitable for disposal by direct sale under section 203 of the Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2750; 43 U.S.C. 1713). The Bureau of Land Management (BLM) is required to receive fair market for the land sold and any amount for less than fair market value will be rejected. The BLM may accept or reject any and all offers, or withdraw any land or interest on the land for sale if the sale would not be consistent with FLPMA or other applicable law.

Sixth Principal Meridan

T. 43 N., R. 79 W.,
Section 8, S½NE¼SW¼

The above land aggregates 20.00 acres, more or less.

FOR FURTHER INFORMATION CONTACT: Richard Zander, Acting Area Manager, Buffalo Resource Area, 189 North Cedar, Buffalo, Wyoming 82834, (307) 684-5586.

SUPPLEMENTARY INFORMATION: This sale is consistent with Bureau of Land Management policies and the Buffalo Resource Area management plan. The purpose of this proposed action is to settle an occupancy trespass on Federal land. The direct sale to William and Lorrene Collins would be made at fair

market value. The publication of this notice segregates the public land described above from settlement, sale, location, and entry under the public land laws including the mining laws. Any subsequent application shall not be accepted, shall not be considered as filed, and shall be returned to the applicant if the notice segregates the land from the use applied for in the application. The segregative effect of this notice will terminate upon issuance of a conveyance of document, 270 days, or when a cancellation notice is published, whichever comes first.

Sale Procedures include the following conditions:

(1) The "total" purchase amount must be received in the Buffalo Resource Area Office on Wednesday, January 30, 1991, by 4 p.m. Full payment must be by certified check, money order, bank drafts, or cashier's check made payable to the Department of the Interior, BLM.

(2) To successfully purchase the land, the purchaser must be a U.S. citizen, 18 years of age or older, a corporation authorized to own real estate in the state of Wyoming, a state, state instrumentality or political subdivision authorized to hold property, or an entity legally capable of conveying and holding land or interests in Wyoming.

Any patent issued will be subject to all valid existing rights to include oil and gas lease WYW-86772.

Specific patent reservations include:

1. A reservation to the United States of a right-of-way for ditches or canals in accordance with Act of August 30, 1890 (43 U.S.C. 945).

2. All minerals shall be reserved to the United States, together with the right to prospect for, mine, and remove minerals. A more detailed description of this reservation, which will be incorporated into the patent document, is available for review at the BLM, Buffalo Resource Area Office.

For a period of forty-five (45) days from the date of issuance of this notice in the **Federal Register**, interested parties may submit comments to the Bureau of Land Management, District Manager, Casper, 1701 East "E" Street, Casper, Wyoming 82601. Any adverse comments will be evaluated by the State Director, who may sustain, vacate, or modify this realty action. In the absence of any objections, this proposed realty action will become final.

Dated: December 7, 1990.

James W. Monroe,

District Manager.

[FR Doc. 90-29363 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-22-M

[ID-943-01-4214-11; I-05283, I-4982]

Proposed Continuation of Withdrawals; Idaho

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: The U.S. Forest Service, Department of Agriculture, proposes that the withdrawals for four sites in the Kaniksu, St. Joe, and Coeur d'Alene National Forests continue for an additional 50 years. The lands are now being used for research and natural areas and as a garnet collecting area for both recreational and commercial use. The lands would remain closed to surface entry and mining in the natural areas and to entry under the mining laws for non-mettaliferous locatable minerals in the Garnet Area. All of the lands have been used would remain open to mineral leasing.

DATES: Comments should be received on or before March 14, 1991.

FOR FURTHER INFORMATION CONTACT: William E. Ireland, BLM, Idaho State Office, 3380 Americana Terrace, Boise, Idaho 83706, (208) 334-1597.

The U.S. Forest Service proposes that the existing land withdrawals made by public land order nos. 2377 and 5523 be continued for a period of 50 years pursuant to section 204 of the Federal Land Policy and Management Act of 1976, 90 Stat. 2751; 43 U.S.C. 1714. The lands are described as follows:

Boise Meridan

Deception Creek Experimental Forest

T. 50 N., R. 1 W.,
Sec. 5, lots 1, and 2;
Sec. 6, lot 4.
T. 51 N., 1 W.,
Sec. 19, E½SW¼, E 20 acres of lot 4, and SE¼;
Sec. 20, S½N½, SW¼and all public land in SE¼;
Sec. 28, S½NW¼and SW¼;
Sec. 29 and 30;
Sec. 31, lots 1, 2, 3, 6 and 7, NE¼, E½NW¼, N½SE¼, and NE¼SW¼;
Sec. 32, N½, SW¼, and NW¼SE¼;
Sec. 33, NW¼.
T. 51 N., R. 2 W.,
Sec. 25;
Sec. 26, E½NE¼, SW¼NE¼, N½SE¼, and SE¼SE¼;
Sec. 36, N½NE¼, SE¼NE¼, and NE¼NW¼.

Priest River Experimental Forest

T. 58 N., R. 3 W.,
Sec. 17, S½SW¼, and SW¼SE¼;
Sec. 18, S½S½;
Sec. 19 and 20;
Sec. 21, W½SW¼, and SE¼SW¼;
Sec. 28, NW¼, N½SW¼, and NW¼SE¼;
Sec. 29, N½and N½S½;
Sec. 30.
T. 58 N., R. 4 W.,
Sec. 23, E½NE¼, S½N½NW¼NE¼, S½NW¼NE¼, SW¼NE¼, SE¼NE¼NW¼, E½SE¼NW¼ and S½;
Secs. 24, 25, and 26;
Sec. 27, lot 2, E½, and E½W½SW¼SW¼;
Sec. 33, lots 1 and 4;
Sec. 34, lots 1, 3, 4, and 6, SE¼NW¼ and E½SW¼.

Teepee Creek Natural Area

T. 62 N., R. 4 W.,
Sec. 8, SE¼SE¼;
Sec. 9, SE¼SE¼;
Secs. 16 and 17;
Sec. 20, W½NW¼NE¼ and NE¼NW¼.

East Fork Emerald Creek Garnet Area

T. 42 N., R. 1 W.,
Sec. 1, S½SE¼SE¼SE¼;
Sec. 11, S½NE¼SE¼SW¼, SE¼SE¼SW¼, E½SW¼SE¼SW¼, E½NW¼SE¼SW¼, S¾SE¼SW¼, SW¼SE¼SE¼, S½NW¼SW¼SW¼, NW¼NE¼SE¼, SE¼NE¼SE¼, E½SW¼NE¼SE¼, NE¼SE¼SE¼, E½NE¼NW¼SE¼, and E½SE¼SE¼SE¼;
Sec. 12, NW¼NE¼NE¼, N½NE¼NE¼NE¼, SE¼NE½NE¼, E½SW¼NE¼NE¼, N½NE¼SE¼NE¼, E½NE¼NW¼NE¼, and SW¼SW¼SW¼;
Sec. 13, SW½SE¼NE¼, N½NW¼NW¼NW¼, W½NE¼NW¼NW¼, SE¼NE¼NW¼, SE¼SE¼NW¼, W¼SW¼, NE¼SW¼NW¼, E½SE¼NE¼SE¼, SW¼SW¼NW¼, N½NW¼NW¼SW¼, N½NE¼NW¼SW¼, SE¼NE¼SE¼, N½NE¼SE¼, and S½SW¼SW¼SE¼;
Sec. 14, SW¼NW¼NE¼, E½NE¼SE¼NE¼, S½SE¼NE¼, E½NW¼SW¼NE¼, NE¼SW¼NE¼, SE¼SW¼NE¼, NE¼NW¼NW¼, S½NW¼NE¼NW¼, E½NE¼NE¼NW¼, N½SE¼NE¼NW¼, N½SW¼NE¼NW¼, NW¼NE¼SW¼, N½NE¼NE¼SW¼, N½NW¼SE¼, and NE¼NE¼SE¼;
Sec. 15, S½SE¼SW¼SE¼ and SW¼SW¼SE¼;
Sec. 23, E½NW¼NE¼, N½NE¼NE¼NE¼, and S½SW¼NE¼NE¼;
Sec. 24, NW¼NW¼NE¼, N½NE¼NW¼NE¼, S½NW¼NE¼, E½NW¼SW¼NE¼, W½NE¼SW¼NE¼, W½SE¼SW¼NE¼, E½SW¼SW¼NE¼, NW¼NW¼NW¼, S½NE¼NW¼NW¼, E½SE¼NW¼NW¼, N½SW¼NW¼NW¼, N½NE¼NW¼, SE¼NE¼NW¼, E½SW¼NE¼NW¼, N½SE¼NW¼, W½SE¼SE¼NW¼, W½SW¼SE¼NW¼, N½NW¼NW¼SW¼, N½NE¼NW¼SW¼, W½NE¼NE¼SW¼, E½SE¼NE¼SW¼, NW¼NW¼SE¼, W½NE¼NW¼SE¼, and N½SW¼NW¼SE¼.

The areas described aggregate 12,779.23 acres in Bonner, Latah, Boundary, Kootenai, and Shoshone Counties.

The withdrawals are essential for protection of natural area and recreational values on the sites. The withdrawals closed the land to surface entry and mining in the research and natural areas and to the location of non-mettaliferous minerals in the Garnet collecting area, but not to mineral leasing. No changes in the segregative

effect or use of the land is proposed by this action.

For a period of 90 days from the date of publication of this notice, all persons who wish to submit comments in connection with the proposed withdrawal continuation may present their views in writing to the State Director at the above address.

The authorized officer of the Bureau of Land Management will undertake such investigations as necessary to determine the existing and potential demand for the lands and their resources. A report will also be prepared for consideration by the Secretary of the Interior, the President, and Congress, who will determine whether or not the withdrawals will be continued; and if so, for how long. The final determination of the withdrawals will be published in the **Federal Register**. The existing withdrawals will continue until such final determination is made.

Dated: December 5, 1990.

William E. Ireland,

Chief, Reality Operations Section.

[FR Doc. 90-29269 Filed 12-13-90; 8:45 am]

BILLING CODE 4310-66-M

[G-910-G1-0404-4214-10; NMNM 84801]

Proposed Withdrawal and Opportunity for Public Meeting; New Mexico

AGENCY: Bureau of Land Management (BLM), Interior.

ACTION: Notice.

SUMMARY: The U.S. Department of Agriculture (USDA), Forest Service, has filed an application to withdraw approximately 4,886.58 acres of National Forest System land for protection of the East Fork of the Jemez Wild and Scenic River and to protect high recreation values. This notice closes the land for up to 2 years from location and entry under the United States mining laws, subject to valid existing rights.

DATES: Comments and requests for a public meeting will be received by March 14, 1991.

ADDRESSES: Comments and meeting requests should be sent to the New Mexico State Director, BLM, P.O. Box 1449, Santa Fe, New Mexico 87504-1449.

FOR FURTHER INFORMATION CONTACT: Clarence F. Hougland, BLM, New Mexico State Office, 505-988-6071.

SUPPLEMENTARY INFORMATION: On November 2, 1990, the USDA filed an application to withdraw the following described National Forest System land from location and entry under the United States mining laws, subject to valid existing rights:

New Mexico Principal Meridan

Santa Fe National Forest

T. 18 N., R. 3 E.,

Sec. 1, lots 5 to 16, inclusive S½NE¼, and SE¼SE¼ (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306 of June 6, 1990);

Sec. 2, lot 1, S½NE¼, E½SW¼NW¼, SE¼NW¼SW¼NW¼, SW¼SW¼NW¼, SE¼NW¼, N½SW¼, E½E½SE¼SW¼, E½SE¼, N½NW¼SE¼, N½S½NW¼SE¼, SW¼SW¼NW¼SE¼, W½W½SW¼SE¼, SE¼SW¼SW¼SE¼, and S½SE¼SW¼SE¼ (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 3, lot 8, SW¼NW¼, W½SE¼NW¼, W½SW¼, W½E½SW¼, and NE¼SE¼ (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 4, lots 3 to 6, inclusive, S½N½, SW¼, NE¼SE¼, and S½SE¼ (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Secs. 5, lots 8 to 10, inclusive, S½NE¼, and SE¼(excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 10, S½NW¼NE¼, SW¼NE¼, NW¼NE¼NW¼, S½NE¼NW¼, NW¼NW¼, S½NW¼, SW¼, SW¼NE¼NE¼SE¼, W½NE¼SE¼, W½SE¼NE¼SE¼, SE¼SE¼NE¼SE¼, W½SE¼, and SE¼SE¼ (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 12, E½;

Sec. 13, N½N½;

Sec. 14, lots 1 and 2, and N½NW¼.

T. 18 N., R. 4 E.,

Sec. 3, lots 17 and 18, and lots 22 to 24, inclusive (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 4, lots 9 to 16, inclusive, and lots 19 to 24, inclusive (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 5, lots 9 to 17, inclusive, and lots 21 to 28, inclusive (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 6, lot 7, and lots 12 to 16, inclusive (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 7, lots 2, 3, 4, 6, and 7, E½, and E½W½;

Sec. 8, SE¼SE¼NE¼NE¼, NW¼NW¼NW¼NE¼, SE¼NE¼, NE¼NE¼NE¼NW¼, S½NE¼NE¼NW¼, NW¼NW¼NE¼NW¼, E½SW¼NE¼NW¼, SE¼NE¼NW¼, W½NW¼, SE¼NW¼, N½SW¼, NE¼SE¼, and S½S½;

Sec. 9, E½, NE¼NW¼, SE¼NE¼NW¼NW¼, S½NW¼NW¼, S½NW¼, and SW¼ (excluding that portion designated as the East Fork of the Jemez Wild and Scenic River as described in Pub. L. 101-306);

Sec. 10, NW¼;

Sec. 17, N½N½;

Sec. 18, lot 1, N½NE¼ and NE¼NW¼

The areas described aggregate approximately 4,886.58 acres in Sandoval County.

The purpose of the proposed withdrawal is for the protection of the East Fork of the Jemez Wild and Scenic River and to protect high recreational values.

For a period of 90 days from the date of publication of this notice, all persons who wish to submit comments, suggestions, or objections in connection with the proposed withdrawal may present their views in writing to the undersigned officer of the BLM.

Notice is hereby given that an opportunity for a public meeting is afforded in connection with the proposed withdrawal. All interested persons who desire a public meeting for the purpose of being heard, on the proposed withdrawal, must submit a written request to the undersigned officer within 90 days from the date of publication of this notice. Upon determination by the authorized officer that a public meeting will be held, a notice of the time and place will be published in the **Federal Register** at least 90 days before the scheduled date of the meeting.

The application will be processed in accordance with the regulations set forth in 43 CFR Part 2300.

For a period of 2 years from the date of publication of this notice in the **Federal Register**, the land will be segregated as specified above unless the application is denied, canceled, or the withdrawal is approved prior to that date. The temporary uses which may be permitted during this segregative period are land uses permitted by the Forest Service under existing laws and regulations.

The temporary segregation or the land in connection with this withdrawal application or proposal shall not affect the administrative jurisdiction over the land, and the segregation shall not have the effect of authorizing any use of the land by the USDA.

Dated: December 6, 1990.

Larry L. Woodard,

State Director.

[FR Doc. 90-29270 Filed 12-13-89; 8:45 am]

BILLING CODE 4310-FB-M

INTERSTATE COMMERCE COMMISSION

[Ex Parte No. 388 (Sub 9)]

Intrastate Rail Rate Authority—Iowa

AGENCY: Interstate Commerce Commission.

ACTION: Notice of recertification.

SUMMARY: Pursuant to 49 U.S.C. 11501(b), the Commission recertifies the State of Iowa to regulate intrastate rail rates, classifications, rules, and practices for a 5-year period.

DATES: Recertification will be effective January 13, 1991, and will expire January 12, 1996.

FOR FURTHER INFORMATION CONTACT: Joseph H. Dettmar (202) 275–7245 (TDD for hearing impaired: (202) 275–1721).

SUPPLEMENTARY INFORMATION: Additional information is contained in the Commission's decision. To purchase a copy of the full decision, write to, call, or pick up in person from: Dynamic Concepts, Inc., room 2229, Interstate Commerce Commission Building, Washington, DC 20423. Telephone: (202) 289–4357/4359.

Decided: December 7, 1990.

By the Commission, Chairman Philbin, Vice Chairman Phillips, Commissioners Simmons, Emmett, and McDonald.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 90–29359 Filed 12–13–90; 8:45 am]

BILLING CODE 7035–01–M

[Finance Docket No. 31779]

Michigan Southern Railroad Co., Inc.; Operation Exemption

The Michigan Southern Railroad Company, Inc. (MSR), a non-carrier, has filed a notice of exemption to operate a line of railroad owned by the Branch & St. Joseph Counties Rail Users Association, Inc. (B&SJ), in Branch and St. Joseph Counties, MI. The line extends approximately 24.34 miles between milepost 382.5, at or near Coldwater, MI, and milepost 406.84, at or near Sturgis, MI, and was acquired by B&SJ after its abandonment by Consolidated Rail Corporation. MSR has entered into an agreement with B&SJ to replace Southwestern Michigan Railroad Company, Inc. (SMR), as operator of the line.[1] This change of operators is exempt under 49 CFR 1150.31(a)(3). The transaction was to be consummated November 22, 1990.

MSR shall retain its interest in and take no steps to alter the historic integrity of all sites and structures on the line that are 50 years old or older until completion of the section 106 process of the National Historic Preservation Act, 16 U.S.C. 470.

Any comments must be filed with the Commission and served on: Fritz R. Kahn, 901 15th Street NW., suite 700, Washington, DC 20005–2301.

This notice is filed under 49 CFR 1150.31. If the notice contains false or misleading information, the exemption is void *ab initio*. Petitions to revoke the exemption under 49 U.S.C. 10505(d) may be filed at any time. The filing of a petition to revoke will not automatically stay the transaction.

Decided: December 10, 1990.

By the Commission, David M. Konschnik, Director, Office of Proceedings.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 90–29360 Filed 12–13–90; 8:45 am]

BILLING CODE 7035–01–M

[1] Under an agreement with B&SJ, SMR has operated the line for approximately the last year. Finance Docket No. 31525, *Southwestern Michigan Railroad Company, Inc.—Acquisition and Operation Exemption—Branch & St. Joseph Counties Rail Users Association, Inc.* (not printed), served and published September 15, 1989 (54 FR 38293). MSR is also the assignee of this agreement.

[Finance Docket No. 31775]

Soo Line Railroad Co. & Chicago and North Western Transportation Co.; Joint Relocation Project Exemption

On November 29, 1990, Soo Line Railroad Company (Soo) and Chicago and North Western Transportation Company (CNW), filed a notice of exemption under 49 CFR 1180.2(d)(5) for their joint project to relocate a line of railroad. The joint project consists of a relocation of Soo's "bridge" trackage rights over CNW's line between Hopkins and Shakopee, MN, to an alternative CNW line between Cliff, MN, and Shakopee.[1]

The joint track is over that portion of CNW's main line between the point of switch of the connection at milepost 4.18, at St. Paul (Cliff), MN, and the point of switch of the connection at milepost 29.0, at Shakopee, a distance of 24.82 miles. This includes all sidings now extant or hereafter constructed along the joint track to be jointly used and includes other appurtenances and facilities, signals, switches, jointly used connecting tracks, interlocking devices and plants, signal and communication lines, and all improvements required for operations over the joint track. The proposed relocation project will permit Soo to realize substantial operating economies in providing service to Shakopee, as it will permit the termination of the subsidy agreement and will enable CNW to complete the abandonment of segments otherwise authorized or exempted.

The joint project involves the relocation of a line of railroad that does not disrupt service to shippers as Soo does not serve shippers over the present "bridge" rights and does not serve shippers along the CNW lines, except at Shakopee which will not be affected by the relocation. There will be no expansion into new territory for Soo because it already serves the shippers at Shakopee, and there will be no change in the existing competitive situation. The joint relocation qualifies under the class exemption procedures at 49 CFR 1180.2(d)(5).

To ensure that all employees who may be affected by the transaction are given the minimum protection afforded under 49 U.S.C. 10505(g)(2) and 49 U.S.C. 11347, the labor conditions set forth in *New York Dock Ry—Control—Brooklyn Eastern Dist.*, 360 I.C.C. 60 (1979), are imposed.

Petitions to revoke the exemption under 49 U.S.C. 10505(d) may be filed at any time. The filing of a petition to revoke will not stay the transaction. Pleadings must be filed with the Commission and served on Larry D. Starns, Administrative Law and Contracts, Soo Line Railroad Company, Soo Line Building, Box 530, Minneapolis, MN 55440, and on Robert T. Opal, Chicago and North Western Transportation Company, 165 North Canal Street, Chicago, IL 60606.

Dated: December 10, 1990.

By the Commission, David M. Konschnik, Director, Office of Proceedings.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 90–29361 Filed 12–13–90; 8:45 am]

BILLING CODE 7035–01–M

[1] The present routing includes a segment between milepost 21.0, at Hopkins, and milepost 32.0, at Chaska, MN. Soo is subsidizing CNW's retention of this line for Soo trackage rights operations under a 49 U.S. 10905 subsidy agreement approved by the Commission in Docket No. AB–1 (Sub–No. 206) *Chicago and North Western Transportation Company—Abandonment and Discontinuance of Trackage Rights—Between Hopkins and Chaska, MN* (not printed), served April 5, 1988. Issuance of a certificate for CNW to abandon the line and for Soo to discontinue trackage rights over the line was postponed for as long as the subsidy agreement was in effect. The subsidy agreement is being terminated as part of the proposed relocation. The present routing also includes another segment (between mileposts 19.85 and 21.0), abandonment of which was exempted in Docket No. AB–1 (Sub–No. 231X), *Chicago and North Western Transportation Company—Abandonment Exemption—In Hennepin Co., MN* (not printed), served June 26, 1990.

[Docket No. AB-340 (Sub-No. 1X)]

Lenawee County Railroad Company, Inc.—Abandonment Exemption—in Lenawee County, MI

Applicant has filed a notice of exemption under 49 CFR part 1152 subpart F—*Exempt Abandonments and Discontinuances* to abandon its 3.8-mile line of railroad between milepost Bimo and milepost Leaf in Lenawee County, MI.[1]

Applicant has certified that: (1) No local traffic has moved over the line for at least two years; (2) any overhead traffic on the line can be rerouted over other lines; and (3) no formal complaint filed by a user of rail service on the line (or a State or local government entity acting on behalf of such user) regarding cessation of service over the line either is pending with the Commission or with any U.S. District Court or has been decided in favor of the complainant within the 2-year period. The appropriate State agency has been notified in writing at least 10 days prior to the filing of this notice.

As a condition to use this exemption, any employee affected by the abandonment shall be protected under Oregon Short Line R. Co.—Abandonment—Goshen, 360 I.C.C. 91 (1979). To address whether this condition adequately protects affected employees, a petition for partial revocation under 49 U.S.C. 10505(d) must be filed.

Provided no formal expression of intent to file an offer of financial assistance has been received, this exemption will be effective on January 15, 1991 (unless stayed pending reconsideration). Petitions to stay that do not involve environmental issues,[2] formal expressions of intent to file an offer of financial assistance under 49 CFR 1152.27(c)(2),[3] and trail use/rail banking statements under 49 CFR 1152.29 must be filed by December 26, 1990.[4] Petitions for reconsideration and requests for public use conditions under 49 CFR 1152.28 must be filed by January 7, 1991, with: Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, DC 20423.

A copy of any petition filed with the Commission should be sent to applicant's representative: Clyne W. Durst, Jr., 245 N. Winter Street, Adrian, MI 49221.

If the notice of exemption contains false or misleading information, use of the exemption is void *ad initio*.

Applicant has filed an environmental report which addresses environmental or energy impacts, if any, from this abandonment.

The Section of Energy and Environment (SEE) will prepare an environmental assessment (EA). SEE will issue the EA by December 21, 1990. Interested persons may obtain a copy of the EA from SEE by writing to it (Room 3219, Interstate Commerce Commission, Washington, DC 20423) or by calling Elaine Kaiser, Chief of SEE at (202) 275-275-7684. Comments on environmental and energy concerns must be filed within 15 days after the EA becomes available to the public.

Environmental, public use, or trail use/rail banking conditions will be imposed, where appropriate, in a subsequent decision.

Decided: November 29, 1990.

By the Commission, David M. Konschnik, Director, Office of Proceedings.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 90-29109 Filed 12-13-90; 8:45 am]

BILLING CODE 7035-01-M

[1] Applicant had originally filed a petition for exemption under 49 U.S.C 10505. By letter and supporting affidavit filed November 26, 1990, applicant requested that the matter be handled under the exempt abandonment procedures of 49 CFR 1152.50.

[2] A stay will be routinely issued by the Commission in those proceedings where an informed decision on environmental issues (whether raised by a party or by the section of Energy and Environment in its independent investigation) cannot be made prior to the effective date of the notice of exemption. *See Exemption of Out-of-Service Rail Lines*, 5 I.C.C. 2d 377 (1989). Any entity seeking a stay involving environmental concerns is encouraged to file its request as soon as possible in order to permit this Commission to review and act on the request before the effective date of this exemption.

[3] *See Exempt. of Rail Abandonment—Offers of Financ. Assist.*, 4 I.C.C. 2d 164 (1987).

[4] The Commission will accept a late-filed trail use statement so long as it retains jurisdiction to do so.

DEPARTMENT OF LABOR

Office of the Secretary

Agency Recordkeeping/Reporting Requirements Under Review by the Office of Management and Budget (OMB)

Background

The Department of Labor, in carrying out its responsibilities under the Paperwork Reduction Act (44 U.S.C. chapter 35), considers comments on the reporting and recordkeeping requirements that will affect the public.

List of Recordkeeping/Reporting Requirements Under Review

As necessary, the Department of Labor will publish a list of the Agency recordkeeping/reporting requirements under review by the Office of Management and Budget (OMB) since the last list was published. The list will have all entries grouped into new collections, revisions, extensions, or reinstatements. The Departmental Clearance Officer will, upon request, be able to advise members of the public of the nature of the particular submission they are interested in. Each entry may contain the following information:

The Agency of the Department issuing this recordkeeping/reporting requirement.

The title of the recordkeeping/reporting requirement.

The OMB and Agency identification numbers, if applicable.

How often the recordkeeping/reporting requirement is needed.

Who will be required to or asked to report or keep records.

Whether small businesses or organizations are affected.

An estimate of the total number of hours needed to comply with the recordkeeping/reporting requirements and the average hours per respondent.

The number of forms in the request for approval, if applicable.

An abstract describing the need for and uses of the information collection.

Comments and Questions

Copies of the recordkeeping/reporting requirements may be obtained by calling the Departmental Clearance Officer, Paul E. Larson, telephone (202) 523-6331. Comments and questions about the items on this list should be directed to Mr. Larson, Office of Information Management, U.S. Department of Labor, 200 Constitution Avenue, NW., room N-1301, Washington, DC 20210. Comments should also be sent to the Office of Information and Regulatory Affairs, Attn: OMB Desk Officer for (BLS/DM/ESA/ETA/OLMS/MSHA/OSHA/PWBA/VETS), Office of Management and Budget, room 3208, Washington, DC 20503 (Telephone (202) 395-6880).

Any member of the public who wants to comment on a recordkeeping/reporting requirement which has been submitted to OMB should advise Mr. Larson of this intent at the earliest possible date.

Extension

Occupational Safety and Health Administration

Gear Certification

1218-0003

Recordkeeping;
Business or other for-profit;
130 respondents; 27,530 total burden hours; 11,000 responses; 2.5 average number hours per response;

OSHA is requiring this information to be collected by accredited agencies to determine the condition of certain cargo handling gear and other material handling devices to ensure the safety of those employees working in the maritime industry while using such equipment.

Reinstatement

Department of Labor/Bureau of Labor Statistics, and Department of Commerce/Bureau of the Census
May 1991 CPS Supplement on Multiple Jobholding and Work Schedules
(Was 1220-0119)—CPS-I, CPS-260

Form	Affected public	Respondents	Frequency	Average time per response
CPS-1, CPS-260	Individuals or households	57,000	One-time	4.5 minutes per response. 4,275 total burden hours.

This supplement will provide data on multiple jobholding and work schedules for individuals age 15 years or older. This information will be used to provide a more detailed analysis of the Nation's labor force than is available from basic CPS data or other data sources.

Signed at Washington, DC this 11th day of December, 1990.

Paul E. Larson,

Departmental Clearance Officer.

[FR Doc. 90-29354 Filed 12-13-90; 8:45 am]

BILLING CODE 4510-24-M

Employment Standards Administration, Wage and Hour Division

Minimum Wages for Federal and Federally Assisted Construction; General Wage Determination Decisions

General wage determination decisions of the Secretary of Labor are issued in accordance with applicable law and are based on the information obtained by the Department of Labor from its study of local wage conditions and data made available from other sources. They specify the basic hourly wage rates and fringe benefits which are determined to be prevailing for the described classes of laborers and mechanics employed on construction projects of a similar character and in the localities specified therein.

The determination in these decisions of prevailing rates and fringe benefits have been made in accordance with 29 CFR part 1, by authority of the Secretary of Labor pursuant to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Stat. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in 29 CFR part 1, appendix, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act. The prevailing rates and fringe benefits determined in these decisions shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

Good cause is hereby found for not utilizing notice and public comment procedure thereon prior to the issuance of these determinations as prescribed in 5 U.S.C. 553 and not providing for delay in the effective date as prescribed in that section, because the necessity to issue current construction industry wage determinations frequently and in large volume causes procedures to be impractical and contrary to the public interest.

General wage determination decisions, and modifications and supersedes decisions thereto, contain no expiration dates and are effective from their date of notice in the **Federal Register**, or on the date written notice is received by the agency, whichever is earlier. These decisions are to be used in accordance with the provisions of 29 CFR parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable Federal prevailing wage law and 29 CFR part 5. The wage rates and fringe benefits, notice of which is published herein, and which are contained in the Government Printing Office (GPO) document entitled "General Wage Determinations Issued Under The Davis-Bacon And Related Acts," shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

Any person, organization, or governmental agency having an interest in the rates determined as prevailing is encouraged to submit wage rate and fringe benefit information for consideration by the Department. Further information and self-explanatory forms for the purpose of submitting this data may be obtained by writing to the U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Division of Wage Determinations, 200 Constitution Avenue NW., room S-3014, Washington, DC 20210.

Modification to General Wage Determination Decisions

The numbers of the decisions listed in the Government Printing Office document entitled "General Wage Determinations Issued Under the Davis-Bacon and Related Acts" being modified are listed by Volume, State, and page number(s). Dates of publication in the **Federal Register** are in parentheses following the decisions being modified.

Georgia:
GA90-4 (Jan. 5, 1990)..... p. 221, p. 222
GA90-22 (Jan. 5, 1990)..... p. 261, p. 262
GA90-37 (Jan. 5, 1990)..... p. 280k
New York:
NY90-2 (Jan. 5, 1990)..... p. 739, pp. 742, 750
NY90-10 (Jan. 5, 1990)..... p. 831, pp. 834, 837
Index..... p. xxiii
Index..... p. lxi
Iowa, IA90-2 (Jan. 5, 1990).. p. 23, p. 24
Michigan:
MI90-2 (Jan. 5, 1990)..... p. 441, p. 443
MI90-7 (Jan. 5, 1990)..... p. 495, pp. 496, 498-516
MI90-18 (Jan. 5, 1990)..... p. 544a
Minnesota:
MN90-7 (Jan. 5, 1990)..... p. 563, p. 568
MN90-8 (Jan. 5, 1990)..... p. 583, p. 588
Ohio:
OH90-29 (Jan. 5, 1990)..... p. 873
OH90-35 (Jan. 5, 1990)..... p. 918c, p. 918d
Alaska, AK90-1 (Jan. 5, 1990). p. 1, p. 3
California, CA90-4 (Jan. 5, 1990). p. 71, pp. 72-86, pp. 89-94
Idaho, ID90-1 (Jan. 5, 1990). p. 147, p. 148
Montana:
MT90-1 (Jan. 5, 1990)..... p. 171, pp. 172-173, 175
MT90-3 (Jan. 5, 1990)..... p. 211, p. 212-214
MT90-8 (Jan. 5, 1990)..... p. 226g, p. 226h

Oregon, OR90-1 (Jan. 5, 1990). p. 309, pp. 311, 314
Washington:
WA90-1 (Jan. 5, 1990) ..... p. 369, p. 371
WA90-2 (Jan. 5, 1990) ..... p. 395, p. 397
WA90-3 (Jan. 5, 1990) ..... p. 405, p. 406
WA90-7 (Jan. 5, 1990) ..... p. 419, p. 420
WA90-8 (Jan. 5, 1990) ..... p. 425, p. 426

General Wage Determination Publication

General wage determinations issued Under the Davis-Bacon and related Acts, including those noted above, may be found in the Government Printing Office (GPO) document entitled "General Wage Determinations Issued Under The Davis-Bacon And Related Acts". This public is available at each of the 50 Regional Government Depository Libraries and many of the 1,400 Government Depository Libraries across the country. Subscriptions may be purchased from:

Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 783-3238.

When ordering subscription(s), be sure to specify the State(s) of interest, since subscriptions may be ordered for any or all of the three separate volumes, arranged by State. Subscriptions include an annual edition (issued on or about January 1) which includes all current general wage determinations for the States covered by each volume. Throughout the remainder of the year, regular weekly updates will be distributed to subscribers.

Signed at Washington, DC this 7th day of December 1990.

Alan L. Moss,

Director, Division of Wage Determinations.

[FR Doc. 90-29152 Filed 12-13-90; 8:45 am]

BILLING CODE 4510-27-M

Employment and Training Administration

[TA-W-24, 784]

Olin Hunt Specialty Products, Inc. Limerock, RI; Affirmative Determination Regarding Application for Reconsideration

By a letter dated November 20, 1990, Local #251 of the Teamsters Union requested administrative reconsideration of the Department of Labor's Notice of Negative Determination Regarding Eligibility to Apply for Worker Adjustment Assistance for workers and former workers of Olin Hunt Specialty Products, Inc., Limerock, Rhode Island. The Negative Determination was issued on October 25, 1990 and published in the **Federal Register** on November 14, 1990 (55 FR 47550).

The union claims that a Japanese firm has purchased the company and is importing the intermediate chemicals formerly produced at Limerock.

Conclusion

After careful review of the application, I conclude that the claims are of sufficient weight to justify reconsideration of the Department of Labor's prior decision. The application is, therefore, granted.

Signed at Washington, DC, this 6th day of December 1990.

Robert O. Deslongchamps,

Director, Office of Legislation and Actuarial Services, UIS.

[FR Doc. 90-29355 Filed 12-13-90; 8:45 am]

BILLING CODE 4510-30-M

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice 90-104]

NASA Advisory Council (NAC), Space Science and Applications Advisory Committee (SSAAC), Life Sciences Subcommittee; Meeting

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, Public Law 92-463, as amended, the National Aeronautics and Space Administration announces a forthcoming meeting of the NASA Advisory Council, Space Science and Applications Advisory Committee, Life Sciences Subcommittee.

DATES: January 8, 1991, 8:30 a.m. to 5:30 p.m.; and January 9, 1991, 8:30 a.m. to 1:15 p.m.

ADDRESSES: National Council on the Aging, room 141 A & B, 600 Maryland Avenue, suite 100, West Wing SW., Washington, DC 20024.

FOR FURTHER INFORMATION CONTACT: Dr. Ronald J. White, Code SB, National Aeronautics and Space Administration, Washington, DC 20546 (202/453-1525).

SUPPLEMENTARY INFORMATION: The Space Science and Applications Advisory Committee consults with and advises the NASA Office of Space Science and Applications (OSSA) on long-range plans for, work in progress on, and accomplishments of NASA's Space Science and Applications programs. The Life Sciences Subcommittee provides advice to the Life Sciences Division concerning all of its programs in the space life sciences. The Subcommittee will meet to discuss the status of OSSA and Life Sciences; receive reports on the Space Station Freedom; review the Biospheric Research Program and Lifesat. The Subcommittee is chaired by Dr. Francis J. Haddy and is composed of 22 members. The meeting will be closed on Wednesday, January 9, 1991, from 12:15 p.m. to 1:15 p.m. to allow for a discussion on qualifications of individuals being considered for membership to the Subcommittee. Such a discussion would invade the privacy of the individuals involved. Since this session will be concerned with matters listed in 5 U.S.C. 552b(c)(6), it has been determined that the meeting will be closed to the public for this period of time. The remainder of the meeting will be open to the public up to the seating capacity of the room (approximately 45 including members of the Subcommittee). It is imperative that the meeting be held on these dates to accommodate the scheduling priorities of the key participants.

Type of Meeting: Open—except for a closed session as noted in the agenda below.

Agenda

Tuesday, January 8

8:30 a.m.—Introduction and Chairman's Remarks.
8:45 a.m.—Office of Space Science and Applications Status.
9:30 a.m.—Life Sciences Status.
10:45 a.m.—Discussion of Advisory Committee Activities.
11:15 a.m.—Summary of Life Sciences Activities.
1:30 p.m.—Report on Space Station Freedom.
2:30 p.m.—Search for Extraterrestrial Intelligence Program Overview.
3:30 p.m.—Biospheric Research Program Report.
4:30 p.m.—Lifesat Update.
5:30 p.m.—Adjourn.

Wednesday, January 9

8:30 a.m.—New Life Sciences Strategic Plan.
10:15 a.m.—Subcommittee Discussion.
11:15 a.m.—Subcommittee Strategy and Actions.
12:15 p.m.—Closed Session.
1:15 p.m.—Adjourn.

Dated: December 11, 1990.

John W. Gaff,

Advisory Committee Management Officer, National Aeronautics and Space Administration.

[FR Doc. 90-29330 Filed 12-13-90; 8:45 am]

BILLING CODE 7510-01-M

THE NATIONAL EDUCATION GOALS PANEL

Meeting

AGENCY: The National Education Goals Panel.

ACTION: Notice of meeting.

SUMMARY: The National Education Goals Panel was formed by Joint Statement of the President and the nation's governors on July 31, 1990 to determine appropriate indicators for measuring the national education goals and a format for reporting annually to the nation on progress. This will be the second meeting of the Panel.

TENTATIVE AGENDA ITEMS: The tentative agenda for the meeting includes a report on activities since the last meeting; a discussion of activities and timeline for the Panel's work; and a discussion on work in progress that relates to measurement issues pertinent to the national education goals.

DATES: The second meeting will be held on December 19, 1990.

ADDRESSES: The meeting is currently scheduled from 1:30–4:00 p.m. at the J.W. Marriott Hotel, 1331 Pennsylvania Avenue NW., Washington, D.C.

FOR FURTHER INFORMATION CONTACT: Charles Kolb at the White House Office of Policy Development. The phone number is (202) 456–6515.

December 7, 1990.

Roger B. Porter,

Assistant to the President for Economic and Domestic Policy.

[FR Doc. 90–29320 Filed 12–13–90; 8:45 am]

BILLING CODE 3127-01-M

NUCLEAR REGULATORY COMMISSION

Documents Containing Reporting or Recordkeeping Requirements: Office of Management and Budget (OMB) Review

AGENCY: Nuclear Regulatory Commission (NRC).

ACTION: Notice of the OMB review of information collection.

SUMMARY: The NRC has recently submitted to OMB for review the following proposal for the collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35).

1. Type of submission: Revision.
2. The title of the information collection: "Contract Clauses".
3. The form number if applicable: N/A.
4. How often the collection is required: One time.
5. Who will be required or asked to report: NRC Contractors.
6. An estimate of the number of responses: 4,380.
7. An estimate of the total number of hours needed to complete the requirement or request: 14,020 (3.2 hrs. per response).
8. An indication of whether section 3504(h), Public Law 96–511 applies: Not applicable.
9. Abstract: The NRC Division of Contracts and Property Management uses clauses other than those in the Federal Acquisition Regulation (FAR) to ensure that agency policies, procedures, and roles directed by the Atomic Energy Act with regard to Contractor Organizational Conflicts of Interest and Security are adhered to.

Copies of the submittal may be inspected or obtained for a fee from the NRC Public Document room 2120 L Street NW, Washington, DC.

Comments and questions can be directed by mail to the OMB reviewer: Ronald Minsk, Paperwork Reduction Project (3150–0112), Office of Information and Regulatory Affairs, NEOB–3019, Office of Management and Budget, Washington, DC 20503.

Comments can also be submitted by telephone at (202) 395–3084. The NRC Clearance Officer is Brenda Jo. Shelton, (301) 492–8132.

Dated at Bethesda, Maryland this 4th day of December 1990.

For the Nuclear Regulatory Commission.

Patricia G. Norry,

Designated Senior Official For Information Resources Management.

[FR Doc. 90–29349 Filed 12–13–90; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50–348–CivP and 50–364–CivP, ASLBP 91–626–02–CivP]

Alabama Power Company; Establishment of Atomic Safety and Licensing Board

Pursuant to delegation by the Commission dated December 29, 1972, published in the **Federal Register**, 37 FR 28710 (1972), and §§ 2.105, 2.700, 2.702, 2.714, 2.714a, 2.717 and 2.721 of the Commission's Regulations, all as amended, an Atomic Safety and Licensing Board is being established in the following proceeding.

Alabama Power Company, Joseph M. Farley Nuclear Plant, Units 1 and 2, Facility Operating License Nos. NPF–2 and NPF–8, E.A. 88–40.

This Board is being designated pursuant to the request of the Licensee for an enforcement hearing regarding an Order issued by the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations, and Research, dated August 21, 1990, entitled "Order Imposing Civil Monetary Penalty". (55 FR 35203, August 28, 1990.)

An order designating the time and place of any hearing will be issued at a later date.

All correspondence, documents and other materials shall be filed in accordance with 10 CFR 2.701. The Board is comprised of the following administrative judges:

Administrative Judge John H. Frye, III, Chairman, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Administrative Judge James H. Carpenter, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Administrative Judge Peter A. Morris, 10825 South Glen Road, Potomac, MD 20854.

Issued at Bethesda, Maryland, this 7th day of December, 1990.

Robert M. Lazo,

Acting Chief Administrative Judge, Atomic Safety and Licensing Board Panel.

[FR Doc. 90–29351 Filed 12–13–90; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 72–10, 50–282/306–RS, ASLBP No. 91–527–01–RS]

Northern States Power Company; Establishment of Atomic Safety and Licensing Board

Pursuant to delegation by the Commission dated December 29, 1972, published in the **Federal Register**, 37 FR 28710 (1972), and §§ 2.105, 2.700, 2.702, 2.714, 2.714a, 2.717 and 2.721 of the Commission's Regulations, all as amended, an atomic Safety and Licensing Board is being established in the following proceeding to rule on petitions for leave to intervene and/or requests for hearing and to preside over the proceeding in the event that a hearing is ordered.

Northern States Power Company, Prairie Island Nuclear Generating Plant, Independent Spent Fuel Storage Installation (ISFSI).

This Board is being established pursuant to a notice published by the Commission on October 19, 1990, in the **Federal Register** (55 FR 42527) entitled, "Notice of Consideration of Issuance of a Materials License for the Storage of Spent Fuel and Notice of Opportunity for a Hearing". The proposed license would authorize the Nuclear Generating Plant, Units 1 and 2, in dry storage casks at an ISFSI to be constructed at the applicant's Prairie Island Nuclear

Generating Plant site. (Operating Licenses DPR-2013 and 2014.) Pursuant to the provisions of 10 CFR part 72, the term of the license for the ISFSI would be twenty (20) years.

The Board is comprised of the following administrative judges:

Robert M. Lazo, Chairman, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

George C. Anderson, 7719 Ridge Drive, NE., Seattle, WA 98115.

Peter S. Lam, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

All correspondence, documents and other materials shall be filed with the Judges in accordance with 10 CFR 2.701.

Issued at Bethesda, Maryland, this 7th day of December, 1990.

Robert M. Lazo,

Acting Chief Administrative Judge, Atomic Safety and Licensing Board Panel.

[FR Doc. 90-29352 Filed 12-13-90; 8:45 am]

BILLING CODE 7590-01-M

[License No. 24-18959-02, ASLBP No. 91-628-01-SC]

Rhodes-Sayre & Associates Inc.; Establishment of Atomic Safety and Licensing Board

Pursuant to delegation by the Commission dated December 29, 1972, published in the **Federal Register**, 37 FR 28710 (1972), and §§ 2.105, 2.700, 2.702, 2.714, 2.714a, 2.717 and 2.721 of the Commission's Regulations, all as amended, an Atomic Safety and Licensing Board is being established in the following proceeding:

Rhodes-Sayre & Associates Inc., Byproduct Material License 24-18959-02

This Board is being established pursuant to the request by Mr. Richard G. Rhodes, P.E., the Licensee, for a hearing regarding an Order issued by the Acting Director, Division of Accounting and Finance, Office of the Controller, dated September 19, 1990, entitled "Order to Show Cause". Mr. Rhodes was ordered to show cause why the Licensee should not be required to cease all operations involving the licensed material, place the material in secured storage, dispose of the material within 10 days, and decontaminate facilities and equipment in accordance with 10 CFR 30.36 and thereafter have its License 24-18959-02 revoked permanently for non-payment of the inspection fee.

An Order designating the time and place of any hearing will be issued at a later date.

All correspondence, documents and other materials shall be filed in accordance with 10 CFR 2.701. The Board is comprised of the following Administrative Judges:

Charles Bechhoefer, Chairman, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Richard F. Cole, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Charles N. Kelber, Atomic Safety and Licensing Board Panel, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Issued at Bethesda, Maryland, this 7th day of December, 1990.

Robert M. Lazo,

Acting Chief Administrative Judge, Atomic Safety and Licensing Board Panel.

[FR Doc. 90-29353 Filed 12-13-90; 8:45 am]

BILLING CODE 7590-01-M

[Docket Nos. 50-338 and 50-339]

Virginia Electric and Power Company; Withdrawal of Application for Amendments to Facility Operating Licenses

The United States Nuclear Regulatory Commission (the Commission) has granted the request of Virginia Electric and Power Company (the licensee) to withdraw its March 18, 1988 application for proposed amendments to Facility Operating License Nos. NPF-4 and NPF-7 for the North Anna Power Station, Units 1 and 2, located in Louisa County, Virginia.

The proposed amendments would have modified the surveillance requirements of Technical Specification 3/4.7.13.1, "Groundwater Level-Service Water Reservoir."

The Commission has previously issued a Notice of Consideration of Issuance of Amendments published in the **Federal Register** on May 26, 1988 (53 FR 19072). However, by letter dated October 17, 1990, the licensee withdrew the proposed change.

For further details with respect to this action, see the application for amendments dated March 18, 1988, and the licensee's letter dated October 17, 1990, which withdrew the application for license amendments. The above documents are available for public inspection at the Commission's Public Document room, 2120 L Street, NW., Washington, DC, and at the Alderman Library, Special Collections Department, University of Virginia, Charlottesville, Virginia 22903-2498.

Dated at Rockville, Maryland, this 29 day of November 1990.

For the Nuclear Regulatory Commission.

Leon B. Engle,

Project Manager, Project Directorate II-2, Division of Reactor Projects—I/II, Office of Nuclear Reactor Regulation.

[FR Doc. 90-29348 Filed 12-13-90; 8:45 am]

BILLING CODE 7590-01-M

NUCLEAR WASTE TECHNICAL REVIEW BOARD

Meeting

ACTION: Notice of meetings.

Pursuant to the Nuclear Waste Technical Review Board's (NWTRB) authority under section 5051 of Public Law 100-203 of the Nuclear Waste Policy Amendments Act (NWPAA) of 1987, the full Board will meet January 16 and 17, 1991, at the Rosslyn Westpark Hotel, 1900 N. Fort Myer Drive, Arlington, Virginia 22209; (703) 527-4814.

On January 16, 1991, the Board will hear presentations from representatives of industry, environmental organizations, public policy groups, and state organizations. Among those scheduled to speak on the disposal of high-level waste (HLW) are Mr. Michael Martinez, Southern States Energy Board; Mr. Michael Wilson, Chairman of the NARUC Subcommittee on Nuclear Issues of the Florida Pubic Service Commission; Mr. Dan Reicher, Natural Resources Defense Council; Mr. Leon Lowery, Environmental Action; Ms. Susan Wiltshire, J.K. Associates; and Dr. Colin Heath, an expert on radioactive waste management. In addition, Mr. David Leroy, who was confirmed in July 1990 as Nuclear Waste Negotiator, has been invited to make a statement. As Nuclear Waste Negotiator, Mr. Leroy will be working with governors, Native Americans, and others in an effort to find a host state for a monitored retrievable storage facility for HLW, and possibly for a repository. Presentations will begin at 9 a.m. A brief question and discussion period will follow each statement.

The Board will meet on January 17, 1991, from 9 a.m.-12 noon to hear from Dr. John W. Barlett, Director of the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management (OCRWM), and Mr. Dwight Shelor, Associate Director of Systems and Compliance for the OCRWM. Dr. Bartlett has been invited to provide the Board with an overview of the OCRWM program including priorities and strategies, budget allocation, program staffing and integration, and the effects of litigation on site-evaluation activities at Yucca

Mountain. Mr. Shelor has been asked to comment on systems integration and on his plans for interacting with the Board in the coming year.

Members of the public are welcome to attend as observers. Transcripts of the meeting will be available on a library-loan basis from Ms. Victoria Reich, NWTRB librarian, beginning February 7, 1991.

The NWTRB was established in the NWPAA of 1987 to evaluate the scientific and technical validity of activities undertaken by the DOE's civilian radioactive waste management program. In the same law, Congress directed the DOE to characterize a site at Yucca Mountain, Nevada, for the possible development of a permanent underground repository for spent nuclear fuel and defense HLW.

For further information, contact Karyn Severson, External Affairs, 1100 Wilson Boulevard, suite 910, Arlington, Virginia 22209; (703) 235-4473.

Dated: December 10, 1990.

William D. Barnard,

Executive Director, Nuclear Waste Technical Review Board.

[FR Doc. 90-29286 Filed 12-13-90; 8:45 am]

BILLING CODE 6820-AM-M

SECURITIES AND EXCHANGE COMMISSION

(Release No. 34-28686; File No. SR-CBOE-90-30)

Self-Regulatory Organizations; Filing and Order Granting Accelerated Approval of Proposed Rule Change by the Chicago Board Options Exchange, Inc., Relating to Listing of Long-Term Options on Reduced Value Standard & Poor's 100 and 500 Indexes

Pursuant to sections 19(b)(1) of the Securities and Exchange Act of 1934 ("Act"), 15 U.S.C. 78s(b)(1), notice is hereby given that on November 19, 1990, the Chicago Board Options Exchange "(CBOE" or "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The CBOE proposes to modify Exchange Rule 5.8 to provide for the listing of long-term options on broad-based stock indexes that expire up to 36 months from the date of issuance. Currently, the CBOE may list long-term stock index options having up to 24 months to expiration. The Exchange also proposes to list long-term reduced value index options that will be computed at one-tenth of the value of the Exchange's Standard and Poor's 100 and 500 Indexes ("OEX" and "SPX", respectively). These long-term options on reduced value indexes, which the CBOE will call OEX LEAPS and SPX LEAPS,[1] will trade independent of and in addition to regular OEX and SPX options traded on the Exchange and will be subject to the same rules that govern the trading of Exchange index options except that the interval between strike prices will be no less than $2.50 instead of $5.00. As a result of CBOE rounding procedures, however, after dividing the OEX and SPX indexes by 10, the reduced value indexes may vary slightly from one-tenth of the full value indexes.[2]

The text of the proposed rule change is available at the Office of the Secretary, CBOE and at the Commission.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The self-regulatory organization has prepared summaries, set forth in sections (A), (B) and (C) below, of the most significant aspects of such statements.

(A) Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

The CBOE has been trading OEX and SPX options for several years. Both are broad-based stock indexes. The Exchange states that its policy has been to ensure that four consecutive near-term expiration months are available for OEX options at any given time. *e.g.* July, August, September, and October. SPX options are listed with two consecutive near-term months and either two or three additional months from the March quarterly cycle. The Exchange currently lists long-term options on the SPX, those having up to 24 months to expiration, which were designated as SPL Options. The Exchange also trades SPX options which settle based on the opening value of the SPX on the last business day before expiration, using the symbol NSX. NSX options have three expiration months based on the March cycle.

The Exchange now proposes to list three-year long-term options based on reduced value OEX and SPX indexes, termed OEX LEAPS and SPX LEAPS, respectively. These reduced value index options will be computed at one-tenth the level of the OEX and the SPX. Other than the reduced value, all other specifications and calculations for OEX and SPX LEAPS will remain the same as for the OEX and SPX options. As noted herein, these new options will have expirations up to 36 months from the time of their introduction.

Based in part on the experience gained from the trading of the 24 month SPL long-term options, the Exchange believes that the listing of 36 month long-term options on a reduced value index will better satisfy the investment needs of retail investors. Among other things, the Exchange believes that the reduced dollar values of the underlying indexes and the relative long-term duration of the proposed options will combine to offer investors the opportunity to obtain long-term portfolio protection at an affordable price.

The Exchange proposes that the new long-term reduced value options will be subject to the same rules that presently govern the trading of index options. In particular, options sales practice rules, margin requirements, floor trading procedures and position and exercise limits will apply. With regard to position limits, the Exchange will aggregate positions in the OEX and SPX LEAPS with those in OEX or SPX, SPL and NSX as applicable.

Like all options on the SPX, SPX LEAPS will feature European-style exercise (restricting exercise only to the last day of trading). Similarly, like OEX options, OEX LEAPS will feature American-style exercise. In addition, the Exchange, pursuant to Rule 24.3, will continuously calculate and disseminate the reduced underlying index values.

[1] LEAPS is an acronym for Long-Term Equity Anticipation Securities.

[2] The CBOE, in a letter from Robert P. Ackermann, Vice President, Legal Services, CBOE, to Thomas R. Gira, Branch Chief, Division of Market Regulation, Commission, dated December 7, 1990, states that the Exchange shall use the following procedure in rounding the reduced value indexes. The Exchange states that it will divide the calculated value, provided by Standard and Poor's Corporation, by 10 and round the resulting quotient to the nearest one-hundredth. The Exchange states that the digits one through four will be rounded down to the next number and the digits five through nine will be rounded up to the next number.

The Exchange proposes to retain flexibility in the listing of new strike prices which would be listed near or bracketing the then current reduced index value. The Exchange proposes to add additional strike prices only when the reduced value indexes (and thus, the overall market) make significant moves of approximately 10 to 15%, but a new expiration month will not be added more than every six months. The Exchange believes that this procedure should result in the listing of only a limited number of series for any expiration, thereby eliminating any confusion that might otherwise be caused by a myriad of strike prices and expirations.

The Exchange further expects that the reduced value indexes coupled with its proposed policy for listing strike prices on reduced value index options, as described below, will permit the offering of long-term options at premiums between $2 and $6 ($200 to $600 per contract) based on current market volatility and normal pricing considerations. The Exchange states that such premiums appear to be in the desired range of prices that investors have favored. The Exchange believes that such premiums could not be achieved for long-term options by using "full size" OEX or SPX options without the listing of strike prices so deep out-of-the-money as to offer investors limited ability to participate in the market or protect their portfolios.

The Exchange believes that the change to Rule 24.9, which reduces the strike price intervals for reduced value index options, is warranted because otherwise new strike prices would only be added after extraordinary market moves. For example, the OEX currently moves approximately one point for every seven point move in the Dow Jones Industrial Average ("DJIA"). Therefore, the Exchange adds a new strike price for every 35 point move in the DJIA. For OEX LEAPS, this ratio would be 70 to 1 and require a DJIA move of 350 points (70×5) before the Exchange would add a new strike price. Accordingly, the Exchange has proposed a $2.50 interval for reduced value index options, so that new strike prices will be added after a 175 point move in the DJIA.

The Exchange believes that the proposed rule change is consistent with section 6(b) of the Act, in general, and furthers the objectives of section 6(b)(5), in particular, in that it will facilitate transactions in securities and protect investors and the public interest while promoting just and equitable principles of trade.

(B) Self-Regulatory Organization's Statement on Burden on Competition

The Exchange believes that the proposed rule change will not impose an inappropriate burden on competition.

(C) Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

Written comments on the proposed rule change were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

The Exchange has requested that the proposed rule change be given accelerated effectiveness pursuant to section 19(b)(2) of the Act.

The commission finds that the proposed rule change is consistent with the Act and the rules and regulations thereunder applicable to a national securities exchange, and, in particular, the requirements of section 6(b)(5).[3] First, the Commission believes that the proposal to list long-term options on broad-based stock indexes that expire up to 36 months from the date of issuance is designed to provide investors with additional means to hedge equity portfolios from long-term market risk, thereby facilitating transactions in options and contributing to the protection of investors and the maintenance of fair and orderly markets.

Specifically, institutional customers currently use index options to, among other things, hedge the risks associated with holding diversified equity portfolios. The Commission believes that the Exchange's proposal to provide longer-term index options, which allows investors to lock in their hedges for up to three years, will permit institutions to protect better their portfolios from adverse long-term market moves. Further, the Commission believes that long-term options will allow this protection to be provided at a known and limited cost.

Second, the Commission believes that the Exchange's proposal to list reduced value index options, computed at one-tenth of the value of the OEX and SPX, will facilitate transactions in options by providing investors with additional means to hedge equity portfolios against long-term market risk.[4] In particular, the Commission believes that options on reduced value indexes will serve the needs of retail investors by providing them with the opportunity to use long-term options to protect their portfolios from long-term market moves at a reduced cost. This may result in options premiums more affordable to retail investors.

The Commission also believes that trading in options on the reduced value OEX and SPX indexes will not have an adverse market impact or be susceptible to manipulation. Previously, the Commission has determined that the OEX and the SPX are broad-based indexes. The Commission does not believe that merely changing these indexes by dividing their value by 10 will change this determination. OEX and SPX LEAPS will contain the same stocks with the same weightings as the full value index on which they are based (*i.e.* the OEX or the SPX) and will be calculated in the same manner as those indexes (with the exception of being 1/10th their value). In addition, the Commission believes that any potential manipulation concerns raised by options on the reduced value indexes are minimized by the fact that positions in these options will be aggregated with positions in options on the full value indexes for position and exercise limit purposes.[5] Moreover, the Commission notes that the same Exchange surveillance procedures for OEX and SPX options will be used for the OEX and SPX LEAPS. Finally, the Commission believes that reducing the strike price intervals for the reduced value index options is reasonable given the fact that any changes in value of the reduced value indexes will occur at a rate which is 1/10th of the rate at which the indexes on which they are based will change.

The Commission finds good cause for approving the proposed rule change prior to the thirtieth day after the date of publication of notice thereof in the **Federal Register**. The CBOE's proposal to list options on reduced value indexes is identical to a proposal by the American Stock Exchange, Inc. ("AMEX") to trade options on a reduced value Major Market Index that was

[3] 15 U.S.C. 78f(b)(5)(1982).

[4] Pursuant to section 6(b)(5) of the Act, the Commission must predicate approval of any new securities product upon a finding that the introduction of such product is in the public interest. Such a finding would be difficult with respect to a product that served no hedging or other economic function because any benefits that might be derived by market participants likely would be outweighed by the potential for manipulation, diminished public confidence in the integrity of the markets, and other valid regulatory concerns.

[5] For example, positions in OEX LEAPS and positions in OEX options will be aggregated, and positions in SPX LEAPS and positions in SPX, SPL, and NSX options will be aggregated.

approved on November 14, 1990.[6] In addition, the CBOE's proposal to list long-term index options with up to 36 months until expiration is identical to a proposal by the AMEX that was approved on October 16, 1987.[7] Both proposals were subject to the full notice and comment period and did not receive any comments, and the Commission does not find any different regulatory issues arising out of the CBOE proposals. Thus, the Commission believes it is appropriate to approve the proposed rule change on an accelerated basis in order to facilitate competition between the exchanges for product services, which, in turn, should benefit public investors. The Commission believes, therefore, that granting accelerated approval of the proposed rule change is appropriate and consistent with section 6 of the Act.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC. Copies of such filing will also be available for inspection and copying at the principal office of the above-mentioned self-regulatory organization. All submissions should refer to the file number in the caption above and should be submitted by January 4, 1991.

It is therefore ordered, pursuant to section 19(b)(2) of the Act [8] that the proposed rule change (SR-CBOE-90-30) is approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.[9]

[6] See Securities Exchange Act Release No. 28613 (November 14, 1990) 55 FR 48307 (November 20, 1990) (order approving SR-AMEX-90-14).

[7] See Securities Exchange Act Release No. 25041 (October 16, 1987), 52 FR 40008 (October 26, 1987) (order approving SR-AMEX-87-22).

[8] 15 U.S.C. 78s(b) (1982).

[9] 17 CFR 200.30-3(a)(12) (1990).

Dated: December 10, 1990.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 90-29278 Filed 12-13-90; 8:45 am]

BILLING CODE 8010-01-M

[Release No. 35-25202]

Filings Under the Public Utility Holding Company Act of 1935 ("Act")

December 7, 1990.

Notice is hereby given that the following filing(s) has/have been made with the Commission pursuant to provisions of the Act and rules promulgated thereunder. All interested persons are referred to the application(s) and/or declaration(s) for complete statements of the proposed transaction(s) summarized below. The application(s) and/or declaration(s) and any amendments thereto is/are available for public inspection through the Commission's Office of Public Reference.

Interested persons wishing to comment or request a hearing on the application(s) and/or declaration(s) should submit their views in writing by January 2, 1991, to the Secretary, Securities and Exchange Commission, 450 5th Street NW., Washington, DC 20549, and serve a copy on the relevant application(s) and/or declarant(s) at the address(es) specified below. Proof of service (by affidavit or, in case of an attorney at law, by certificate) should be filed with the request. Any request for hearing shall identify specifically the issues of fact or law that are disputed. A person who so requests will be notified of any hearing, if ordered, and will receive a copy of any notice or order issued in the matter. After said date, the application(s) and/or declaration(s), as filed or as amended, may be granted and/or permitted to become effective.

National Fuel Gas Company, et al. (70-7691)

National Fuel Gas Company ("NFG"), 30 Rockefeller Plaza, suite 4545, New York, New York 10112, a registered holding company, and its wholly owned subsidiary companies, Data-Track Account Services, Inc. ("Data-Track"), 10 Lafayette Square, Buffalo, New York 14203 and Seneca Resources Corporation ("Seneca"), 333 Clay Street, suite 4150, Houston, Texas 77002, have filed a post-effective amendment with the additional section 13 of the Act and Rules 90 and 91 thereunder, to this application-declaration filed with the Commission under sections 6(a), 7, 9(a), 10, 12(b) and 12(f) of the Act and Rules 43, 45, and 50(a)(5) thereunder.

Pursuant to an order of this Commission dated December 27, 1989 (HCAR No. 25013) ("Order"), Seneca is authorized to borrow up to $125 million from the NFG System Money Pool ("Money Pool") through December 31, 1991.

Seneca now proposes to borrow up to an additional $20 million aggregate principal amount from the Money Pool to make oil and gas investments in the gulf coast and southwest regions of the United States. NFG also proposed that Data-Track join the Money Pool and be authorized to make borrowings from the Money Pool of up to $500,000 aggregate principal amount outstanding at any one time. Data-Track will use its Money Pool borrowings as working capital, which will permit it to increase its collection activities for the NFG system companies. The proposed borrowings will run through December 31, 1991, and all the terms and conditions that apply to Seneca's additional borrowings and Data-Track's borrowings are the same as stated in the Order.

Granite State Electric Company, et al. (70-7765)

Granite State Electric Company, Massachusetts Electric Company, The Narragansett Electric Company ("Narragansett"), New England Transmission Corporation, New England Electric Inc., New England Hydro-Transmission Electric Company, Inc., New England Hydro-Transmission Corporation, New England Power Company, New England Power Service Company, subsidiary companies of New England Electric System ("NEES"), a registered holding company, and NEES, each located at 25 Research Drive, Westborough, Massachusetts 01582,[1] have filed a post-effective amendment to their application-declaration under sections 6(a), 7, 9(a), 10, and 12(b) of the Act and Rules 45 and 50(a)(5) thereunder.

By prior order, the Commission authorized, *inter alia*, Narragansett to lend money in the NEES Money Pool and, through October 31, 1993, to borrow from the NEES Money Pool and/or banks in an aggregate principal amount not to exceed $70 million. (HCAR No. 25156, Sept. 21, 1990).

Narragansett now proposes to issue and sell up to $70 million in commercial paper ("Commercial Paper"), through October 31, 1993, under an exception

[1] On November 7, 1990, NEES sold its energy management services subsidiary, NEES Energy, Incorporated ("NEES Energy"), to Northeast Energy Services, Inc. pursuant to Commission order (HCAR No. 25121, July 20, 1990). Consequently, NEES Energy is no longer a party to this filing.

from the competitive biding requirements of Rule 50 under subsection (a)(5) thereunder, in the form of unsecured promissory notes having varying maturities of not in excess of 270 days, as an additional short term borrowing vehicle. The aggregate principal amount of all borrowings by Narragansett, either from the NEES Money Pool, banks or the issuance of Commercial Paper, will not exceed $70 million through October 31, 1993.

Narragansett has requested, pursuant to Rule 50(a)(5), that it be authorized to carry out negotiations for the terms and conditions of the placement of the Commercial Paper. It may do so.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 90-29227 Filed 12-13-90; 8:45 am]

BILLING CODE 8010-01-M

TENNESSEE VALLEY AUTHORITY

Paperwork Reduction Act of 1980; Information Collection Under Review by the Office of Management and Budget

AGENCY: Tennessee Valley Authority.

ACTION: Information collection under review by the Office of Management and Budget (OMB).

SUMMARY: The Tennessee Valley Authority (TVA) has sent to OMB the following proposal for the collection of information under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. chapter 35), as amended by Public Law 99-591.

Requests for information, including copies of the information collection proposed and supporting documentation, should be directed to the Agency Clearance Officer whose name, address, and telephone number appear below. Questions or comments should be made within 30 days directly to the Agency Clearance Officer and also to the Desk Officer for the Tennessee Valley Authority, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503; telephone: (202) 395-3084.

Agency Clearance Officer: Mark R. Winter, Tennessee Valley Authority, Edney Building 4B, Chattanooga, TN 37402; (615) 751-2523.

Type of Request: Regular submission.

Title of Information Collection: Annual Report on Distribution and Use of TVA Fertilizers.

Frequency of Use: Annually.

Type of Affected Public: Businesses or other for-profit, small businesses or organizations.

Small Businesses or Organizations Affected: Yes.

Federal Budget Functional Category Code: 452.

Estimated Number of Annual Responses: 200.

Estimated Total Annual Burden Hours: 215.

Estimated Average Burden Hours Per Response: 1.08.

Need For and Use of Information: The information requested from distributors is needed to complete contractual requirements by distributors, to report on the use of TVA fertilizers and on the use of new manufacturing processes, and to provide feedback for program evaluation and direction.

Louis S. Grande,

Vice President, Information Services Senior Agency Official.

[FR Doc. 90-29266 Filed 12-13-90; 8:45 am]

BILLING CODE 8120-02-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Noise Exposure Map Notice Space Center Executive Airport Titusville, FL

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice

SUMMARY: The Federal Aviation Administration (FAA) announces its determination that the noise exposure maps submitted by the Titusville-Cocoa Airport Authority for the Space Center Executive Airport under the provisions of title I of the Aviation Safety and Noise Abatement Act of 1979 (Public Law 96-193) and 14 CFR part 150 are in compliance with applicable requirements.

EFFECTIVE DATE: The effective date of the FAA's determination on the noise exposure maps is November 28, 1990.

FOR FURTHER INFORMATION CONTACT: Pablo G. Auffant, P.E., Orlando Airports District Office, 9677 Tradeport Drive, suite 130, Orlando, FL 32827-5397, telephone (407) 648-6583.

SUPPLEMENTARY INFORMATION: This notice announces that the FAA finds that the noise exposure maps submitted for the Space Center Executive Airport are in compliance with applicable requirements of part 150, effective November 28, 1990.

Under section 103 of the Aviation Safety and Noise Abatement Act of 1979 (hereinafter referred to as "the Act"), an airport operator may submit to the FAA noise exposure maps which meet applicable regulations and which depict noncompatible land uses as of the date of submission of such maps, a description of projected aircraft operations, and the ways in which such operations will affect such maps. The Act requires such maps to be developed in consultation with interested and affected parties in the local community, government agencies, and persons using the airport.

An airport operator who has submitted noise exposure maps that are found by FAA to be in compliance with the requirements of Federal Aviation Regulations (FAR) part 150, promulgated pursuant to title I of the Act, may submit a noise compatibility program for FAA approval which sets forth the measures the operator has taken or proposes for the reduction of existing noncompatible uses and for the prevention of the introduction of additional noncompatible uses.

The FAA has completed its review of the noise exposure maps and related descriptions submitted by the Titusville-Cocoa Airport Authority. The specific maps under consideration are 1990 "Existing Conditions" Noise Exposure Map and 1995 "Future Conditions" Noise Exposure Map (UNABATED) in the submission. The FAA has determined that these maps for the Space Center Executive Airport are in compliance with applicable requirements. This determination is effective on November 28, 1990. FAA's determination on an airport operator's noise exposure maps is limited to a finding that the maps were developed in accordance with the procedures contained in appendix A of FAR part 150. Such determination does not constitute approval of the applicant's data, information or plans, or a commitment to approve a noise compatibility program or to fund the implementation of that program.

If questions arise concerning the precise relationship of specific properties to noise exposure contours depicted on a noise exposure map submitted under section 103 of the Act, it should be noted that the FAA is not involved in any way in determining the relative locations of specific properties with regard to the depicted noise contours, or in interpreting the noise exposure maps to resolve questions concerning, for example, which properties should be covered by the provisions of section 107 of the Act. These functions are inseparable from the ultimate land use control and planning responsibilities of local government. These local responsibilities

are not changed in any way under part 150 or through FAA's review of noise exposure maps. Therefore, the responsibility for the detailed overlaying of noise exposure contours onto the map depicting properties on the surface rests exclusively with the airport operator which submitted those maps, or with those public agencies and planning agencies with which consultation is required under section 103 of the Act. The FAA has relied on the certification by the airport operator, under § 150.21 of FAR part 150, that the statutorily required consultation has been accomplished.

Copies of the noise exposure maps and of the FAA's evaluation of the maps are available for examination at the following locations:

Federal Aviation Administration, 800 Independence Avenue SW., room 617, Washington, DC 20591

Federal Aviation Administration, Orlando Airports District Office, 4100 Tradecenter Street, Orlando, FL 32827

Mack R. LaZenby, P.E., A.A.E., Executive Director, TICO Airport Authority, 355 Golden Knights Boulevard, Titusville, Florida 32780.

Questions may be directed to the individual named above under the heading "**FOR FURTHER INFORMATION CONTACT**".

Issued in Orlando, Florida, November 28, 1990.

James E. Sheppard,

Manager, Orlando Airports District Office.

[FR Doc. 90-29324 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

Receipt of Noise Compatibility Program and Request for Review Pal-Waukee Municipal Airport, Wheeling/Prospect Heights, IL

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice.

SUMMARY: The Federal Aviation Administration (FAA) announces that it is reviewing a proposed noise compatibility program that was submitted for Pal-Waukee Municipal Airport under the provisions of title I of the Aviation Safety and Noise Abatement Act of 1979 (Pub. L. 96-193) (hereinafter referred to as "the Act") and 14 CFR part 150 by the Pal-Waukee Municipal Airport Commission (operator) and the city of Prospect Heights and the village of Wheeling (co-owners). This program was submitted subsequent to a determination by FAA that associated noise exposure maps submitted under 14 CFR part 150 for Pal-Waukee Municipal Airport were in compliance with applicable requirements effective July 26, 1988. The proposed noise compatibility program will be approved or disapproved on or before May 29, 1991.

EFFECTIVE DATES: The effective date of the FAA's start of its review of the associated noise compatibility program is November 30, 1990. The public comment period ends January 29, 1991.

FOR FURTHER INFORMATION CONTACT: Jerri L. Horst, Federal Aviation Administration, Great Lakes Region, Chicago Airports District Office, CHI-ADO-640.8, 2300 East Devon Avenue, Des Plaines, Illinois 60018, (312) 694-7524. Comments on the proposed noise compatibility program should also be submitted to the above office.

SUPPLEMENTARY INFORMATION: This notice announces that the FAA is reviewing a proposed noise compatibility program for that Pal-Waukee Municipal Airport which will be approved or disapproved on or before May 29, 1991. This notice also announces the availability of this program for public review and comment.

An airport operator who has submitted noise exposure maps that are found by FAA to be in compliance with the requirements of Federal Aviation Regulations (FAR) part 150, promulgated pursuant to title I of the Act, may submit a noise compatibility program for FAA approval which sets forth the measures the operator has taken or proposes for the reduction of existing noncompatible uses and for the prevention of the introduction of additional noncompatible uses.

The FAA has formally received the noise compatibility program for Pal-Waukee Municipal Airport, effective on November 30, 1990. It was requested that the FAA review this material and that the noise mitigation measures, to be implemented jointly by the airport and surrounding communities, be approved as a noise compatibility program under section 104(b) of the Act. Preliminary review of the submitted material indicates that it conforms to the requirements for the submittal of noise compatibility programs, but that further review will be necessary prior to approval or disapproval of the program. The formal review period, limited by law to a maximum of 180 days, will be completed on or before May 29, 1991.

The FAA's detailed evaluation will be conducted under the provisions of 14 CFR part 150, § 150.33. The primary considerations in the evaluation process are whether the proposed measures may reduce the level of aviation safety, create an undue burden on interstate or foreign commerce, or be reasonably consistent with obtaining the goal of reducing existing noncompatible land uses and preventing the introduction of additional noncompatible land uses.

Interested persons are invited to comment on the proposed program with specific reference to these factors. All comments, other than those properly addressed to local land use authorities, will be considered by the FAA to the extent practicable. Copies of the noise exposure maps, the FAA's evaluation of the maps, and the proposed noise compatibility program are available for examination at the following locations:

Federal Aviation Administration, Great Lakes Region, 2300 East Devon Avenue, room 269, Des Plaines, Illinois 60018.

Federal Aviation Administration, Chicago Airports District Office, 2300 East Devon Avenue, room 268, Des Plaines, Illinois 60018.

Pal-Waukee Municipal Airport Commission, Pal-Waukee Airport, Wheeling, Illinois 60090.

Village of Wheeling, 255 West Dundee Road, Wheeling, Illinois 60090.

City of Prospect Heights, 4 East Camp McDonald Road, Prospect Heights, Illinois 60070.

Questions may be directed to the individual named above under the heading, "**FOR FURTHER INFORMATION CONTACT**".

Issued in Des Plaines, Illinois, November 30, 1990.

Louis H. Yates,

Manager, Chicago Airports District Office, Great Lakes Region.

[FR Doc. 90-29325 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-13-M

Federal Highway Administration

Environmental Impact Statement: Tuolumne County, CA

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of intent.

SUMMARY: The FHWA is issuing this notice to advise the public that an environmental impact statement will be prepared for a proposed highway project in Tuolumne County, California.

FOR FURTHER INFORMATION CONTACT: Mr. John R. Schultz, District Engineer, Federal Highway Administration, P.O. 1915, Sacramento, California 95812-1915, telephone: (916) 551-1140.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the California Department of Transportation, will prepare an

environmental impact statement (EIS) on a proposal to improve approximately 4.9 miles of State Route 108 in Tuolumne County, California.

The existing facility is a two-lane conventional highway through a rapidly developing rural area. Because of commercial development along the existing highway, and a high volume of recreational traffic, there is a great deal of congestion. The proposed project will be designed to eliminate the congestion and provide a safer facility.

The alternatives under consideration are: (1) No action, and (2) construct a four-lane expressway on new alignment.

Letters describing the proposed action and soliciting comments will be sent to appropriate Federal, State, and local agencies, as well as to private organizations and citizens who have previously expressed interest in this proposal. Public notice will be given with the time and place of meetings and a public hearing. The draft EIS will be available for public and agency review and comment. No formal scoping meeting is planned at this time.

To ensure that the full range of issues related to this proposed action are address, and all significant issues are identified, comments and suggestions are invited from all interested parties. Comments or questions concerning this proposed action and the EIS should be directed to the FHWA at the address previously provided in this document.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Research, Planning, and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation of Federal Programs and activities apply to this program.)

Issued on: December 7, 1990.

Mr. John R. Schultz,

District Engineer, Sacramento, California.

[FR Doc. 90-29267 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-22-M

Maritime Administration

Approval of Applicant as Mortgagee

Notice is hereby given that The Bank of California, N.A., with offices at 400 California Street, San Francisco, California, has been approved as Mortgagee pursuant to Public Law 100-710 and 46 CFR part 221.

Dated: December 10, 1990.

By Order of the Maritime Administrator.

James E. Saari,

Secretary.

[FR Doc. 90-29283 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-81-M

Research and Special Programs Administration

Applications for Exemptions

AGENCY: Research and Special Programs Administration, DOT.

ACTION: List of applicants for exemptions.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, exemptions from the Department of Transportation's Hazardous Materials Regulations (49 CFR part 107, subpart B), notice is hereby given that the Office of Hazardous Materials Transportation has received the applications described herein. Each mode of transportation for which a particular exemption is requested is indicated by a number in the "Nature of Application" portion of the table below as follows: 1—Motor vehicle, 2—Rail freight, 3—Cargo vessel, 4—Cargo-only aircraft, 5—Passenger-carrying aircraft.

DATES: Comments must be received on or before January 14, 1991.

ADDRESS COMMENTS TO: Dockets Branch, Research and Special Programs Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-addressed stamped postcard showing the exemption application number.

FOR FURTHER INFORMATION: Copies of the applications are available for inspection in the Dockets Branch, Room 8426, Nassif Building, 400 7th Street, SW., Washington, DC.

NEW EXEMPTIONS

Application No.	Applicant	Regulation(s) affected	Nature of exemption thereof
10507-N	PVS Chemicals, Inc., Wyandotte, MI	49 CFR 174.67(i)	To authorize chlorine filled tank cars to stand with unloading connections attached during unloading without being attended by an unloader. (mode 2).
10508-N	Jet Propulsion Laboratory, Pasadena, CA.	49 CFR 173.145, 173.276	To authorize the transportation of flammable liquids in 3AAX stainless steel cylinders (not to exceed 20 pounds per shipment) overpacked in non-DOT specification wooden boxes transported in private-owned vehicles. (mode 1).
10509-N	IRECO Incorporated, Salt Lake City, UT.	49 CFR 173.154(a)(17)	To authorize shipment of ammonium nitrate solution (containing 35% or less water) in DOT-Specification stainless steel 111A1O0W6 tank cars. (mode 2).
10510-N	CMB Enterprises, Inc., Verona, NJ	49 CFR 173.1200(a)(8), 173.306(a), (b), (c), 173.34(d)(3)(ii), 173.34(e), (f).	To manufacture, mark and sell non-DOT specification metal containers comparable to DOT Specification 2Q, for shipment of certain flammable and nonflammable compressed gases, and an insecticide, liquified gas containing no poison A or B material. (modes 1, 2, 3, 4).
10511-N	Schlumberger Well Services, Houston, TX.	49 CFR 173.304	To authorize shipment of sulfur hexafluoride, classed as a nonflammable gas, in a non-DOT specification device contained in a specially designed shipping vessel. (modes 1, 2, 3, 4, 5).
10512-N	Albright & Wilson Americas, Richmond, VA.	49 CFR 173.263(a)(12)	To authorize the construction of tank cars fabricated of ASTM A240 type 316 Ti alloy steel without post weld heat treatment for shipment of 42% sodium chloride solution, classed as corrosive material. (mode 2).
10513-N	Great Lakes Chemical Corporation, West Lafayette, IN.	49 CFR 173.154	To authorize shipment of flammable solids, organic peroxide solids, and oxidizers not specifically provided for in non-DOT specification bulk bags overpacked in either a fiberboard box or drum in less than truckload quantities in non-dedicated trailers. (mode 1).
10514-N	Liquid Air, Walnut Creek, CA	49 CFR 174.67(i), (j)	To authorize carbon dioxide filled tank cars to stand with unloading connections attached during unloading without being attended by an unloader. (mode 2).

NEW EXEMPTIONS—Continued

Application No.	Applicant	Regulation(s) affected	Nature of exemption thereof
10515-N	Queen City Barrel Co., Cincinnati, OH.	49 CFR 178.118	To manufacture, mark and sell a DOT Specification 17H drum with plastic removable head for transportation of those solids as presently authorized in 17H drums or UN1A2 packaging Group II Packagings. (modes 1, 2, 3).
10516-N	S.A.F.E. Systems, Inc., Decatur, GA	49 CFR 173.306(c)(3)	To authorize shipment of approximately 40,571 non-DOT specification cylinders (fire extinguishers), which exceed 35 cubic inches containing a liquified compressed gas (Bromotrifluoromethane). (mode 1).
10517-N	Nalco Chemical Company, Naperville, IL.	49 CFR 173.32(e)(1)(ii)	To authorize the retesting of DOT-Specification 57 portable tanks fabaricated of stainless steel at five-year intervals. (modes 1, 2, 3).
10519-N	Canadian Liquid Air Limited, Montreal, Quebec, Canada.	49 CFR 173.119, 173.245, 173.246, 173.247, 173.251, 173.273, 173.302, 173.304, 173.328, 173.34, 173.346.	To authorize use of a non-DOT specification containment unit for the transportation of leaking or defective gas cylinders containing certain pressurized nonpressurized hazardous materials. (mode 1).
10520-N	Schlumberger Well Services, Houston, TX.	49 CFR 172.101, 173.53(u), 173.80	To authorize the transport of oil well jet perforating guns with a booster attached to the detonating cord classed as Class C explosives. (modes 1, 3).

This notice of receipt of applications for new exemptions is published in accordance with part 107 of the Hazardous Materials Transportations Act (49 U.S.C. 1806; 49 CFR 1.53(e)).

Issued in Washington, DC, on December 10, 1990.

J. Suzanne Hedgepeth,

Chief, Exemptions Branch, Office of Hazardous Materials Exemptions and Approvals.

[FR Doc. 90-29307 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-60-M

Notice of Applications for Renewal or Modification of Exemptions or Applications to Become a Party to an Exemption

AGENCY: Research and Special Programs Administration, DOT.

ACTION: List of applications for renewal or modification of exemptions or application to become a party to an exemption.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, exemptions from the Department of Transportation's Hazardous Materials Regulations (49 CFR part 107, subpart B), notice is hereby given that the Office of Hazardous Materials Transportation has received the applications described herein. This notice is abbreviated to expedite docketing and public notice. Because the sections affected, modes of transportation, and the nature of application have been shown in earlier **Federal Register** publications, they are not repeated here. Except as otherwise noted, renewal application are for extension of the exemption terms only. Where changes are requested (e.g. to provide for additional hazardous materials, packaging design changes, additional mode of transportation, etc.) they are described in footnotes to the application number. Application numbers with the suffix "X" denote renewal; application numbers with the suffix "P" denote party to. These applications have been separated from the new applications for exemptions to facilitate processing.

DATES: Comments must be received on or before December 31, 1990.

ADDRESS COMMENTS TO: Dockets Branch, Research and Special Programs, Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-addressed stamped postcard showing the exemption number.

FOR FURTHER INFORMATION: Copies of the applications are available for inspection in the Dockets Branch, Room 8426, Nassif Building, 400 7th Street, SW., Washington, DC.

Application No.	Applicant	Renewal of exemption
2582-X	Matheson Gas Products, Inc., Secaucus, NJ	2582
3667-X	Greendyke Transport, Inc., Enid, OK	3667
4453-X	W.A. Murphy, Inc., El Monte, CA	4453
4453-X	Brandywine Explosives & Supply, Inc., Paris, KY	4453
4719-X	Dow Chemical Company, Freeport, TX	4719
4719-X	Allied-Signal, Inc., Morristown, NJ	4719
4719-X	Halocarbon Products Corporation, North Augusta, SC	4719
5206-X	Geenen Explosives, Inc., Kaukauna, WI	5206
6530-X	GenEx, Ltd., Des Moines, IA	6530
6557-X	U.S. Department of Defense, Falls Church, VA	6557
6658-X	U.S. Department of Defense, Falls Church, VA	6658
6658-X	U.S. Department of Energy, Washington, DC (see footnote 1)	6658
6971-X	Alltech Associates, Deerfield, IL	6971
6974-X	General Dynamics Corporation, San Diego, CA	6974
7007-X	Allied Universal Corporation, Miami, FL	7007
7286-X	Liquid Carbonic Specialty Gas Corporation, Chicago, IL	7286
7546-X	Grumman Aircraft Systems, Bethpage, NY	7546
7546-X	National Aeronautics & Space Administration (NASA)	7546
7605-X	General Dynamics Corporation—Fort Worth Division, Fort Worth, TX	7605
7605-X	U.S. Department of Defense, Falls Church, VA	7605
7616-X	Union Pacific Railroad Company, Omaha, NE	7616
7616-X	Atchison, Topeka and Santa Fe Railway Company, Topeka, KS	7616

Application No.	Applicant	Renewal of exemption
7616-X	Norfolk Southern Corporation, Norfolk, VA	7616
7616-X	Chicago and North Western Transportation Company, Chicago, IL	7616
7616-X	Soo Line Railroad Company, Milwaukee, WI	7616
7616-X	Southern Pacific Transportation Company, San Francisco, CA	7616
7616-X	Consolidated Rail Corporation (CONRAIL), Philadelphia, PA	7616
7835-X	Lincoln Big Three, Inc., Baton Rouge, LA	7835
7943-X	Action Chemical Company, Phoenix, AZ	7943
8115-X	Acurex Corporation, Mountain View, CA	8115
8168-X	Smurfit Plastic Packaging Inc., Wilmington, DE	8168
8184-X	Trojan Corporation, Spanish Fork, UT	8184
8184-X	Austin Powder Company, Cleveland, OH	8184
8214-X	Nissan Motor Corporation in U.S.A. Gardena, CA	8214
8214-X	General Motors Corporation, Warren, MI	8214
8214-X	Subaru of America, Cherry Hill, NJ	8214
8230-X	J.T. Baker, Inc., Phillipsburg, NJ	8230
8387-X	FMC Corporation, Philadelphia, PA	8387
8426-X	Rich-Sand Service Co., Orcutt, CA	8426
8445-X	Waste Conversion, Inc., Hatfield, PA	8445
8465-X	Chase Packaging Corporation, Greenwich, CT (see footnote 2)	8465
8540-X	U.S. Department of Defense, Falls Church, VA	8540
8554-X	Olson Explosives, Inc., Decorah, IA	8554
8554-X	ECONEX Incorporated, Wheaton, IL	8554
8554-X	Wampum Hardware Company, New Galilee, PA	8554
8554-X	Geenen Explosives, Inc., Kaukanuna, WI	8554
8579-X	Explosives Technologies International, Inc. (ETI), Wilmington, DE	8579
8582-X	Iowa Northern Railway Company, Greene, IA	8582
8582-X	Cedar Valley Railroad Company, Osage, IA	8582
8582-X	Cedar Rapids and Iowa City Railway Company, Cedar Rapids, IA	8582
8614-X	Arrowhead Airways, Inc., Blaine, MN	8614
8693-X	Matheson Gas Products, Inc., Secaucus, NJ	8693
8706-X	Prairie State Equipment, Inc., Corsica, SD	8706
8723-X	Econex Incorporated, Wheaton, IL	8723
8747-X	Copps Industries, Inc., Menomonee Falls, WI	8747
8885-X	Copps Industries, Inc., Menomonee Falls, WI	8885
8938-X	Cryogenic Services, Inc., Canton, GA	8938
8966-X	GPS Industries, City of Industry, CA	8966
8966-X	Action Chemical Company, Phoenix, AZ	8966
8966-X	All Pure Chemical Company, Inc., Tracy, CA	8966
8988-X	Oil-Air Hydraulic, Inc., Houston, TX	8988
8995-X	Polyfoam Products, Inc., Spring, TX	8995
9059-X	Air Products and Chemicals, Inc., Allentown, PA	9059
9059-X	Cryogenic Rare Gas Laboratories, Inc., Hanahan, SC	9059
9059-X	U.S. Department of Defense, Falls Church, VA	9059
9059-X	Boeing Aerospace Company, Seattle, VA	9059
9108-X	Trojan Corporation, Spanish Fork, UT	9108
9108-X	Austin Powder Company, Cleveland, OH	9108
9108-X	E.I. DuPont De Nemours & Company, Wilmington, DE	9108
9120-X	Western Atlas International, Inc., Houston, TX	9120
9222-X	Terra First, Inc., Vernon, AL	9222
9308-X	Organic Peroxides Div. of Atochem North America, Buffalo, NY	9308
9372-X	Halliburton Logging Services, Inc., Houston, TX	9372
9388-X	Cominco American, Incorporated, Spokane, WA	9388
9393-X	Sexton Can Company, Inc., Cambridge, MA (see footnote 3)	9393
9431-X	U.S. Department of Defense, Falls Church, VA	9431
9579-X	IRECO, Incorporated, Salt Lake City, VT	9579
9672-X	Ethyl Corporation, Baton Rouge, LA	9672
9677-X	Allied Universal Corporation, Miami, FL	9677
9683-X	Meter Engineers, Inc., Wichita, KS	9683
9696-X	Fluoroware, Inc., Chaska, MN	9696
9797-X	National Aeronautics & Space Administration (NASA), Washington, DC	9797
9833-X	Wacker Chemie, GmbH, Munich, West Germany	9833
9833-X	Wacker Chemical (USA), Inc., Canaan, CT	9833
9843-X	Bruin Engineered Parts Inc., Midland, Ontario, Canada	9843
9970-X	Hercules, Inc., Wilmington, DE	9970
10001-X	Linde Gases of the Great Lakes, Inc., Cleveland, OH	10001
10007-X	Copps Industries, Inc., Menomeonee Falls, WI	10007
10062-X	Callery Chemical Company, Pittsburgh, PA	10062
10084-X	Composite Trailer, Inc., Corona, CA	10084
10176-X	Eveready Battery Company, Inc., Westlake, OH (see footnote 4)	10176
10249-X	E.I. du Pont de Nemours and Company, Inc., Wilmington, DE	10249
10373-X	Day & Zimmermann, Inc., Parsons, KS	10373
10449-X	Tren-Fuels, Inc., Austin, TX (see footnote 5)	10449

[1] To renew, and modify exemption to provide for cargo-only aircraft as an additional mode of transportation.
[2] To renew, and modify exemption to provide for additional commodities classed as oxidizer for transportation in polyethylene plastic bags.
[3] To authorize cargo aircraft as additional made of transportation for shipment of certain nonflammable gases in non-DOT specification cylinder.
[4] To modify exemptions to provide for alternative type packaging for transportation of lithium batteries.
[5] To reissue exemption originally issued on an emergency basis to authorize shipment of compressed natural gas, classed as a flammable gas in DOT specification 3AA X cylinders.

Application No.	Applicant	Parties to exemption
4453-P	Olson Explosives, Inc., Decorah, IA	4453
4453-P	Van Amburgh/Alamo, Inc., Dallas, TX	4453
4453-P	Econex, Wheaton, IL	4453
6805-P	Air Products and Chemicals, Inc., Allentown, PA	6805
7052-P	Northrop Corporation Aircraft Division, Newbury Park, CA	7052
7052-P	LSM International, Houston, TX	7052
7052-P	Lockheed Advanced Development Company, Burbank, CA	7052
8009-P	Natural Gas of America, Inc., Clearwater, FL	8009
8236-P	Du-Laur Products Inc., Vassar, MI	8236
8723-P	Mt. State Bit Service, Inc., Morgantown, WV	8723
9275-P	Olympic Energy, Inc., Whitesburg, GA	9275
9275-P	E.I. DuPont De Nemours & Company, Wilmington, DE	9275
9498-P	TRW Safety Systems/Mesa, Mesa, AZ	9498
9579-P	Wampum Hardware Co., New Galilee, PA	9579
9623-P	Alpha Explosives, Lincoln, CA	9623
9632-P	Compagnie Des Containers Reservoirs, Paris, France	9632
10001-P	Randall-Graw Company, Inc., La Crosse, WI	10001
10001-P	GenEx, Ltd., Des Moines, IA	10001
10001-P	Ill-Mo Products Co., Jacksonville, IL	10001
10291-P	Compagnie Des Containers Reservoirs, Paris, France	10291

This notice of receipt of applications for renewal of exemptions and for party to an exemption is published in accordance with part 107 of the Hazardous Materials Transportations Act (49 CFR 1.53(e)).

Issued in Washington, DC, on December 10, 1990.

J. Suzanne Hedgepeth,

Chief, Exemptions Branch, Office of Hazardous Materials Exemptions and Approvals.

[FR Doc. 90-29308 Filed 12-13-90; 8:45 am]

BILLING CODE 4910-60-M

DEPARTMENT OF THE TREASURY

Public Information Collection Requirements Submitted to OMB for Review

Dated: December 7, 1990.

The Department of Treasury has submitted the following public information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1980, Public Law 96-511. Copies of the submission(s) may be obtained by calling the Treasury Bureau Clearance Officer listed. Comments regarding this information collection should be addressed to the OMB reviewer listed and to the Treasury Department Clearance Officer, Department of the Treasury, room 3171, Treasury Annex, 1500 Pennsylvania Avenue, NW., Washington, DC 20220.

Departmental Offices

OMB Number: 1505-0024.

Form Number: International Capital Forms CQ-1 and CQ-2.

Type of Review: Extension.

Title: Treasury International Capital Form CQ-1, "Financial Liabilities to, and Claims on, Unaffiliated Foreigners"; and Treasury International Capital Form CQ-2, "Commercial Liabilities to, and Claims on, Unaffiliated Foreigners".

Description: This report is required by law and is designed to collect timely and accurate information on international capital movements including data on financial and commercial liabilities to, and claims on, unaffiliated foreigners held by U.S. non-banking business enterprises, nonprofit institutions and other U.S. specified persons.

Respondents: Businesses or other for-profit.

Estimated Number of Respondents: 475.

Estimated Burden Hours Per Response: 4 hours.

Frequency of Response: Quarterly.

Estimated Total Reporting Burden: 7,600 hours.

Clearance Officer: Dale A. Morgan (202) 566-2693, Departmental Offices, room 3171, Treasury Annex, 1500 Pennsylvania Avenue, NW., Washington, DC 20220.

OMB Reviewer: Milo Sunderhauf (202) 395-6880, Office of Management and Budget, room 3001, New Executive Office Building, Washington, DC 20503.

Lois K. Holland,

Departmental Reports, Management Officer.

[FR Doc. 90-29275 Filed 12-13-90; 8:45 am]

BILLING CODE 4810-25-M

Sunshine Act Meetings

Federal Register
Vol. 55, No. 241
Friday December 14, 1990

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

U.S. CONSUMER PRODUCT SAFETY COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: Vol. 55, page 50638, December 7, 1990.

PREVIOUSLY ANNOUNCED DATE OF MEETING: December 13, 1990.

CHANGES: The following item has been added to the Agenda:

Election of Vice Chairman

The Commission will elect a Vice Chairman for the term beginning on January 1, 1991 and ending on December 31, 1991.

FOR A RECORDED MESSAGE CONTAINING THE LATEST AGENDA INFORMATION, CALL 301-492-5709.

CONTACT PERSON FOR ADDITIONAL INFORMATION: Sheldon D. Butts, Office of the Secretary, 5401 Westbard Ave., Bethesda, Md. 20207 301-492-6800.

Dated: December 11, 1990.

Sheldon D. Butts,

Deputy Secretary.

[FR Doc. 90-29448 Filed 12-12-90; 11:17 am]

BILLING CODE 6355-01-M

FEDERAL DEPOSIT INSURANCE CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that the Federal Deposit Insurance Corporation's Board of Directors will meet in open session at 2:00 p.m. on Tuesday, December 18, 1990, to consider the following matters:

Memorandum and resolution re: Lawsuits Brought By the Corporation, FSLIC, or Resolution Trust Corporation ("RTC") Against Firms Seeking to Provide Services to the Corporation or the RTC.

FDIC Study of the feasibility of establishing a risk-based deposit insurance premium rate structure.

Corporation's 1991-1992 Business Plan.

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550—17th Street, N.W., Washington, D.C.

Requests for further information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 898-6757.

Dated: December 11, 1990.

Federal Deposit Insurance Corporation.

M. Jane Williamson,

Assistant Executive Secretary.

[FR Doc. 90-29459 Filed 12-12-90; 1:47 pm]

BILLING CODE 6714-01-M

FEDERAL MARITIME COMMISSION

TIME AND DATE: 10:00 a.m., December 19, 1990.

PLACE: Hearing Room One, 1100 L Street, N.W., Washington, D.C. 20573-0001

STATUS: Part of the meeting will be open to the public. The rest of the meeting will be closed to the public.

MATTERS TO BE CONSIDERED:

Portion Open to the Public

1. Docket No. 90-23—*Automated Tariff Filing and Information System (ATFI)—Ocean Freight Tariffs in Foreign and Domestic Offshore Commerce.*

Portion Closed to the Public

1. Proposed Investigation of Shipping Act of 1984, violations.

CONTACT PERSON FOR MORE INFORMATION: Joseph C. Polking, Secretary, (202) 523-5725.

Joseph C. Polking,

Secretary.

[FR Doc. 90-29449 Filed 12-12-90; 11:34 am]

BILLING CODE 6730-01-M

FEDERAL RESERVE SYSTEM BOARD OF GOVERNORS

TIME AND DATE: 10:00 a.m., Wednesday, December 19, 1990.

PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, N.W., Washington, D.C. 20551.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. Proposal to establish an all-electronic Automated Clearing House (ACH) service.
2. Any items carried forward from a previously announced meeting.

Note: This meeting will be recorded for the benefit of those unable to attend. Cassettes will be available for listening in the Board's Freedom of Information Office, and copies may be ordered for $5 per cassette by calling (202) 452-3684 or by writing to:

Freedom of Information Office, Board of Governors of the Federal Reserve System, Washington, D.C. 20551

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board, (202) 452-3204.

Dated: December 12, 1990.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 90-29432 Filed 12-12-90; 10:31 am]

BILLING CODE 6210-01-M

FEDERAL RESERVE SYSTEM BOARD OF GOVERNORS

TIME AND DATE: Approximately 10:30 a.m., Wednesday, December 19, 1990, following a recess at the conclusion of the open meeting.

PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets NW., Washington, DC 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Federal Reserve Bank and Branch director appointments. (This matter was originally announced for a closed meeting on December 17, 1990.)
2. Consumer Advisory Council appointments.
3. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.
4. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204. You may call (202) 452-3207, beginning at approximately 5 p.m. two business days before this meeting, for a recorded announcement of bank and bank holding company applications scheduled for the meeting.

Dated: December 12, 1990.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 90-29443 Filed 12-12-90; 10:31 am]

BILLING CODE 6210-01-M

RESOLUTION TRUST CORPORATION

Notice of Agency Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that the Board of Directors of the Resolution Trust Corporation will meet in open session on Tuesday, December 18, 1990 following the Federal Deposit Insurance Corporation open session beginning at 2:00 p.m. to consider the following matters:

Summary Agenda

No substantive discussion of the following items is anticipated. These matters will be resolved with a single vote unless a member of the Board of Directors request that an item be moved to the discussion agenda.

Quarterly Report of Actions Taken Under Delegated Authority by the Resolution Trust Corporation Committee on Management and Disposition of Assets for the period January 1, 1990 through March 31, 1990.

Discussion Agenda

A. *Memorandum re:*

Proposed revisions to Resolution Trust Corporation Statement of Policy regarding firms in litigation with the RTC, FDIC, or FSLIC.

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550–17th Street, N.W., Washington, D.C.

Requests for further information concerning the meeting may be directed to Mr. John M. Buckley, Jr., Executive Secretary of the Resolution Trust Corporation, at (202) 416–7282.

Dated: December 11, 1990.

Resolution Trust Corporation.

John M. Buckley, Jr.,

Executive Secretary.

[FR Doc. 90–29467 Filed 12–12–90; 1:48 pm]

BILLING CODE 6714-01-M

SECURITIES AND EXCHANGE COMMISSION

Agency Meetings

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Pub. L. 94–409, that the Securities and Exchange Commission will hold the following meetings during the week of December 17, 1990.

A closed meeting will be held on Tuesday, December 18, 1990, at 2:30 p.m. An open meeting will be held on Thursday, December 20, 1990, at 10:00 a.m., in Room 1C30.

The Commissioners, Counsel to the Commissioners, the Secretary to the Commission, and recording secretaries will attend the closed meeting. Certain staff members who have an interest in the matters may also be present.

The General Counsel to the Commission, or his designee, has certified that, in his opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c)(4), (8), (9)(A) and (10) and 17 CFR 200.402(a)(4), (8), (9)(i) and (10), permit consideration of the scheduled matters at a closed meeting.

Commissioner Schapiro, as duty officer, voted to consider the items listed for the closed meeting in closed session.

The subject matter of the closed meeting scheduled for Tuesday, December 18, 1990, at 2:30 p.m., will be:

Settlement of injunctive actions.

Institution of administrative proceedings of an enforcement nature.

Settlement of administrative proceedings of an enforcement nature.

Formal order of investigation.

Institution of injunctive actions.

Opinion.

The subject matter of the open meeting scheduled for Thursday, December 20, 1990, at 10:00 a.m., will be:

Consideration of whether to issue a Memorandum Opinion and Order with respect to an application-declaration filed by Northeast Utilities, a registered holding company under the Public Utility Holding Company Act of 1935, proposing the acquisition of Public Service Company of New Hampshire, a publicly owned electric utility company that is a debtor-in-possession in reorganization proceedings under Chapter 11 of the United States Bankruptcy Code pursuant to a plan of reorganization, and related corporate and financing transactions. For further information, please contact Yvonne M. Hunold at (202) 272–2676.

At times, changes in Commission priorities require alterations in the scheduling of meeting items. For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact: Paul Atkins at (202) 272–2000.

Dated: December 11, 1990.

Jonathan G. Katz,

Secretary.

[FR Doc. 90–29455 Filed 12–12–90; 12:47 pm]

BILLING CODE 8010-01-M

Corrections

Federal Register
Vol. 55, No.
Friday, December 14, 1990

This section of the FEDERAL REGISTER contains editorial corrections of previously published Presidential, Rule, Proposed Rule, and Notice documents. These corrections are prepared by the Office of the Federal Register. Agency prepared corrections are issued as signed documents and appear in the appropriate document categories elsewhere in the issue.

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

9 CFR Parts 92, 94, 98, 151

[Docket No. 90-023]

RIN 0579-AA30

Importation of Certain Animals, Poultry, Animal and Poultry Products, and Animal Embryos

Correction

In the correction to rule document 90-17541 appearing on page 34797 in the issue of Friday, August 24, 1990, make the following corrections:

1. In the first column, the CFR heading should appear as set forth above.

2. Also in the first column, item 1 is corrected to read as follows:

"1.On page 31486, in the eighth column, under the heading "Semen", the last two entries corresponding with "92.4(a)(2)" and "92.4(a)(3)" of the first column, should read "98.24(a)(2)" and "98.24(a)(3)" respectively."

BILLING CODE 1505-01-D

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 90N-0378]

Martec Pharmaceutical, Inc. et al.; Withdrawal of Approval of Abbreviated New Drug Applications

Correction

In notice document 90-27886 beginning on page 49427 in the issue of Wednesday, November 28, 1990, make the following correction:

On page 49428, in the table, in the Drug column corresponding to the ANDA no. 86-940 "Chlorthiazide" should read "Chlorothiazide".

BILLING CODE 1505-01-D

DEPARTMENT OF THE INTERIOR

National Park Service

Abandoned Shipwreck Act Guidelines

Correction

In notice document 90-28350 beginning on page 50116 in the issue of Tuesday, December 4, 1990, make the following corrections:

1. At the top of each page of the document, in the dateline, the date should read "Tuesday, December 4, 1990".

2. On page 50116, in the third column, in the fourth paragraph, in the ninth line, the first "and" should be deleted.

3. On page 50117, in the third column, in the second full paragraph, in the first line, "State" should read "States".

4. On page 50118, in the first column, in the third full paragraph, in the first line, "that" should read "the".

5. On page 50119, in the third column, following the signatory information and preceding the **CONTENTS** insert:

ABANDONED SHIPWRECK ACT GUIDELINES

6. On page 50122, in the first column, in the first full paragraph, in the eighth line, "state" should read "State".

7. On the same page, in the third column, in paragraph (a) of "Guideline 3", in the fifth line, "an" should read "and".

8. On page 50123, in the second column, in the third paragraph, in the third line, "Currently" should be spelled with a lowercase "c".

9. On the same page, in the second column, in the introductory paragraph, of "Guideline 6" in the 11th line, "contract" should read "contact".

10. On the same page, in the third column, in paragraph (f) of "Guideline 6", in the first line, add "and" after "agency".

11. On page 50128, in the second column, under "Guideline 3", in the third line, "Historic" should be spelled with a capital "H" and add "Fund" after "Preservation".

12. On the same page, in the same column, in the same paragraph, in the 14th line, add a comma after "States".

13. On page 50130, in the third column, under "Guideline 7", in the fourth line, "shipwreck" should read "shipwrecks".

14. On page 50131, in the first column, in paragraph (b) of "Guideline 7", in the fifth line, add "and" after "Navy,".

15. On the same page in the third column, under "Guideline 2", in the eighth line, delete "recreational and educational" and add "historical".

16. On page 50132, in the third column, in the 13th line from the bottom, "Recovery" should read "Recovering".

17. On page 50133, in the first column, in the eighth line, "coal" should read "local" and "business" should read "businesses".

18. In the same paragraph, in the 14th line, "shipwrecks" should read, "shipwreck".

19. On the same page, in the second column, in paragraph (d)(1) of "Guideline 1", in the fifth line, add "to" after "not".

20. On the same page, in the third column, in paragraph (e)(1) of "Guideline 2", in the ninth line, "that" should read "the".

21. On page 50134, in the third column, in the fourth line from the bottom, add "private" after "to".

22. On page 50135, in the first column, the paragraph designated, "(b1)" of "Guideline 6", should read "(b)".

23. On the same page, in the same column, on the last line, "for" should read "or".

24. On page 50136, in the first column, in paragraph (e), in the 8th line, "instruction" should read "instructions", and in the 15th line, "individual" should read "individuals".

25. On the same page, in the same column, in the seventh line from the bottom, 'historic" should read "historical".

26. On the same page, in the second column, under "Guideline 3", in the ninth line, add "at" after "as".

27. On the same page, in the same column, in the 11th line from the bottom, "*Guidelines 4*" should read "*Guideline 4*".

28. On page 50137, in the second column, in the second line, delete the open parenthesis.

29. On page 50139, in the second column, at section 7 of the Act, in the heading, "Relationship" should be one word.

30. On the same page, in the third column, in the fifth line from the bottom, "is" should read "are".

31. On page 50140, in the third column, under *Georgia*, in the eighth line, insert a period after "immunity.".

32. On the same page, in the same column, in the sixth line from the

bottom, "(ex-*Rajasan*)" should read "(ex-*S.S.Rajasan*)".

33. On page 50141, in the first column, under *Indiana*, in the seventh line, "regional" should read "regionally".

34. On page 50142, in the last line of the third column, add "snag" after "stern-wheel".

35. On page 50143, in the third column, in the second full paragraph, in the fifth and sixth lines, delete "U.S. Government, Department of the Navy." and add "State of North Carolina.".

36. On page 50144, in the first column, under *Nebraska*, at *Bertrard*, add "Listed in the National Register as nationally significant." to the end of the paragraph.

37. On the same page, in the third column, under *Oregon*, in the last three lines, delete "part of an archeological district of national significance" and add "nationally significant.".

38. On the same page, in the same column, under *Rhode Island* delete, "nationally significant" and add "part of an archeological district of national significance.".

39. On page 50145, in the third column, in the file line, the document number should read "90-28350".

BILLING CODE 1505-01-D

OFFICE OF PERSONNEL MANAGEMENT

5 CFR Part 213

Excepted Service-Schedule A Authority for Employment of Students

Correction

In proposed rule document 90-28708 appearing on page 50560 in the issue of Friday, December 7, 1990, in the first column under **DATES** in the second line, "February 5, 1990" should read "February 5, 1991."

BILLING CODE 1505-01-D

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-28644; File No. SR-PSE-90-39; International Series Release No. 195]

Self-Regulatory Organizations; Filing of Proposed Rule Change by the Pacific Stock Exchange, Inc. Relating to Amendments to Exchange Rules To Provide for the Listing and Trading of Currency Warrants

Correction

In notice document 90-28333 beginning on page 50069 in the issue of Tuesday, December 4, 1990, the docket number should read as set forth above.

BILLING CODE 1505-01-D

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 75

[Airspace Docket No. 90-AWA-4]

Establishment of Jet Routes

Correction

In final rule document 90-24786 appearing on page 42364 in the issue of Friday, October 19, 1990, make the following correction:

In the first column, under **HISTORY**, in the first line "22" should read "2".

BILLING CODE 1505-01-D

federal register

Friday
December 14, 1990

Part II

Environmental Protection Agency

40 CFR Part 300
Hazard Ranking System; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[FRL-3730-8]

RIN 2050 AB73

Hazard Ranking System

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is adopting revisions to the Hazard Ranking System (HRS), the principal mechanism for placing sites on the National Priorities List (NPL). The revisions change the way EPA evaluates potential threats to human health and the environment from hazardous waste sites and make the HRS more accurate in assessing relative potential risk. These revisions comply with other statutory requirements in the Superfund Amendments and Reauthorization Act of 1986 (SARA).

DATES: Effective date March 14, 1991. As discussed in Section III H of this preamble, comments are invited on the addition of specific benchmarks in the air and soil exposure pathways until January 14, 1991.

ADDRESSES: Documents related to this rulemaking are available at and comments on the specific benchmarks in the air and soil exposure pathways may be mailed to the CERCLA Docket Office, OS-245, U.S. Environmental Protection Agency, Waterside Mall, 401 M Street, SW, Washington, DC 20460, phone 202-382-3046. Please send four copies of comments. The docket is available for viewing by appointment only from 9:00 am to 4:00 pm, Monday through Friday, excluding Federal holidays. The docket number is 105NCP-HRS.

FOR FURTHER INFORMATION CONTACT: Steve Caldwell or Agnes Ortiz, Hazardous Site Evaluation Division, Office of Emergency and Remedial Response, OS-230, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or the Superfund Hotline at 800-424-9346 (in the Washington, DC area, 202-382-3000).

SUPPLEMENTARY INFORMATION:

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I. Background

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. 9601 *et seq.*), commonly called the Superfund, in response to the dangers posed by uncontrolled releases of hazardous substances, contaminants, and pollutants. To implement section 105(8)(A) of CERCLA and Executive Order 12316 (46 FR 42237, August 20, 1981), the U.S. Environmental Protection Agency (EPA) revised the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR part 300, on July 16, 1982 (47 FR 31180), with later revisions on September 16, 1985 (50 FR 37624), November 20, 1985 (50 FR 47912), and March 8, 1990 (55 FR 8666). The NCP sets forth guidelines and procedures for responding to releases or potential release of hazardous substances, pollutants, or contaminants.

Section 105(8)(A) of CERCLA (now section 105(a)(8)(A)) requires EPA to establish:

> Criteria for determining priorities among releases or threatened releases [of hazardous substances] throughout the United States for the purpose of taking remedial action and, to the extent practicable taking into account the potential urgency of such action, for the purpose of taking removal action. Criteria and priorities * * * shall be based upon the relative risk or danger to public health or welfare or the environment * * * taking into account to the extent possible the population at risk, the hazard potential of the hazardous substances at such facilities, the potential for contamination of drinking water supplies, the potential for direct human contact, [and] the potential for destruction of sensitive ecosystems * * *.

To meet this requirement and help set priorities, EPA adopted the Hazard Ranking System (HRS) as appendix A to the NCP (47 FR 31180, July 16, 1982). The HRS is a scoring system used to assess the relative threat associated with actual or potential releases of hazardous substances at sites. The HRS is the primary way of determining whether a site is to be included on the National Priorities List (NPL), the Agency's list of sites that are priorities for long-term evaluation and remedial response, and is a crucial part of the Agency's program to address the identification of actual and potential releases. (Each State can nominate one site to the NPL as a State top priority regardless of its HRS score; sites may also be added in response to a health advisory from the Agency for Toxic Substances and Disease Registry (see NCP, 40 CFR 300.425(c)(3)).) Under the original HRS, a score was determined for a site by evaluating three migration pathways—ground water, surface water, and air. Direct contact and fire and explosion threats were also evaluated to determine the need for emergency actions, but did not enter into the decision on whether to place a site on the NPL.

In 1986, Congress enacted the Superfund Amendments and Reauthorization Act of 1986 (SARA) (Pub. L. 99-499), which added section 105(c)(1) to CERCLA, requiring EPA to amend the HRS to assure "to the maximum extent feasible, that the hazard ranking system accurately assesses the relative degree of risk to human health and the environment posed by sites and facilities subject to review." Congress, in its Conference Report on SARA, stated the substantive standard against which HRS revisions could be assessed:

> This standard is to be applied within the context of the purpose for the National Priorities List; i.e., identifying for the States and the public those facilities and sites which appear to warrant remedial actions. * * * This standard does not, however, require the Hazard Ranking System to be equivalent to detailed risk assessments, quantitative or qualitative, such as might be performed as part of remedial actions. The standard requires the Hazard Ranking System to rank sites as accurately as the Agency believes is feasible using information from preliminary assessments and site inspections * * * Meeting this standard does not require long-term monitoring or an accurate determination of the full nature and extent of contamination at sites or the projected levels of exposure such as might be done during remedial investigations and feasibility studies. This provision is intended to ensure that the Hazard Ranking System performs with a degree of accuracy appropriate to its role in expeditiously identifying candidates for response actions. [H.R. Rep. No. 962, 99th Cong., 2nd Sess. at 199-200 [1986]]

Section 105(c)(2) further specifies that the HRS appropriately assess the human health risks associated with actual or potential contamination of surface waters used for recreation or drinking

water and that this assessment should take into account the potential migration of any hazardous substance through surface water to downstream sources of drinking water.

SARA added two criteria for evaluating sites under section 105(a)(8)(A): Actual or potential contamination of the ambient air and threats through the human food chain. In addition, CERCLA section 118, added by SARA, requires EPA to give a high priority to facilities where the release of hazardous substances has resulted in the closing of drinking water wells or has contaminated a principal drinking water supply. Finally, CERCLA section 125, added by SARA, requires revisions to the HRS to address facilities that contain substantial volumes of wastes specified in section 3001(b)(3)(A)(i) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act (RCRA). These wastes include fly ash wastes, bottom ash wastes, slag wastes, and flue gas emission control wastes generated primarily from the combustion of coal or other fossil fuels. Specifically, section 125 requires EPA to revise the HRS to assure the appropriate consideration of each of the following site-specific characteristics of such facilities:

- The quantity, toxicity, and concentrations of hazardous constituents that are present in such waste and a comparison with other wastes;
- The extent of, and potential for, release of such hazardous constituents into the environment; and
- The degree of risk to human health and the environment posed by such constituents.

EPA published an advance notice of proposed rulemaking (ANPRM) on April 9, 1987 (52 FR 11513), announcing its intention to revise the HRS and requesting comments on a number of issues. After a comprehensive review of the original HRS, including consideration of alternative models and Science Advisory Board review, EPA published a notice of proposed rulemaking (NPRM) for HRS revisions on December 23, 1988 (53 FR 51962). The NPRM contains a detailed preamble, which should be consulted for a more extensive discussion of CERCLA, SARA, the HRS, and the proposed changes to the HRS.

Today, EPA is publishing the revised HRS, which will supersede the HRS previously in effect as appendix A to the NCP. CERCLA section 105(c)(1) states that the revised HRS shall be applied to any site newly listed on the NPL after its effective date; as specified in section 105(c)(3), sites scored with the original HRS prior to that effective date need not be reevaluated.

The HRS is a scoring system based on factors grouped into three factor categories. The factor categories are multiplied and then normalized to 100 points to obtain a pathway score (e.g., the ground water migration pathway score). The final HRS score is obtained by combining the pathway scores using a root-mean-square method. The proposed HRS revised every factor to some extent. A few factors were replaced, and several new factors were added. The major proposed changes included:

(1) Consideration of potential as well as actual releases to air;

(2) Addition of mobility factors;

(3) Addition of dilution and distance weightings for the water migration pathways and modification of distance weighting in the air migration pathway;

(4) Revisions to the toxicity factor;

(5) Additions to the list of covered sensitive environments;

(6) Addition of human food chain and recreation threats to the surface water migration pathway;

(7) Revision of the hazardous waste quantity factor to allow a tiered approach;

(8) Addition of health-based benchmarks for evaluating population factors and ecological-based benchmarks for evaluating sensitive environments;

(9) Addition of factors for evaluating the maximally exposed individual; and

(10) Inclusion of a new onsite exposure pathway.

EPA conducted a field test of the proposed HRS to assess the feasibility of implementing the proposed HRS factors, to determine resources required for specific tasks, to assess the availability of information needed for evaluation of sites, and to identify difficulties with the use of the proposed revisions. To meet the objectives, site inspections were performed at 29 sites nationwide. The sites were selected either because work was already planned at the site or because the sites had specific features EPA wanted to test using the proposed revisions to the HRS. The major results of the field test were summarized on September 14, 1989 (54 FR 37949), when the field test report was made available for public review and comment.

II. Overview of the Final Rule

The rule being promulgated today incorporates substantial changes to revisions proposed in December 1988. EPA has changed the rule for three reasons: (1) To respond to the general comment submitted by many commenters that the factor categories and pathways need to be consistent with each other; (2) to respond to specific recommendations made by commenters; and (3) to respond to problems identified during the field test and discussed in the field test report. Major changes affecting multiple pathways include:

- Multiplication of hazardous waste quantity factor, toxicity, and other waste characteristics factors;
- Uncapping of population factors (i.e., no limit is placed on maximum value);
- Revised criteria for establishing an observed release;
- Capping of potential to release at a value less than observed release;
- Revision of the toxicity evaluation to select carcinogenic and non-cancer chronic values in preference to acute toxicity values;
- Elimination of Level III concentrations and extension of weighting based on levels of exposure to nearest individual (well/intake; formerly maximally exposed individual) factors;
- Modification of the weights assigned to Level I and Level II concentrations;
- Revisions to the benchmarks used and methods for determining exceedance of benchmarks;
- Use of ranges to assign values for potentially exposed populations;
- Inclusion of factors assessing exposures of the nearest individual in all pathways;
- Revisions to distance and dilution weights in all pathways except ground water migration;
- Replacement of the use factors with less heavily weighted resources factors;
- Evaluation of wetlands based on size or surface water frontage; and
- Specific instructions for the evaluation of radionuclides at radioactive waste sites and sites with radioactive and other hazardous substances wastes.

The major changes in the ground water migration pathway include:

- Replacement of depth to aquifer/hydraulic conductivity and sorptive capacity factors with travel time and depth to aquifer factors; and
- Revision of the mobility factor, including consideration of distribution coefficients.

In the surface water migration pathways, the major changes include:

- Elimination of the separate recreational use threat;
- Addition of a ground water to surface water component;

• Incorporation of bioaccumulation into the waste characteristics factor category rather than the targets factor category for the human food chain threat;

• Revision to allow use of additional tissue samples in establishing Level I concentrations for the human food chain threat; and

• Addition of ecosystem bioaccumulation potential factor for sensitive environments.

The major changes in the soil exposure pathway (formerly the onsite exposure pathway) include:

• Elimination of separate consideration of the high risk population;

• Inclusion of hazardous waste quantity in the waste characteristics factor category;

• Consideration of workers in the resident threat's targets factor category; and

• Revisions to scoring of terrestrial sensitive environments.

The major changes in the air migration pathway include:

• Separate evaluation of gas and particulate potential to release; and

• Consideration of actual contamination in evaluating sensitive environments.

Figures 1 to 4 show the differences between the pathways in the original HRS and in the final rule.

BILLING CODE 6560-50-M

Figure 1

Ground Water Migration Pathway

ORIGINAL HRS

Likelihood of Release	X	Waste Characteristics	X	Targets
Observed Release or Route Characteristics Depth to Aquifer of Concern Net Precipitation Permeability of Unsaturated Zone Physical State Containment		Toxicity/Persistence Hazardous Waste Quantity		Ground Water Use Distance to Nearest Well/ Population Served

FINAL HRS

Likelihood of Release	X	Waste Characteristics	X	Targets
Observed Release or Potential to Release Containment Net Precipitation Depth to Aquifer Travel Time		Toxicity/Mobility Hazardous Waste Quantity		Nearest Well Population Resources Wellhead Protection Area

Figure 2

Surface Water Migration Pathway

ORIGINAL HRS

Likelihood of Release	X	**Waste Characteristics**	X	**Targets**
Observed Release		Toxicity/Persistence		Surface Water Use
or		Hazardous Waste Quantity		Distance to Sensitive Environment
Route Characteristics				Population Served/Distance to Nearest Intake Downstream
Facility Slope/Intervening Terrain				
1-Year, 24-Hour Rainfall				
Distance to Nearest Surface Water				
Physical State				
Containment				

Figure 2

Surface Water Migration Pathway (continued)

FINAL HRS

Likelihood of Release:
Overland Flow/Flood Component

Observed Release
or
Potential to Release

By Overland Flow
Containment
Runoff
Distance to Surface Water
By Flood
Containment
Flood Frequency

or

Likelihood of Release:
Ground Water to Surface Water Component

Observed Release
or
Potential to Release
Containment
Net Precipitation
Depth to Aquifer
Travel Time

X

Drinking Water Threat

Waste Characteristics	x	**Targets**
Toxicity/Mobility[1]/Persistence		Nearest Intake
Hazardous Waste Quantity		Population
		Resources

+

Human Food Chain Threat

Waste Characteristics	x	**Targets**
Toxicity/Mobility[1]/ Persistence/Bioaccumulation		Food Chain Individual
Hazardous Waste Quantity		Population

+

Environmental Threat

Waste Characteristics	x	**Targets**
Ecosystem Toxicity/Mobility[1]/ Persistence/Bioaccumulation		Sensitive Environments
Hazardous Waste Quantity		

[1] Mobility is only applicable to the Ground Water to Surface Water Component.

Figure 3

Soil Exposure Pathway[1]

FINAL HRS

Resident Population Threat

Likelihood of Exposure	X	Waste Characteristics	X	Targets
Observed Contamination		Toxicity Hazardous Waste Quantity		Resident Individual Resident Population Workers Resources Terrestrial Sensitive Environments

+

Nearby Population Threat

Likelihood of Exposure	X	Waste Characteristics	X	Targets
Attractiveness/Accessibility Area of Contamination		Toxicity Hazardous Waste Quantity		Population Within 1 Mile Nearby Individual

[1] New pathway.

Figure 4

Air Migration Pathway

ORIGINAL HRS

Likelihood of Release	X	Waste Characteristics	X	Targets
Observed Release		Reactivity and Incompatibility Toxicity Hazardous Waste Quantity		Population Within 4-Mile Radius Distance to Sensitive Environment Land Use

FINAL HRS

Likelihood of Release	X	Waste Characteristics	X	Targets
Observed Release or Potential to Release Gas Gas Containment Gas Source Type Gas Migration Potential Particulate Particulate Containment Particulate Source Type Particulate Migration Potential		Toxicity/Mobility Hazardous Waste Quantity		Nearest Individual Population Resources Sensitive Environments

BILLING CODE 6560-50-C

Section III of this preamble summarizes and responds to major issues raised by commenters. These issues are organized so that issues that affect multiple pathways are covered first, followed by discussions of individual pathway issues. Section IV provides a section-by-section discussion of the final rule. All substantive changes not discussed in section III are identified in section IV. Because the rule has been substantially rewritten to clarify the requirements, editorial changes are not generally noted.

III. Discussion of Comments

About 100 groups and individuals submitted comments on the ANPRM and NPRM. Nineteen of these also submitted comments on the field test report; two other groups submitted comments only on the field test report. The commenters included more than 20 State agencies, several Federal agencies, companies, trade associations, Indian tribes, environmental groups, technical consultants, and individuals. This section summarizes and responds to the major issues raised by commenters. A description of the comments and EPA's response to each issue raised in the comments are available in *Responses to Comments on Revisions to the Hazard Ranking System (HRS)* in the EPA CERCLA docket (see **ADDRESSES** section above).

A. Simplification

In response to SARA, EPA proposed revisions to the HRS so that, to the maximum extent feasible, it accurately assesses the relative risks posed by hazardous waste sites to human health and the environment. Consequently, the proposed rule required more data than did the original HRS.

A number of commenters stated that the data collection requirements of the proposed rule were excessive given its purpose as a screening tool. These commenters expressed concern that the data requirements were too extensive for a screening process; specifically, that the data requirements would lengthen the time needed to score sites with the HRS, increase the cost of listing sites, and, therefore, limit the money available for remedial actions. Most commenters—even those who considered that the revisions increased the accuracy of the model—stated that the resources required to evaluate sites under the proposed HRS were excessive.

One commenter suggested the proposed HRS would be so expensive to implement that EPA would need to develop a new screening tool to determine whether a site should undergo an HRS evaluation. Another commenter suggested that because of the complexity of the proposed revisions, preliminary scoring of a site during the site assessment process would be impractical because sites would advance too far in the site assessment process before they were determined not to be NPL candidates. Several commenters stated that, with the additional requirements, the proposed HRS is more of a quantitative risk-assessment tool than the screening tool it is supposed to be. Another suggested that the increased accuracy of the proposed rule over the original HRS is of marginal value relative to the amount of time and money involved, and that the HRS is no longer a quick and inexpensive method of assessing relative risks associated with sites.

Several commenters expressed concern that the increased data requirements of the proposed HRS would affect the schedule of the entire site assessment process. They suggested that these requirements would create a backlog of sites to be evaluated, slow the process of listing sites, and delay cleanup. Some noted that this would be contrary to the goal of identifying and evaluating sites expeditiously.

In response, the Agency believes the requirements of the final rule are within the scope of the site assessment process and that a new screening tool to determine whether a site should undergo an HRS evaluation will not be needed. To assist in screening sites, the site assessment process is divided into two stages:

- A preliminary assessment (PA), which focuses on a visual inspection, collection of available local, State, and Federal permitting data, site-specific information (e.g., topography, population), and historical industrial activity; and
- A site inspection (SI), where PA data are augmented by additional data collection, including sampling of appropriate environmental media and wastes, to determine the likelihood of a site receiving a high enough HRS score to be considered for the NPL.

The field test identified a best estimate of the average and range of costs incurred to support the data requirements of the proposed HRS. These cost estimates represented the entire site assessment process from PA to SI, and comprehensive evaluations for all pathways at most sites. As such, the Agency believes these cost estimates overstate the costs associated with site assessments occurring on the greater universe of CERCLA sites. The amount of data collected during an SI varies from site to site depending on the complexity of the site and the number of environmental media believed to be contaminated. Some SIs may be limited in scope if data are easy to obtain, while others require more substantial resource commitments. The most important factors in determining costliness of an SI are (1) the presence or absence of ground water monitoring wells in situations where ground water is affected, and (2) the number of affected media, which determines the number of samples taken and analyzed. The Agency believes the greater universe of CERCLA sites will not require the more substantial resource commitments.

Finally, EPA does not agree that the requirements of the final rule will delay the listing of sites. The site assessment process screens sites at each stage, thereby limiting the number of sites that require evaluation for scoring. The Agency believes that it will be possible to score sites expeditiously with the revised HRS.

The Agency believes the additional data requirements of the final rule will make it more accurately reflect the relative risks posed by sites, but also that the HRS should be as simple as possible to make it easier to implement and to retain its usefulness as a screening device. This approach responds to the majority of commenters who recommended that EPA simplify the proposed HRS to make it easier and less expensive to implement. In response to these comments, the rule adopted today includes a number of changes from the proposed rule that simplify the HRS. These simplifying changes were based largely on EPA's field test of the proposed rule, sensitivity studies, and issue analyses undertaken by EPA in response to comments.

- In the surface water migration pathway, the proposed recreation threat has been eliminated as a separate threat. Instead of requiring a separate set of detailed calculations and data, the final rule accounts for recreational use exposures through resources factors, where points may be added for recreation use.
- In the ground water migration pathway, the proposed potential to release has been simplified by dropping "sorptive capacity," by revising "depth to aquifer" and making it a separate factor, and by eliminating the requirement to consider all geological layers between the hazardous substance and the aquifer in evaluating travel time to the aquifer. The "travel time" factor (the depth to aquifer/hydraulic conductivity factor in the proposed rule)

is now based on the layer(s) with the lowest hydraulic conductivity.

• In the three migration pathways (i.e., ground water, surface water, and air), the use factors in the proposed rule—"land use" in the air migration pathway, "drinking water use" and "other water use" in the ground water migration pathway, and "drinking water use" and "other water use" in the surface water migration pathway—have been replaced by "resources" factors. The "fishery use" factor has been dropped from the surface water migration pathway. A resources factor has been added to the soil exposure pathway.

• In the soil exposure pathway, the requirement that children under seven be counted as a separate population has been dropped. The "accessibility/frequency of use" factor has been replaced by a simpler "attractiveness/accessibility" factor.

• In the surface water migration pathway, the "runoff curve number," which required determining the predominant land use within the drainage area, has been replaced by a simpler factor, "soil group," which only requires classifying the predominant soil group in the drainage area into one of four categories.

• In the air migration pathway, the maps used to assign values of particulate migration potential (formerly particulate mobility under potential to release) have been simplified.

• In all pathways, potentially exposed populations are assigned values based on ranges rather than exact counts, reducing documentation requirements.

• In the surface water and ground water migration pathways, Level III benchmarks have been dropped.

• In all pathways, hazardous waste quantity values are based on ranges, which will reduce documentation requirements. The methodology and explanation for evaluating the hazardous waste quantity factor have been simplified.

• Containment tables have been simplified in the air, ground water, and surface water migration pathways.

A number of the simplifications, such as the changes to the travel time and hazardous waste quantity factors, better reflect the uncertainty of the underlying site data and, therefore, do not generally affect the accuracy of the HRS. In addition, EPA notes that some revisions that may appear to make the HRS more complex actually make it more flexible. For example, the hierarchy for determining hazardous waste quantity allows using data on the quantity of hazardous constituents if they are available or can be determined; additionally, data on the quantity of hazardous wastestreams, source volume, and source area can be used, depending on the completeness of data within the hierarchy. The hierarchy allows a site to be scored at the most precise level for which data are reasonably available, but does not require extensive data collection where available data are less precise.

In response to comments on the complexity of the rule language, the presentation of the HRS has been reorganized and clarified. Factors that are evaluated in more than one pathway are explained in a separate section of the final rule (§ 2) to eliminate the repetition of instructions. The proposed HRS included descriptive background material that, while useful, made the HRS difficult to read. Much of this descriptive material has been removed from the rule.

B. HRS Structure Issues

Although the proposed rule retained the basic structure of the original HRS, a number of commenters felt that the HRS should provide results consistent with the results of a quantitative risk assessment. Several commenters identified this issue explicitly, while others identified specific aspects of the proposed rule that they believed to be inconsistent with basic risk assessment principles. The commenters maintained that if the HRS is to reflect relative risks to the extent feasible, as required by the statute, its structure should be modified to better reflect the methods employed in quantitative risk assessments. Commenters stressed the need for EPA to follow the advice of the EPA Science Advisory Board (SAB) as expressed in the SAB review of the HRS:

> Revisions to the HRS should begin with the development of a chain of logic, without regard for the ease or difficulty of collecting data, that would lead to a risk assessment for each site. This framework, but not the underlying logic, would be simplified to account for the very real difficulties of data collection.
>
> This chain of logic * * * should lead to a situation in which an increased score reflects an increased risk presented by a site.

In response to the structural issues raised by commenters and to the statutory mandate to reflect relative risk to the extent feasible, EPA made a number of changes to the final rule. These structural changes affect how various factors are scored and how scores are combined, but do not involve changes in the types or amount of data required to score a site with the HRS. The Agency stresses that the limited data generated at the SI stage are designed to support site screening, and are not intended to provide support for a quantitative risk assessment.

General structural changes. While the final rule retains the basic structure of the proposed rule in that three factor categories (likelihood of release, waste characteristics, and targets) continue to be multiplied together to obtain pathway scores, the structure has been changed in certain respects to make the underlying logic of the HRS more consistent with risk assessment principles.

The key structural changes to the waste characteristics factor category were to make use of consistent scales and to multiply the hazardous waste quantity and toxicity (or, depending on the pathway and threat, toxicity/mobility, toxicity/persistence, or toxicity/persistence/bioaccumulation) factors. Within the waste characteristics factor category, factors have been modified so they are on linear scales. These modifications make the functional relationships between the HRS factors more consistent with the toxicity and exposure parameters evaluated in risk assessments.

Where possible, the final rule assigns similar maximum point values to factor categories across pathways. The likelihood of release (likelihood of exposure) factor category is assigned a maximum value of 550; the waste characteristics factor category is assigned a maximum value of 100 (except for the human food chain and environmental threats of the surface water migration pathway); the targets factor category is not assigned a maximum. EPA determined that in general targets should be a key determinant of site threat because the data on which the targets factors are based are relatively more reliable than most other data available at the SI stage.

Likelihood of release. Except in the air migration pathway, the proposed rule assigned the same maximum value to observed release and potential to release. In the final rule, an observed release is assigned a value of 550 points and potential to release has a maximum value of 500 in all pathways. This relative weighting of values reflects the greater confidence (the association of risks with targets) when reporting an observed release as opposed to a potential release. As a result of this change in point values at the factor category level, as well as the new maximums for most pathways, the values assigned to individual potential to release factors have been adjusted.

Waste characteristics. The proposed rule assigned a maximum point value to

hazardous substance quantities of 1,000 pounds. Because some sites have hazardous substance quantities far in excess of that amount and because it is reasonable to assume that these sites present some additional risk, all else being equal, the final rule elevates the maximum value to quantities in excess of 1,000,000 pounds. Even when hazardous waste quantity is documented with precision, EPA concluded that there are diminishing returns in considering quantities above this amount.

Although the HRS does not employ the same type and quality of information that would be used to support a risk assessment (e.g., pounds of waste and mobility are combined in the ground water pathway as a surrogate for long-term magnitude of releases), as waste characteristics values rise, contamination resulting from conditions at the sites in general should be worse. As a result of using linear scales and incorporation of a multiplicative relationship between hazardous waste quantity, toxicity, and other waste characteristics factors, the influence of the waste characteristics factor category could be disproportionately large relative to the likelihood of release and targets factor categories in determining overall pathway scores. Therefore, EPA is limiting—through use of a scale transformation—the values assigned to the waste characteristics factor category, shown in Table 2–7 of the final HRS, to limit the effect of waste characteristics on the pathway scores.

While the waste characteristics factor values are limited to values of 0 to 100 in most cases, the waste characteristics factor category may reach values of up to 1,000 for both the human food chain and environmental threats in the surface water migration pathway. These exceptions have been made to accommodate the bioaccumulation factor (or ecosystem bioaccumulation factor), applied in these threats but not in other pathways or threats, which can add up to four orders of magnitude to the waste characteristics factor values before reduction to the scale values of 0 to 1,000.

Targets. The final rule includes two major structural changes to the targets factor category. Population factor values are not capped as they were in the proposed rule. This change allows a site with a large population but a low waste characteristics value to receive scores similar to a site with a smaller population but larger waste characteristics value (as would be done in a risk assessment). A second change in the targets factors involves the nearest individual (or intake or well) factors (i.e., the maximally exposed individual factors in the proposed rule). These factors are now assigned values based on exposure to Level I and Level II contamination (50 and 45 points, respectively). Potentially exposed nearest individuals are assigned a maximum of 20 points in all pathways. EPA changed the assigned values for these factors to give more relative weight to individuals that are exposed to documented contamination.

C. Hazardous Waste Quantity

In the NPRM, EPA proposed to change the hazardous waste quantity factor to allow the use of four levels of data depending on what data are available and how complete they are. Hazardous waste quantity for a source could be based on (a) hazardous constituent quantity, (b) the total quantity of hazardous wastes in the source, (c) the volume of the source, or (d) the area of the source. Each source at the site would be evaluated separately, based on data available for the source.

EPA received numerous comments relating to changes in the hazardous waste quantity factor. Several commenters agreed that allowing use of waste constituent data, when available, was an improvement over the original HRS. Several also supported the tiered approach to scoring hazardous waste quantity when constituent data were incomplete or unavailable.

Two commenters stated that the emphasis on hazardous constituent data will require more extensive and expensive site investigations. These commenters have misunderstood the revisions. The rule does not require the scorer to determine hazardous constituent quantities in all instances, but simply encourages use of those data when they are available. This approach allows a scorer the flexibility to use different types of available data for scoring hazardous waste quantity. At a minimum, the scorer need only determine the area of a source (or the area of observed contamination), which is routinely done in site inspections. Where better data are available, they may be used in scoring the factor. This approach is in keeping with the intent of Congress that the HRS should act as a screening tool for identifying sites warranting further investigation.

Several commenters stated that the methodology for determining hazardous waste quantity was too complex and time consuming, and that its administrative costs outweighed its benefits. Others found the proposed rule instructions and tables confusing and hard to follow.

EPA strongly disagrees with the claim that the costs of the revised approach to scoring waste quantity outweigh its benefits. The amount of hazardous substances present at a site is an important indicator of the potential threat the site poses. At the same time, EPA recognizes that cost is an important consideration. In revising the hazardous waste quantity factor, however, the Agency believes it has established an appropriate balance between time and cost required for scoring this factor and the degree of accuracy needed to evaluate the relative risk of the site properly.

In response to comments, EPA has modified the hazardous waste quantity scoring methodology to make it easier to understand and to use. The changes include elimination of proposed rule Table 2–13, Hazardous Waste Quantity Factor Evaluation Methodology and Worksheet. In addition, the scale for the hazardous waste quantity factor has been divided into ranges that span two orders of magnitude (100x) to reflect the uncertainty inherent in estimates of hazardous waste quantities at typical sites. The practical effect of this scale change is to reduce the data collection and documentation requirements. See §§ 2.4.2–2.4.2.2. The final rule also clarifies the treatment of wastes classified as hazardous under RCRA. Under CERCLA, any RCRA hazardous waste stream is considered a hazardous substance. If this definition were strictly applied in evaluating hazardous waste quantity of RCRA hazardous wastestreams, hazardous constituent quantity and hazardous wastestream quantity would be the same because the entire wastestream would be considered a hazardous substance. The final rule makes clear that only the constituents in a RCRA wastestream that are CERCLA hazardous substances should be evaluated for determining hazardous constituent quantity; for the other three tiers, however, the entire RCRA wastestream is considered as is any other wastestream.

As discussed in section III Q, EPA will consider removal actions when calculating waste quantities. EPA believes consideration of removal actions is likely to increase incentives for rapid actions. If there has been a removal at a site, and the hazardous constituent quantity for all sources and associated releases is adequately determined, the hazardous waste quantity factor value will be based only on the amount remaining after the removal. This will result in lowering some hazardous waste quantity factor values.

Where an adequate determination of the hazardous constituent quantity remaining after the removal cannot be made, EPA has established minimum hazardous waste quantity factor values in order to ensure that the HRS score reflects any continuing risks at the sites. In this case, the assigned hazardous waste quantity factor value will be the current hazardous waste quantity factor value (as derived in Table 2-6), or the minimum value, whichever is greater.

The proposed rule assigned a minimum hazardous waste quantity factor value of 10 when data on hazardous constituent quantity was not complete. In the final rule, for migration pathways (i.e., not the soil exposure pathway), if the hazardous constituent quantity is not adequately determined, and if any target is subject to Level I or II contamination, the minimum hazardous waste quantity factor value will be 100.

If the hazardous constituent quantity for all sources is not adequately determined, and none of the targets are subject to Level I or II contamination, the minimum factor value assigned for hazardous waste quantity depends on whether there has been a removal action, and what the hazardous waste quantity factor value would have been without consideration of the removal action. If there has not been a removal action, the minimum hazardous waste quantity factor value will be 10. If there has been a removal action and if a factor value of 100 or greater would have been assigned without consideration of the removal action, a minimum hazardous waste quantity factor value of 100 will be assigned. If the hazardous waste quantity factor value was less than 100 prior to consideration of the removal action, a minimum hazardous waste quantity factor value of 10 will be assigned. This will ensure that the Agency provides an incentive for removal actions and that in no case will consideration of removal actions result in an increased hazardous waste quantity factor value score.

D. Toxicity

The proposed HRS substantially changed the basis for evaluating toxicity. The major change was that hazardous substance toxicity would be based on carcinogenicity, chronic non-cancer toxicity, and acute toxicity. For each migration pathway and each surface water threat except human food chain and recreation, toxicity was combined with mobility or persistence factors to select the hazardous substance with the highest combined value for toxicity and the applicable mobility or persistence factor. For the human food chain threat, only substances with the highest bioaccumulation values were evaluated for toxicity/persistence. For the recreation threat, only substances with the highest dose adjusting factor values were evaluated for toxicity/persistence. In addition, ecosystem toxicity rather than human toxicity was evaluated for the environmental threat of the surface water migration pathway.

Several commenters expressed concern about or opposition to using the single most hazardous substance at a site to score toxicity, stating that the approach seems overly conservative and unlikely to distinguish sites on the basis of hazard. Some commenters suggested that EPA allow flexibility in weighting the toxicity values of multiple substances either by concentration, waste quantity, or proportion information, whenever such information is available. One commenter suggested basing toxicity on a fixed percentage of the hazardous substances known to be present at a site.

The Agency agrees that, for purposes of accurately assessing the risk to human health and the environment posed by a site, it would be preferable to evaluate the overall toxicity by considering all hazardous substances present, based on some type of dose- (or concentration-) weighted toxicity approach. EPA believes, however, that this approach is not feasible because the data requirements would be excessive. Such an approach would be feasible only when relative exposure levels of multiple substances are known or can reasonably be estimated; however, these data can be obtained only by conducting a comprehensive risk assessment. Extensive concentration data would be required to be confident that comparable concentrations are being used for the various substances, and that the multi-substance toxicity of the contaminants is not, in fact, being underestimated. Use of inadequate data could result in underestimating or overestimating the toxicity of substances in a pathway.

EPA considered a number of alternatives to the use of a single hazardous substance to score toxicity (mobility/persistence) and tested some of these on several real and hypothetical sites. The analyses included comparisons between the single most toxic substance and the average toxicity value for all substances, the average toxicity value for the 10 most toxic substances, and the concentration-weighted average value of all substances. These alternatives were also tested using toxicity/mobility values. The results of these analyses showed that using a single substance approach usually resulted in an assigned value (either toxicity or toxicity/mobility) that was within one interval in the scale of values of the alternatives tested; for example, the single substance approach would assign a value of 1,000 for toxicity whereas averaging the toxicities would assign a value of 1,000 or 100, the next lower scale value. (The final rule uses linear scales to assign values for toxicity, mobility, and persistence. The scales for toxicity now range from 0 to 10,000 rather than 0 to 5; consequently, the default value for toxicity is now 100 rather than 3.) The Agency recognizes the uncertainty in the use of the single substance approach, but concludes that it is a reasonable approach for a screening model, especially given the general unavailability of information to support alternatives. In making this judgment, the Agency notes that the single substance approach to evaluating the toxicity factor was not identified in SARA as a portion of the HRS requiring further examination, even though it had been used in the original HRS and EPA had received criticism similar to the above comments prior to the enactment of SARA.

Several commenters suggested that additive, synergistic, or antagonistic effects among substances be considered in scoring toxicity when several substances are found at a site. In particular, one commenter suggested increasing the scores for sites with a large number of hazardous substances to account for additive or synergistic effects.

As noted in EPA's 1988 *Technical Support Document for the Proposed Revisions to the Hazard Ranking System*, quantitative consideration of synergistic/antagonistic effects between hazardous substances is generally not possible even in RI/FS risk assessments because appropriate data are lacking for most combinations of substances. Interactive effects have been documented for only a few substance mixtures, and the Agency's risk assessment guidelines for mixtures (51 FR 34014, September 24, 1986) emphasize that although additivity is a theoretically sound concept, it is best applied for assessing mixtures of similar acting components that do not interact. Thus, the Agency believes that consideration of interactive effects in evaluating toxicity in the HRS is not feasible, nor is it necessary to allow use of the HRS as a screening model. The Agency rejects the suggestion that scores should simply be raised for sites

with numerous substances because this approach ignores the technical complexities related to interactions (i.e., the possibility of antagonistic effects.)

One commenter suggested that a waste's toxicity should be assessed in terms of its "degree of risk," and that this could be measured by comparing constituent concentrations at the point of exposure to appropriate toxicity reference levels. Two commenters stated that toxicity should be measured at a likely point of human exposure rather than at the waste site.

The toxicity of a substance, as used in the HRS, is an inherent property, often expressed quantitatively as a dose or exposure concentration associated with a specific response (i.e., a dose-response relationship). These toxicity values, in general, are independent of expected environmental exposure levels; many are based on laboratory tests on animals. Risk, on the other hand, is a function of toxicity, the concentration of a substance in environmental media to which humans may be exposed, and the likelihood of exposure to that medium (and the population likely to be exposed). The toxicity factor in the waste characteristics factor category of the HRS is intended to reflect only the inherent toxicity (i.e., the basic dose-response relationship) of substances found at the site. The HRS as a whole is intended to evaluate, to the extent feasible, relative risks posed by sites by including factors for likelihood of release, waste quantity, toxicity, and the proximity of potentially exposed populations. If actual contamination (for example, of drinking water) has been detected at a site, the measured environmental concentration of each substance is compared with its appropriate health-based or ecological-based concentration limit (i.e., its benchmark). If these environmental concentrations equal or exceed a benchmark, certain target factors are assigned higher values than if environmental concentrations are less than benchmarks.

Two commenters suggested using Cancer Potency Factors to score toxicity only for Class A and B1 carcinogens, and using reference doses (RfDs) for scoring Class B2 and C carcinogens (i.e., substances for which there is inadequate or no direct human evidence of carcinogenicity).

In response, EPA believes that because the HRS is a screening tool, it should maintain a conservative (i.e., protective) approach to evaluation of potential cancer risks. EPA's 1986 *Guidelines for Carcinogen Risk Assessment* (51 FR 34014, September 24, 1986) provide for substances in Class A and Class B (both B1 and B2) to be regarded as suitable for quantitative human risk assessment. In general, according to EPA's 1989 *Risk Assessment Guidance for Superfund: Human Health Evaluation Manual*, Class C substances are evaluated for cancer risks within the Superfund risk assessment process. Thus, the use of cancer risk information for Class B2 and C substances in the HRS is consistent with the objective of maintaining a conservative approach and with other Agency and Superfund program risk assessment guidelines.

In response to comments that the best available data should be used to score sites, that accepted Agency practices be relied on, and that consistency across pathways be encouraged, the Agency has modified slightly the way the toxicity value for a substance is selected. The final rule requires the use of carcinogenicity and chronic toxicity data, when available, over acute toxicity data. If both slope factors and RfDs are available, the higher of the values assigned for these types of toxicity parameters is used. If neither is available, but acute toxicity data are available, the acute toxicity data are used to assign toxicity factor values. EPA decided to give preference to slope factors and RfD values because these undergo more extensive Agency review and are based on long-term exposure studies.

E. Radionuclides

The proposed HRS assigned radionuclides a maximum toxicity value, but included no other procedures specific to radionuclides.

One commenter, the U.S. Department of Energy (DOE), asserted that the proposed HRS "* * * contains an inequitable bias regarding radionuclides * * *" DOE specifically criticized assigning maximum toxicity factor values to radionuclides, "* * * where, in fact, the health impact associated with radionuclides is associated with the type of decay, the level of decay energy, the half-life, the mobility, the concentration of the radionuclide, internal biological factors, and external pathway factors." DOE proposed using concepts for evaluating radionuclides that were included in its Modified Hazard Ranking System (mHRS). In its subsequent comments on the HRS field test report, DOE stated that it considered the "* * * method of handling radionuclides in the proposed revised HRS to be a serious flaw in the evaluation system."

In the final rule, EPA has clarified and significantly changed how radionuclides are evaluated. Instead of using or adapting the mHRS directly, however, EPA modified the proposed HRS to account more fully for radionuclides based on EPA's own methods for evaluating them, which are similar to and generally consistent with the radiation analysis concepts underlying the mHRS.

The final rule evaluates radionuclides within the same basic structure as other hazardous substances, and the evaluation of many individual HRS factors is the same whether radionuclides are present or not. Table 7–1 of the final rule lists HRS factors and indicates which are evaluated differently for radionuclides. Essentially, radionuclides are simply treated as additional hazardous substances with certain special characteristics that are accounted for by separate scoring rules for some HRS factors. For sites containing only radionuclides, the scoring process is very similar to the process at other hazardous substance sites, except that different scoring rules are applied to a number of substance-specific factors and a few other factors. For sites containing both radionuclides and other hazardous substances, both types of substances are scored for all HRS factors that are substance-specific, with overall factor values based either on combined values or the higher of the values, as appropriate.

EPA notes that, although some radioactive substances are statutorily excluded from the definition of "hazardous waste" in both CERCLA and RCRA (specifically, source, special nuclear, and byproduct material as defined in the Atomic Energy Act of 1954), such substances may be, and generally are, "hazardous substances" as defined in section 101(14) of CERCLA and therefore may be addressed under CERCLA. Radioactive substances should be included in HRS scoring and section 7 of the final rule is intended to facilitate that analysis. It also should be noted that two narrow categories of releases (either from "nuclear incidents" or from sites designated under the Uranium Mill Tailings Radiation Control Act of 1978) are excluded from CERCLA's definition of the term "release" (CERCLA section 101(22)), and such releases should not be scored using the HRS.

The major changes to the HRS in the evaluation of radionuclides apply to establishing observed releases, to factors in the waste characteristics category, and to determining the level of actual contamination in the targets factor category. The HRS components that have been modified are briefly described below.

The criteria for establishing an observed release through analysis of samples for radionuclides differ considerably from the criteria used for other hazardous substances. These criteria are divided into three groups: radionuclides that occur naturally or are ubiquitous in the environment; manmade radionuclides that are not ubiquitous in the environment; and gamma radiation (soil exposure pathway only). (See § 7.1.1.)

The hazardous waste quantity factor for sources (and areas of observed contamination) containing radionuclides has been modified to reflect the different units used to measure the amount of radiation (curies, a measure of activity) versus the units used for other hazardous substances (pounds, a measure of mass). EPA believes it is preferable to use activity units rather than mass units because activity is the standard measure of radiation quantity and is a better indicator of energy released and potential to cause human health damage than is mass. In addition, the hierarchy for evaluating the waste quantity factor for sources (and areas of observed contamination) containing radionuclides is limited to Tiers A and B. Tiers C and D, based on source volume and source area, respectively, are not used because adequate data to derive their quantitative relationship to Tier A were unavailable. Thus, the waste quantity factor is based either on radionuclide constituent quantity (Tier A) or radionuclide wastestream quantity (Tier B).

For sites containing only radionuclides, hazardous waste quantity is calculated based on the activity content of the radionuclides or radionuclide wastestreams associated with each source. For sites with both radionuclides and other hazardous substances, hazardous waste quantity is evaluated separately for the two types of hazardous substance for each source, and the values are then summed in determining the hazardous waste quantity value. The scale for scoring radionuclide waste quantity was derived based on concepts of risk equivalence between radionuclides and other hazardous substances.

In the proposed rule, all radionuclides were automatically assigned a maximum default value for the toxicity factor. The final rule evaluates radionuclides individually on the basis of human toxicity, across a range of factor values based on the potential to cause cancer (i.e., cancer slope factors). Non-cancer effects are not considered for radionuclides because cancer is generally the most significant toxic effect. Incorporated in the development of cancer slope factors are the type of radioactive decay; energy emitted during decay; biological uptake, distribution, and retention; and radiation dose-response relationship. Thus, across the set of scoring ranges used, radionuclides that are more potent carcinogens per unit activity now receive higher toxicity factor values than those that are less potent. The new toxicity scoring scale for radionuclides was derived in a manner consistent with the derivation of the existing carcinogenicity scale for other hazardous substances. Taken together, the new toxicity and hazardous waste quantity scales for radionuclides result in a risk equivalence between radionuclides and other hazardous substances.

Mobility of radionuclides in both the air and ground water migration pathways is evaluated in the same way as mobility for other hazardous substances; that is, on the basis of the chemical and physical characteristics of the radionuclide. Similarly, the bioaccumulation (and ecosystem bioaccumulation) potential factor is evaluated in the same way for radionuclides as for other hazardous substances. The final rule clarifies that radionuclides should be scored for these factors in all relevant pathways.

The persistence factor in the surface water migration pathway has been modified so that radionuclides are evaluated solely on the basis of half-life, which for HRS purposes is based on both radioactive half-life and volatilization half-life. Sorption to sediments is not considered, nor are hydrolysis, photolysis, or biodegradation. Other than this change in the processes considered to estimate surface water half-life, the scoring of the persistence factor is the same for radionuclides as for other hazardous substances.

The final rule extends to radionuclides the benchmark concept used throughout the HRS for weighting certain targets factor values. Measured levels of specific radionuclides at potential exposure points are compared to benchmark levels, and additional weight is given to targets subject to actual contamination (Levels I and II). This approach for weighting target factors using benchmarks is similar for radionuclides and for other hazardous substances, although both the specific benchmark values used for radionuclides and the methods for deriving the values are different. Benchmarks for evaluating radionuclide contamination parallel those used for other hazardous substances in that available Federal standards and screening concentrations are used when applicable. At sites with both radionuclides and other hazardous substances, each radionuclide and other substance is evaluated separately. If no individual substance equals or exceeds its benchmark, the ratios of the measured concentrations to the screening concentrations for cancer for radionuclides and other hazardous substances are added. Radionuclides are not evaluated using screening concentrations for non-cancer effects.

Specific benchmark values for radionuclides are in activity units instead of mass units, however, to reflect the appropriate measurement units for the level of radionuclide contamination. Radionuclide benchmarks include drinking water maximum contaminant levels (MCLs) for both the ground water and the surface water/drinking water threat pathways; Uranium Mill Tailings Radiation Control Act (UMTRCA) standards for the soil exposure pathway; and screening levels corresponding to 10^{-6} individual cancer risk for inhalation or oral exposures, as derived from cancer slope factors, for all pathways and threats incorporating human health benchmarks. The radionuclide benchmarks are consistent with EPA's radionuclide risk assessment methods in that they incorporate standard data or assumptions about contact/consumption rates for various environmental media and radiation dose-response, as well as the specific radionuclide's type of decay, decay energy, biological absorption, and biological half-life. Furthermore, radionuclide benchmarks for the soil exposure pathway account for external exposure (i.e., exposure to radiation originating outside the human body) from gamma-emitting radioactive materials in surficial material as well as from ingestion, which is the sole basis for non-radioactive hazardous substance benchmarks for the soil exposure pathway, because external exposure from gamma-emitting radionuclides can be an extremely important exposure route.

F. Mobility/Persistence

The proposed rule added mobility factors to both the ground water and air migration pathways and modified the persistence factor in the surface water migration pathway to consider a greater number of potential degradation mechanisms.

The Agency received a large number of comments critical of several aspects

of the ground water mobility factor. The most common issues included:

• Concern about the use of coefficients of aqueous migration to establish mobility values for inorganic cations and anions;

• Suggestions that solubility values, distribution coefficients, and other measures be used to establish mobility values for anions and cations; and

• Requests that the same measures of mobility be used for organics and inorganics.

Criticism of the use of the coefficients of aqueous migration focused on its obscurity; except for geochemists, few scientists are familiar with the measure. In response to these comments and because coefficients of aqueous migration are not available for all hazardous substances and radionuclides, the Agency decided to replace coefficients of aqueous migration.

The majority of commenters stated a preference for using parameters related either to hazardous substance release (solubility) or to transport (distribution coefficients) as measures of mobility. The ground water mobility factor is intended to reflect the fraction of a hazardous substance expected to be released from sources, migrate through porous media, and contaminate aquifers and the drinking water wells that draw from them. Because mobility is concerned with both release and transport, the Agency concluded that mobility for all hazardous substances in ground water will be evaluated using both solubility and distribution coefficient values. A default value is assigned when none of the hazardous substances eligible to be evaluated can be assigned a mobility factor value based on available data.

A number of commenters raised questions about the persistence factor in the surface water migration pathway. In general, the commenters were divided between those who wanted more degradation mechanisms considered and those who believed the equation in the proposed rule for calculating half-lives was too complex. Several commenters suggested including sorption of substances by sediments.

In response to these comments, EPA has made several changes to the persistence factor. The free-radical oxidation half-life has been dropped from the equation used to calculate half-life because the data on which its half-life values are based are typically derived from ideal, laboratory conditions that differ greatly from conditions found in nature; few field validation studies have been conducted to provide a basis for extrapolating these laboratory values to natural environments. Thus, EPA concluded that including free-radical oxidation in the persistence equation resulted in an overemphasis of the influence of free-radical oxidation as a degradation mechanism. For hazardous substances that sorb readily to particulates found in natural water bodies, the persistence equation as proposed overemphasized the importance of degradation mechanisms that occur in the liquid phase. Log K_{ow}, the logarithm of the n-octanol-water partition coefficient, has been added to account for sorption to sediments.

The Agency received several comments concerning the mobility factors in the air migration pathway. The most significant of the issues raised by commenters were:

• Whether consideration of mobility in both the likelihood of release factor category and the waste characteristics factor category counts mobility twice;

• Whether the approach used in the proposed rule properly reflected the dynamics of releases of gases from sources into the atmosphere; and

• Whether the Thornthwaite P-E Index was sufficient as the sole measure of particulate mobility and whether particle size should be included.

In response to these and other related structural and air migration pathway comments, the Agency thoroughly re-assessed the adequacy of the mobility factors in the likelihood of release and waste characteristics factor categories. Based on this review, EPA has made several changes to the mobility factors in the final rule. In response to the "double counting" issue, the Agency believes there are differences between mobility in the context of likelihood of release and mobility in the context of waste characteristics. The potential to release mobility factor is a measure of the likelihood that a source at a site will release a substance to the air; the waste characteristics mobility factor, together with the hazardous waste quantity factor, is a measure of the magnitude of release. To highlight these differences, the names of the likelihood of release mobility factors have been changed to gas (or particulate) migration potential.

In response to comments on air migration pathway mobility and structure, EPA reviewed gas and particulate release rate models to develop revised mobility factors that improve evaluations of release magnitude and duration. The gas and particulate mobility factors in the final rule are a result of that review. The gas mobility factor is based on a simplified release model and is determined by the vapor pressure of the most toxic/mobile hazardous substance available for migration to the atmosphere at the site. The particulate mobility factor is based on a simplified fine-particle wind-erosion model and reflects the combined effects of differing wind speeds and soil moisture. Analyses indicated that soil moisture was dominant over both wind speed and particle size, which are essentially equal in effect. Because of the comparative difficulty of determining particle sizes in an SI, a single particle size was assumed to apply to all sites. This constant particle size value was factored into the simplified model yielding the factor in the final rule.

G. Observed Release

The proposed HRS described how to determine whether an observed release was significantly above background levels based on multiples of detection limits and background concentrations.

Some commenters stated that the proposed revisions treated observed release in an overly complex manner. A number of commenters, primarily from the mining industries, were concerned about the consideration of background concentration in determining an observed release. (See Section III P below for a summary of their concerns and EPA's response.)

As in the proposed rule, observed releases may be established based on either direct observation or chemical analysis of samples. In the case of direct observation, material (e.g., particulate matter) containing hazardous substances must be seen entering the medium directly or must have been deposited in the medium.

EPA has replaced the proposed rule criteria for establishing an observed release by chemical analysis with simpler criteria. In the final HRS, an observed release is established when a sample measurement equals or exceeds the sample quantitation limit (SQL) and is at least three times above the background level, and available information attributes some portion of the release of the hazardous substance to the site. (The SQL is the quantity of a hazardous substance that can be reasonably quantified, given the limits of detection for the methods of analysis and sample characteristics that may affect quantitation (e.g., dilution, concentration).) When a background concentration is not detected (i.e., below detection limits), an observed release is established when the sample measurement equals or exceeds the SQL. Any time the sample measurement is less than the SQL, no observed release is established. Table 2-3 of the

final rule provides the criteria for determining when analytic sampling information is sufficient for establishing an observed release (or observed contamination in the soil exposure pathway). The final rule also provides procedures to be followed when the SQL is unavailable and defines various types of detection and quantitation limits in the context of the HRS. (See § 2.3 of the final rule.)

H. Benchmarks

SARA requires that EPA give high priority to sites that have led to closing of drinking water wells or contamination of principal drinking water supplies. To respond to this mandate, the proposed rule added health-based benchmarks to the ground water and surface water migration pathways; in addition, ecological-based benchmarks were added to evaluate sensitive environments targets in surface water. In the proposed rule, population factors were evaluated at Level I if a health-based benchmark had been exceeded. If actual contamination was present, but the benchmark was not exceeded, populations were evaluated based on two levels of contamination (i.e., Level II and Level III). Sensitive environments in the surface water migration pathway were evaluated based on two levels of actual contamination (exceeding benchmark or not exceeding benchmark). Where several hazardous substances were present below benchmarks, the percentages of their concentrations relative to their benchmarks were added to determine which level was used to assign values.

Of the commenters on this issue, most supported EPA's proposal to give extra weighting to sites where measured exposure-point concentrations exceed benchmarks. One commenter who dissented suggested giving extra weighting to sites where actual contamination is documented; documentation of an observed release (or observed contamination) would be the only criterion for assigning higher values to target factors, and the relationship of the concentration of hazardous substances to benchmarks would not be used. The other dissenting commenter suggested that EPA re-evaluate the role of health-based benchmarks in the HRS because common sense, and other laws, will discourage people from drinking water contaminated above benchmark levels, and because evaluating this factor will entail large resource expenditures for marginal gains in discrimination.

The final rule weights most targets based on actual and potential exposure to contamination across all pathways and threats, including those for which benchmarks were not originally proposed, because EPA believes that this approach both improves the ability of the HRS to identify sites that pose the greatest threat to human health and the environment and increases the internal consistency of the HRS. (See §§ 2.5, 2.5.1, 2.5.2, 3.3.1, 3.3.2, 4.1.2.3.1, 4.1.2.3.2, 4.1.3.3.1, 4.1.3.3.2, 4.1.4.3.1, 4.2.2.3.1, 4.2.2.3.2, 4.2.3.3.1, 4.2.3.3.2, 4.2.4.3.1, 5.1.3.1, 5.1.3.2, 6.3.1, 6.3.2, 6.3.4, 7.3.1, 7.3.2.) In the final rule, both the population factors and the factors reflecting the hazard to the nearest individual (or well or intake) are evaluated in relation to health-based benchmarks in all pathways. The sensitive environment factor in the surface water environmental threat is weighted in relation to ecological-based benchmarks; however, in the soil exposure and air migration pathways, the sensitive environment factor is weighted simply on the basis of exposure to actual contamination, and no benchmarks are used.

The Agency chose to use benchmarks in all pathways in response to comments that specifically suggested such a change; it is also responding to comments that the HRS should better reflect relative risks and that the approaches in all pathways should be consistent. The Agency has concluded that the concerns expressed by commenters outweigh the concerns about uncertainties in the evaluation of samples collected in air and soil and about the lack of regulatory standards and criteria on which to base soil or air benchmarks that led the Agency not to include benchmarks for those pathways in the proposed rule. In short, EPA carefully considered this point and concluded that the consistent application of benchmarks across all pathways provides for the most reasonable use of data given the purpose of the HRS as a screening tool.

EPA generally selected specific criteria based on applicable or relevant and appropriate requirements (ARARs), excluding State standards, that have been selected for the protection of public health and the environment as outlined in the NCP (55 FR 8666, March 8, 1990). In the HRS NPRM, EPA proposed to use MCLs, maximum contaminant level goals (MCLGs), and screening concentrations (SCs) based on cancer slope factors as drinking water benchmarks, and Food and Drug Administration (FDA) Action Levels as benchmarks for the human food chain threat. EPA also proposed to use Ambient Water Quality Criteria (AWQC) as ecological-based benchmarks for the environmental threat. EPA received 21 comments from 12 commenters on which benchmarks the HRS should use and whether additional information should be considered in establishing benchmarks. Opinion was divided on the use of specific types of benchmarks: three commenters supported the use of MCLs; three did not. Two commenters supported the use of MCLGs, two opposed such use, and one suggested that EPA consider the economic impact of using the value of 0 (i.e., the MCLG for a carcinogen) as a health-based benchmark. Two commenters suggested including relevant State drinking water standards, and one suggested including concentrations based on RfDs. One commenter expressed concern that the current lack of water quality standards for many substances might make the benchmark system ineffective in identifying sites that pose a significant threat to human health. Two commenters suggested that carcinogen weight of evidence should be used in establishing SCs (e.g., the individual risk level should be lower for a Class A carcinogen than for a Class B2 carcinogen). Two commenters suggested considering other important routes of exposure (e.g., inhalation of hazardous substances volatilized from water, or dermal contact with contaminated water) in establishing drinking water benchmarks.

EPA conducted a number of analyses on specific benchmarks and on the modification of factors to consider in establishing HRS benchmarks. As a result of public comments and these analyses, EPA has concluded that the HRS is improved by including concentrations based on nationally uniform standards, criteria, or toxicity values as health-based or ecological-based benchmarks in all pathways and threats. EPA's conclusion is based on several considerations. First, the addition of benchmarks across all pathways and the use of ARARs for those benchmarks improves linkages with the RI/FS process. That is, the HRS benchmarks will be those used most frequently during RI/FSs, and the additional points provided by equalling or exceeding a benchmark will aid in identifying areas requiring follow-up in the RI/FS. Second, the internal consistency of the HRS is improved by using benchmarks because concentrations measured at or above benchmark levels are treated in a parallel manner across all pathways, allowing more consistent and fuller use of the relatively costly sampling data

collected during the SI. Third, the number of hazardous substances for which at least one health-based or ecological-based benchmark is available is increased, allowing for more uniform assessment of sites nationwide.

The benchmark criteria that the Agency has concluded are most appropriate for each pathway and threat are listed below. As discussed above, EPA agrees with comments suggesting that benchmarks also be used in the soil exposure and air migration pathways and has selected criteria for these pathways based upon the kinds of factors discussed above. While EPA believes the criteria for the soil exposure and air migration pathways in the final rule are appropriate, it is open to any comments that members of the public may wish to submit regarding these criteria and specifically solicits such comments at this time. EPA asks that any such comments be submitted on or before (30 days after the date of publication in the Federal Register).

For the final rule, EPA has selected the following types of benchmarks in each pathway and threat, subject to any revisions in the criteria for air and soil exposure that may be made in response to comments. (Benchmarks for radionuclides are discussed in Section III E of this preamble.)

- Benchmarks in the ground water migration pathway and the surface water drinking water threat include MCLs, non-zero MCLGs, screening concentrations (SCs) for non-cancer effects based on RfDs for oral exposures, and SCs for cancer based on slope factors for oral exposures and 10^{-6} individual cancer risk (see Table 3–10). Because SCs based on RfDs and slope factors are used as drinking water benchmarks, MCLGs with a value of 0 have been dropped as HRS benchmarks.
- Benchmarks in the surface water human food chain threat include FDA Action Levels for fish or shellfish, SCs for non-cancer effects based on RfDs for oral exposures, and SCs for cancer based on slope factors for oral exposures and 10^{-6} individual cancer risk (see Table 4–17).
- Benchmarks in the surface water environmental threat include AWQC and Ambient Aquatic Life Advisory Concentrations (AALACs); AALACs will be considered as they become available (see Table 4–22).
- Benchmarks in the soil exposure pathway include SCs for non-cancer effects based on RfDs for oral exposures, and SCs for cancer based on slope factors for oral exposures and 10^{-6} individual cancer risk (see Table 5–3).
- Benchmarks in the air migration pathway include National Ambient Air Quality Standards, National Emission Standards for Hazardous Air Pollutants (NESHAPs) that are expressed in ambient concentration units, SCs for non-cancer effects based on RfDs for inhalation exposures, and SCs for cancer based on slope factors for inhalation exposures and 10^{-6} individual cancer risk (see Table 6–14).

Several commenters suggested technical refinements for deriving health-based benchmarks. Although qualifying information is useful and important and is, in fact, used extensively in the RI/FS process, the benefits of including such information in the HRS must be balanced against its limited scope and purpose as well as the limited data available to determine concentration at the point of exposure. Consequently, in the final rule:

- All health-based benchmarks are set in reference to the major exposure concern for each pathway or threat (e.g., benchmarks in the air migration pathway are set in reference to inhalation only; benchmarks in drinking water, the human food chain threat, and the soil exposure pathway are set in reference to ingestion), except for radionuclides for which external exposure is also considered in the soil exposure pathway;
- All benchmarks are set in reference to uniform exposure assumptions that are consistent with RI/FS procedures (e.g., water consumption is assumed to be two liters per day; body weight is assumed to be 70 kg);
- State water quality standards and other State or local regulations are not included as benchmarks because they would introduce regional variation in the HRS;
- A hierarchy has been developed to provide a single benchmark concentration for each hazardous substance by pathway and threat; and
- Qualitative weight-of-evidence is not used in deriving SCs for carcinogens.

In the NPRM, EPA requested comments on how many tiers (levels) of actual contamination to consider when weighting populations relative to benchmarks (i.e., which of three alternative methods presented should be adopted). EPA received two comments on this issue and three related comments regarding the weighting factors for each level. One commenter supported Alternative 2 (i.e., use of two levels of observed contamination and one level of potential contamination). Another commenter suggested that Level II and Level III concentrations be combined to include the range of contaminant levels above background, but below health-based benchmarks. A third commenter suggested that the weighting factors for each level be reconsidered. A fourth commenter suggested that 1/1000 of a benchmark factor is inappropriate because it is excessively conservative and difficult to detect. The fifth commenter suggested that because Level III represents concentrations with cancer risks below 10^{-7}, populations exposed to Level III concentrations should not be considered in the population category of drinking water threats.

EPA conducted a number of analyses on the subject of benchmark tiers and has dropped Level III contamination. In the final rule, Level I contamination is defined as concentration levels for targets which meet the criteria for actual contamination (see § 2.5 of the final rule) and are at or above media-specific benchmark levels; Level II contamination is defined as concentration levels for targets which either meet the criteria for actual contamination but are less than media-specific benchmarks, or meet the criteria for actual contamination based on direct observation; and potential contamination is defined as targets that are potentially subject to releases (i.e., targets that are not associated with actual contamination for that pathway or threat). These three tiers are used to assign values to both the nearest individual (or well or intake) and the population factors. As a result of EPA's analyses of benchmark issues, the weighting assigned to Level I and Level II contamination has been changed and made consistent across pathways. For example, Level I populations are now multiplied by a factor of 10 in all pathways. As in the proposed rule, potentially contaminated populations and nearest individuals (or wells or intakes) are distance or dilution weighted.

The proposed rule summed the ratios of all hazardous substances to their individual benchmarks as a means of defining the level of actual contamination, and EPA requested comments on the appropriateness of this approach to scoring multiple substances detected in drinking water. Of the 10 comments in response to this proposal, nine strongly opposed the proposed approach, particularly when applied to drinking water standards (i.e., MCLs), MCLGs, and noncarcinogens. One commenter supported the proposed approach.

EPA has decided to retain the summing of ratios of hazardous substances to their individual benchmarks, but in a modified form. The final rule sums measures of carcinogenic and noncarcinogenic effects separately;

concentrations specified in regulatory limits (e.g., NAAQS, MCLs, or FDA Action Levels) are not included in the summing algorithm. EPA recognizes that a more precise estimate of relative risk would be obtained by summing the ratios of hazardous substances to their individual RfD-based concentrations by segregating substances according to major effect, target organ, and mechanism of action. In fact, such a segregation is recommended during the RI/FS. However, health-based benchmarks are used in the HRS to provide a higher weight to populations exposed to hazardous substances at levels that might result in adverse health effects. As a consequence, EPA believes that use of the summed ratios of hazardous substances within pathways and threats to their individual RfD-based benchmark levels is appropriate for the screening purpose of the HRS.

EPA proposed and solicited comments on a range of 10^{-4} to 10^{-7} for individual cancer risk levels of concern in establishing levels of actual contamination with respect to health-based benchmarks. EPA received eight comments concerning this risk range. Four commenters suggested restricting the range to 10^{-4} to 10^{-6}, primarily because this range would be consistent with risk levels identified in the NCP and used by other EPA regulatory programs. Three commenters said the SCs for carcinogens should be the 10^{-6} individual cancer risk level. One commenter stated that 10^{-4} to 10^{-7} generally is the risk range considered for Superfund response. The final rule defines only two levels of actual contamination: significantly above background and equal to or above benchmark, and significantly above background but less than benchmark. When an applicable or relevant and appropriate requirement does not exist for a carcinogen, EPA selects remedies resulting in cumulative risks that fall within a range of 10^{-4} to 10^{-6} incremental individual lifetime cancer risk based on the use of reliable cancer potency information. EPA has selected the 10^{-6} screening risk level in defining the HRS benchmark level for cancer risk because it is the lower end of the cancer risk range (i.e., 10^{-4} to 10^{-6}) identified in the NCP and used by other EPA regulatory programs.

Two commenters objected to assigning releases of substances with no benchmarks to Level II as a default value. One suggested assigning unknowns to Level III because substances that are frequently released or are known or suspected to cause health problems are studied before those that are not. The other objected because "the absence of data is not data."

Because EPA has decided to adopt a benchmark system incorporating only two levels of actual contamination, the default level is Level II. If none of the hazardous substances eligible to be evaluated at a sampling location has an applicable benchmark, but actual contamination has been established, the actual contamination at the location is assigned to Level II.

I. Use Factors

The proposed HRS included factors to assign values to uses of potentially affected resources in the three migration pathways: ground water use (drinking water and other) in the ground water migration pathway, drinking water and other use and fishery use in the surface water migration pathway, and land use in the air migration pathway.

EPA received a number of comments on each of these factors. The commenters raised specific objections to distinctions drawn among various potential uses and to the weights assigned to those uses. For example, for the ground water use factor, some commenters asserted that the HRS should not delineate between private and public water supply contamination. For the surface water use factors, a commenter recommended a range of assigned values for irrigation of commercial food or forage crops because of variations in rates of uptake of hazardous substances. For the land use factor, two commenters urged giving greater consideration to institutional land use because of the sensitive populations that would be exposed.

Partly in response to these comments, and in an effort to simplify the HRS, EPA has substantially revised the method of incorporating resource use information in targets factor categories. The field test indicated that collecting data on each of the use factors involved considerable effort at many sites. In addition, because of weighting factors applied to potentially contaminated populations, at sites with no actual contamination, use factors were contributing more to the targets value than were large populations. As some commenters pointed out, the use factors mixed concerns about human health with concerns about the value of the resource and, therefore, were partially redundant with population factors. To avoid redundancy with human health concerns as evaluated through the population factor, EPA has made major changes in how resource uses are evaluated and scored in the final rule.

In each migration pathway, the use factors have been replaced by a resources factor that assigns values to resources appropriate for the pathway. In addition, a resources factor has been added to the soil exposure pathway. The resources factor for a pathway is assigned a maximum of five points if any of the resource uses for that pathway exists within the target distance limit in the ground water or surface water migration pathway, within one-half mile of a source in the air migration pathway, or within an area of observed contamination in the soil exposure pathway. If none of the uses exists, the factor is assigned a value of 0.

The resources factor in the ground water migration pathway assigns a value of 5 for wells supplying water for irrigation of commercial food or commercial forage crops (five-acre minimum), watering of commercial livestock, as an ingredient in commercial food preparation, or as a supply for commercial aquaculture or for a major or designated water recreation area (excluding drinking water use)—for example, water parks (see § 3.3.3). A value of 5 is also assigned if the water in the aquifer is usable for drinking water, but not used.

The resources factor in the drinking water threat of the surface water migration pathway assigns a value of 5 if the surface water is designated by a State for drinking water use but not used, or is usable but not used for drinking water. In addition, points may be assigned for intakes supplying water for irrigation of commercial food or commercial forage crops (five-acre minimum), watering of commercial livestock, as an ingredient in commercial food preparation, or if the water body is used as a major or designated water recreation area (see § 4.1.2.3.3). The fishery use factor has been deleted to avoid double-counting of fisheries.

In the air migration pathway, the resources factor is assigned a value of 5 if there is commercial agriculture or commercial silviculture, or a major or designated recreation area within a half mile of a source (see § 6.3.3). The distance of one-half mile for the agricultural, silvicultural, and recreational areas was determined by the distance weighting factors for the air migration pathway, which reflect the rapid diminishing of air contaminant concentrations beyond one-half mile from a source. Therefore, resources beyond this distance are not considered in this pathway.

A resources factor has also been added to the resident population threat of the soil exposure pathway. The factor is assigned a value of 5 if there is commercial agriculture, commercial silviculture, or commercial livestock production or grazing on an area of observed contamination at the site.

J. Sensitive Environments

The proposed rule expanded the list of sensitive environments considerably and, for the surface water and air pathways, counted all sensitive environments within the target distance limit, rather than just the one with the highest assigned value; for the soil exposure pathway, only the sensitive environment assigned the highest value was counted. Potentially contaminated sensitive environments were distance/dilution weighted; in the surface water environmental threat, actual contamination of sensitive environments was evaluated on the basis of ecological-based benchmarks.

EPA received relatively few comments on issues related to sensitive environments. However, participants in the field test requested clarification of three categories of sensitive environments involving spawning areas, migratory pathways, and feeding areas critical for the maintenance of a fish species within a river system, coastal embayment, or estuary. In particular, critical migratory pathways and feeding areas were difficult to identify and seemed to provide little discrimination among surface waters in some areas of the country.

EPA has redefined critical spawning areas to include shellfish beds, and has limited the areas to those used for intense or concentrated spawning by a given species. Critical migratory pathways and feeding areas have been combined into a single category and limited to anadromous fish (i.e., fish that ascend from the ocean to spawn), which face special problems in migrating substantial distances between the ocean and their spawning areas. These feeding areas are further restricted to only those areas in which the fish spend extended periods of time. Examples include areas where juveniles of anadromous species feed for prolonged periods (e.g., weeks) as they prepare to migrate from fresh water to the ocean, and holding areas along the adult migratory pathways.

Terrestrial areas used for breeding by large or dense aggregations of vertebrates (e.g., heron rookery, sea lion breeding beach) have been added to the list of sensitive environments to parallel the spawning areas listed for fish species. Water segments designated by a State as not attaining toxic water quality standards have been removed because these environments are already degraded and thus are not analogous to the other sensitive environments listed. Also, the assigned value for State designated areas for protection or maintenance of aquatic life has been changed from 50 points to 5 points (see Table 4–23 in final rule) to be consistent with the points assigned under the resources factor for State designated areas for drinking water use.

In response to public comment, National Monuments have been added to the 100-point category on the list of terrestrial sensitive environments considered under the soil exposure pathway. "State designated natural areas" and "particular areas, relatively small in size, important to the maintenance of unique biotic communities" were also added to the list of terrestrial sensitive environments in response to public comment. These latter two categories were already considered in the air and surface water pathway evaluation of sensitive environments. (See Table 5–5.)

The method for evaluating wetlands has been revised, partially because participants in the field test had difficulty identifying discrete wetlands. Some wetlands were patchy and could be classified as one large or many small wetlands. Other wetlands were divided by rivers or roads, or changed from one type of wetland to another, making it unclear whether more than one wetland should be counted. To eliminate these difficulties, wetlands are now evaluated on the basis of size and level of contamination. In the air migration pathway, wetlands are evaluated based on acreage and level of contamination (see § 6.3.4); in the surface water migration pathway, wetlands are evaluated by linear frontage along the surface water hazardous substance migration path and level of contamination (see § 4.1.4.3.1). Distinguishing among wetlands on the basis of size and level of contamination should improve the discriminating ability of the sensitive environments factor. In the drier portions of the country, where even small wetlands (e.g., prairie potholes) are very important, small wetlands may also qualify as "particular areas, relatively small in size, important to the maintenance of unique biotic communities."

Sensitive environments other than wetlands are not evaluated on the basis of size for several reasons. Most other HRS sensitive environments tend to be less common and less widely distributed nationally than wetlands (e.g., see EPA's 1989 *Field Test of the Proposed Revised HRS*) and, therefore, their numbers and boundaries tend to be easier to identify. In addition, the value of many sensitive environments is independent of size; for example, the size of a critical habitat of an endangered species may vary solely due to the type of species present. Furthermore, potential or actual contamination of even a small portion of many sensitive environments—for example, a wildlife refuge—tends to be viewed as unacceptable.

An ecosystem bioaccumulation potential factor has been added to the waste characteristics factor category of the surface water environmental threat in response to comments that hazardous substances that demonstrate an ability to bind to sediments and/or to bioaccumulate (e.g., PCBs, mercury) tend to pose the greatest long-term threats to aquatic organisms. The accumulation of hazardous substances in the aquatic food chain can result in adverse effects in aquatic species and in other animals that ingest aquatic species (e.g., waterfowl). The ecosystem bioaccumulation potential factor differs slightly from the bioaccumulation potential factor in the human food chain threat, primarily in that all BCF data are considered in deriving it and not just BCF data for human food chain organisms.

The EPA ambient aquatic life advisory concentrations (AALACs) have been added to the data hierarchy used to assign the ecosystem toxicity value (see § 4.1.4.2.1.1). The Natural Heritage Program alternative sensitive environment rating factors have been removed from the rule because of problems that arose during the field tests; field test participants found that the availability of information varied substantially among States. However, a Natural Heritage Program Data Center can assist in identifying many of the sensitive environment types listed in Tables 4–23 and 5–5.

K. Use of Available Data

A number of commenters stated that all available data should be used when scoring a site. Several cited the tiered approach to hazardous waste quantity as a model that could be applied to other factors. Under this method, where data are available, they would be used; where data are not available, defaults or more generalized approaches would be applied. Several commenters specifically suggested using this approach for ground water flow direction and for scoring mining sites. These commenters argued that it would be less expensive and time-consuming to use available data when scoring a site

than to wait until the remedial investigation to consider the additional information.

EPA considered modifying the HRS to allow the use of additional data, but determined that further expanding the HRS to account for varying levels of data availability is inconsistent with the HRS's role as an initial screening tool. Adding tiers to various factors to accommodate the use of all available data would make the HRS considerably more difficult to apply and could lead to substantial inconsistencies in how sites are investigated and evaluated. EPA Regions and States would have to determine, for each set of data presented, whether the data quality was good enough for the data to be considered. Debates over decisions on data quality could delay scoring and, ultimately, delay cleanup at sites. Therefore, the Agency believes that the limited use of tiers in the final HRS represents a reasonable tradeoff between the need to limit the complexity of the system and the desire to accommodate risk-related information that is generally outside the scope of a site inspection.

L. Ground Water Migration Pathway

The proposed rule included a number of significant changes in the ground water migration pathway: new hydrogeologic factors were added; populations were distance weighted unless exposed to actual contamination; a maximally exposed individual (MEI) factor was added; the target distance limit was extended; a mobility factor was added and combined with toxicity; and a wellhead protection area factor was added. Figure 5 shows the proposed ground water migration pathway and the final rule pathway.

Ground water flow direction. Neither the original HRS nor the proposed HRS directly considered ground water flow direction in evaluating targets. The proposed HRS indirectly considered ground water flow direction by weighting populations based on actual and potential contamination of drinking water wells.

EPA received 50 letters from 40 commenters on this issue; 27 letters responded to the ANPRM, 21 to the NPRM, and two to the field test report. Commenters included eight States, three Federal agencies, the mining, petroleum, chemical, and cement industries, utilities, and professional engineers. The commenters supported the consideration of ground water flow direction data, at least in some circumstances. Numerous commenters urged the use of ground water flow direction data when they are either available or easily obtained. They suggested several methods to incorporate flow direction, including:

- Considering use of a radial impact area when directional release routes can be determined. Only a half circle with a three-mile radius for the downgradient portion (and a half-mile radius for the rest of the circle) should be considered when scoring;
- Differentiating between upgradient and downgradient areas using topographic maps, evaluating water levels at wells, and noting the presence of major surface water bodies;
- Expending the effort to obtain accurate data and considering selected upgradient locations as a precaution against unanticipated anomalies;
- Excluding drinking water wells where analytical data prove no contamination is present;
- Having a "professional" review available information and conduct a site visit;
- Using available flow direction data and developing regionally based defaults when no data are available;
- Installing piezometers to determine flow direction in the PA/SI phase and when no ground water flow data are available;
- Incorporating ground water flow direction into the "depth to aquifer" and "distance to nearest well/population served" scores; and
- Affording responsible parties the opportunity to determine flow direction.

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Figure 5

Ground Water Migration Pathway

PROPOSED HRS

Likelihood of Release	X	Waste Characteristics	X	Targets
Observed Release or Potential to Release Containment Net Precipitation Depth to Aquifer/ Hydraulic Conductivity Sorptive Capacity		Toxicity/Mobility Hazardous Waste Quantity		Maximally Exposed Individual Population Ground Water Use Wellhead Protection Area

FINAL HRS

Likelihood of Release	X	Waste Characteristics	X	Targets
Observed Release or Potential to Release Containment Net Precipitation Depth to Aquifer Travel Time		Toxicity/Mobility Hazardous Waste Quantity		Nearest Well Population Resources Wellhead Protection Area

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Commenters suggested that data on ground water flow are either readily available or can be easily obtained at reasonable cost and are no more imprecise than other aspects of the HRS. Some commenters stated that the level of effort required to estimate the direction of ground water flow is no greater than that required to determine other hydrogeologic parameters in the HRS.

EPA reviewed a range of options for considering ground water flow direction in evaluating targets. For the reasons discussed above under "Use of Available Data," the Agency decided that it was not feasible to adopt a tiered approach in the targets factors for evaluating ground water flow direction. EPA does not agree that increased accuracy warrants the increased complexity of accounting for ground water flow direction, because this level of accuracy is not required for a screening tool that is intended to assess relative risk. This level of accuracy, however, is needed to determine the extent of remedial action and, therefore, is appropriate at the time of the RI.

EPA disagrees with the argument that determining ground water flow direction is no more difficult than determining other ground water factors. Aquifer interconnections and discontinuities as well as hydraulic conductivity and depth to aquifer, which are evaluated in the final rule, are geologic features that are unlikely to change over the short-term. In contrast, ground water flow direction can be influenced by factors such as seasonal flows and pumping from well fields. In addition, the ground water flow direction may be different in each aquifer at the site, and the direction of hazardous substance migration is not always the same as the direction of ground water flow. Therefore, data on ground water flow direction would need to be considerably more extensive than would the data required to document the other hydrogeologic factors. EPA notes that in the final rule, many of the other hydrogeologic factors considered have been simplified and the sorptive capacity factor has been dropped. EPA also notes that ground water flow direction was not identified in SARA as a portion of the HRS requiring further examination, even though ground water flow direction was not considered in the original HRS and the Agency had received criticism similar to the above comments prior to enactment of SARA.

Although the final rule does not consider ground water flow direction directly in evaluating targets, it does consider flow direction indirectly in the method used to evaluate target populations. If wells have not been contaminated by the site, as the commenters assume upgradient wells would not be, the population drawing from those wells is distance weighted and, thus, populations drawing from the wells would have to be substantial before a large number of points could be assigned. Moreover, in addition to providing a measure of the population at risk from the site, the target factors afford a measure of the value of the ground water resources in the area of the site and of the potential need for expanded uses of the ground water.

Aquifer interconnections. Aquifer interconnections facilitate the transfer of ground water or hazardous substances between aquifers. The final rule specifies that if aquifer interconnections occur within two miles of the sources at the site (or within areas of observed ground water contamination attributed to sources at the site that extend beyond two miles from the sources), the interconnected aquifers are treated as a single aquifer for the purposes of scoring the site. Thus, for example, when an observed release to a shallow aquifer has been identified, targets using deeper aquifers interconnected to the shallow aquifer are included in the evaluation of the combined aquifer. This approach is common to the original as well as the revised HRS.

In practice, EPA has found that studies in the field to determine whether aquifers are interconnected in the vicinity of a site will generally require resources more consistent with remedial investigations than SIs, especially where installation of deep wells is necessary to conduct aquifer testing. Thus, EPA has in the past relied largely on existing information to make such determinations and the Agency finds it necessary to continue that approach. Examples of the types of information useful in identifying aquifer interconnections were given in the proposed rule. This information includes literature or well logs indicating that no lower relative hydraulic conductivity layer or confining layer separates the aquifers being assessed (e.g., presence of a layer with a hydraulic conductivity lower by two or more orders of magnitude); literature or well logs indicating that a lower relative hydraulic conductivity layer or confining layer separating the aquifers is not continuous through the two-mile radius (i.e., hydrogeologic interconnections between the aquifers are identified); evidence that withdrawals of water from one aquifer (e.g., pumping tests, aquifer tests, well tests) affect water levels in another aquifer; and observed migration of any constituents from one aquifer to another within two miles. For this last type of information, the mechanism of vertical migration does not have to be defined, and the constituents do not have to be attributable to the site being evaluated. Other mechanisms that can cause interconnection (e.g., boreholes, mining activities, faults, etc.) will also be considered. While the descriptive text has been removed from the rule, the approaches mentioned in the proposed rule will be used in making aquifer interconnection determinations. In general, EPA will base such determinations on the best information available; in the absence of definitive studies and where costs of field studies are prohibitive, the Agency will rely on expert opinion (e.g., U.S. Geological Survey staff or State geologists). In the absence of such information, EPA assumes that aquifers are not interconnected.

Ground water potential to release factors. EPA proposed replacing the depth to the aquifer of concern and permeability factors of the original HRS with depth to aquifer/hydraulic conductivity and sorptive capacity factors. EPA received more than 75 comments on these factors, in addition to general comments on evaluating ground water potential to release in response to the ANPRM.

Several commenters supported consideration of depth to aquifer in evaluating the ground water migration pathway. One commenter stated that use of a depth to aquifer/hydraulic conductivity matrix, which was intended to reflect travel time to ground water, was an improvement over considering these two parameters individually and additively. Concerns were raised, however, about how to determine depth to aquifer. In addition, commenters stated that the two-mile radius for evaluating hydrogeologic factors should be extended to four miles, while others commented that the distance should be measured from vertical points as near to the source as possible.

Commenters generally supported the proposal to include hydraulic conductivity, although many believed that the proposed method was too complicated; several commenters suggested that the single least conductive layer(s) should be used. Another concern was the lack of data for determining hydraulic conductivity. One commenter stated that unless data can confirm that the geologic strata

extend throughout the entire area of a site, assigning a hydraulic conductivity value is highly questionable.

Some commenters offered alternative approaches to evaluating hydraulic conductivity. These included replacing the proposed method with:

- Assigned "confidence levels" tied to professional estimates based on regional data and judgment;
- Consideration of actual travel time in the unsaturated zone; or
- An assumption of maximum hydraulic conductivity among the various geological layers below the site.

More than 20 comments were received on the sorptive capacity factor, but there was little consensus among the commenters. A number of commenters agreed that the factor should be added, but stated that the approach was not detailed enough and that more waste- and site-specific information should be required. Other commenters agreed that the factor was an improvement, but said that sorptive capacity should be dropped because the waste- and site-specific information needed for an accurate evaluation cannot be collected during a screening process. Others said that it was too complex as proposed and should be dropped.

Based on these comments and the field test results, EPA examined the depth to aquifer/hydraulic conductivity and sorptive capacity factors. The examination showed that the lowest hydraulic conductivity layer(s) accounted for almost all of the travel time to the aquifer if a one-foot or three-foot minimum layer thickness was used. Accordingly, in the final rule, the depth to aquifer/hydraulic conductivity factor has been replaced with a simpler factor, travel time, which is determined using a matrix of the hydraulic conductivity and thickness of the lowest hydraulic conductivity layer(s) with at least a three-foot thickness. (See § 3.1.2.4 and Table 3–7 of the final rule.)

To conform with the change limiting the travel time factor to the least conductive layer(s), and to meet the goal of simplification, a change to the sorptive capacity factor was necessary. The proposed rule evaluated this factor using all layers between the source and the aquifer. In reexamining this factor, EPA concluded that depth to aquifer is one of the major parameters affecting total sorbent content, at least within the HRS ranges for the factor. Depth to aquifer also indirectly reflects geochemical retardation mechanisms because, all else being equal, the effect of these retardation mechanisms increases as the depth to aquifer increases. At the field test sites, using only the layer(s) of lowest hydraulic conductivity decreased the calculated sorbent content between 10 and 99 percent. For these reasons, EPA has decided to replace the sorptive capacity factor with a depth to aquifer factor. (See § 3.1.2.3 and Table 3–5 of the final rule).

M. Surface Water Migration Pathway

The proposed rule made major changes to the evaluation of releases or threatened releases to surface water. The pathway was divided into four threats: drinking water, human food chain, recreational use, and environmental. Other changes included consideration of flood potential; revision of potential overland flow; addition of dilution weights for potentially contaminated populations; extension of the target distance limit to 15 miles; revision of the persistence factor to consider more degradation mechanisms; addition of a bioaccumulation factor for evaluation of human food chain toxicity/persistence and populations; addition of ecosystem toxicity to evaluate the environmental threat; and addition of a maximally exposed individual factor (MEI) factor to the drinking water threat. Figure 6 shows the proposed rule and the overland flow/flood migration component of the surface water migration pathway in the final rule.

Recreational use threat. SARA stated that the HRS should consider threats to surface water used for recreation and drinking water, and the proposed HRS included a recreational use threat in the surface water migration pathway. A number of States, several companies and trade associations, and two Federal agencies identified problems with the proposed recreational use threat. Some commenters objected to weighting it as heavily as the drinking water threat, while others suggested that evaluating the threat was too complicated for use in a screening tool. Many commenters said that proposed methods for assigning values to recreation areas were too broadly drawn and that a limited number of recreation areas should be considered. Two commenters suggested using actual attendance data, and one commenter suggested that recreational uses be considered in other pathways as well.

EPA's field test indicated that the recreational use threat evaluation was too complex for HRS purposes and, at the same time, was not very accurate. Several field test participants commented that the recreation target population was difficult to evaluate and that the approach for determining population was inaccurate and time-consuming. In addition, the population factor did not provide meaningful discrimination among sites. The proposed rule used the physical characteristics (e.g., capital improvements) of a recreational site as the basis for determining the distance limit used to evaluate population, but because major and minor sites may have the same types of capital improvements (e.g., boat ramps, picnic facilities), the same distance limit could be associated with a minor recreation area and a major recreation area. The alternative approach would be to require actual use data to evaluate targets; however, site-specific population data are not available for many recreation areas, making it difficult to obtain accurate estimates of the population at risk. The target distance limits, which ranged from 10 to 125 miles, also contributed to the problems with evaluating targets. The Agency invited comments on refining these calculations; no alternative approaches were suggested, and EPA did not identify viable alternatives.

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Figure 6

Surface Water Migration Pathway

PROPOSED HRS

Likelihood of Release X **Drinking Water Threat**

Observed Release
or
Potential to Release

By Overland Flow
Containment
Runoff
Distance to Surface Water
By Flood
Containment
Flood Frequency

Waste Characteristics	X	**Targets**
Toxicity/Persistence		Maximally Exposed Individual
Hazardous Waste Quantity		Population
		Surface Water Use

+

Human Food Chain Threat

Waste Characteristics	X	**Targets**
Toxicity/Persistence/ Bioaccumulation		Population
Hazardous Waste Quantity		Fishery Use

+

Recreational Use Threat

Waste Characteristics	X	**Targets**
Toxicity/Persistence/Dose Adjusting Factor		Population
Hazardous Waste Quantity		

+

Environmental Threat

Waste Characterisitics	X	**Targets**
Ecosystem Toxicity/ Persistence		Sensitive Environments
Hazardous Waste Quantity		

Figure 6

Surface Water Migration Pathway - Overland Flow/Flood Component

FINAL HRS

Likelihood of Release X **Drinking Water Threat**

Observed Release
or
Potential to Release

By Overland Flow
Containment
Runoff
Distance to Surface Water
By Flood
Containment
Flood Frequency

Waste Characteristics	X	**Targets**
Toxicity/Persistence		Nearest Intake
Hazardous Waste Quantity		Population
		Resources

+

Human Food Chain Threat

Waste Characteristics	X	**Targets**
Toxicity/Persistence/ Bioaccumulation		Food Chain Individual
Hazardous Waste Quantity		Population

+

Environmental Threat

Waste Characteristics	X	**Targets**
Ecosystem Toxicity/ Persistence/Bioaccumulation		Sensitive Environments
Hazardous Waste Quantity		

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EPA is also concerned that many qualities of recreation areas (e.g., uniqueness, attractiveness, value) cannot be readily quantified or measured, which poses significant problems for a screening tool. Therefore, the recreational use threat has been removed from the final rule. Instead, factors related to recreational use are being included in the assessment of resource factors in the air, surface water, and ground water migration pathways. (See the discussion of resources factors above and §§ 3.3.3, 4.1.2.3.3, 4.2.2.3.3, and 6.3.3 of the rule.) Recreational use is also a major component of the evaluation of the attractiveness/accessibility factor in the soil exposure pathway (see § 5.2.1.1 of the rule).

Human food chain. SARA requires that EPA consider "the damage to natural resources which may affect the human food chain * * *" Accordingly, the surface water migration pathway of the proposed rule included evaluation of threats to human health via the aquatic food chain.

A number of commenters suggested that terrestrial food chain threats should also be evaluated because most of the food eaten in the United States originates on land, and the terrestrial human food chain is, therefore, more important than the aquatic human food chain. Commenters specifically stated that the HRS should account for human food chain threats involving irrigated crops, livestock, and game animals. One commenter stated that the SARA mandate would not be fulfilled if only aquatic human food chain threats were evaluated.

After conducting an investigation into possible methods, EPA determined that it would not be practical to include a separate evaluation of terrestrial human food chain threats in the HRS. The terrestrial food chain is more complex and site-specific and is less understood than the aquatic food chain, and its assessment requires considerably more data. These factors render evaluation of the relative risks associated with the terrestrial human food chain well beyond the capability of a screening system such as the HRS. The final rule, therefore, does not separately evaluate terrestrial human food chain threats. These threats are, however, considered indirectly under the resources target components in the air migration pathway, ground water migration pathway, soil exposure pathway, and drinking water threat portion of the surface water migration pathway.

The proposed rule required the estimation of bioaccumulation potentials for hazardous substances posing threats via the human food chain. One commenter stated that the estimation of bioaccumulation potentials requires excessive time and resources, and that this step should be dropped from the HRS.

EPA disagrees and considers the bioaccumulation potentials of hazardous substances to be among the most important factors determining the degree of human health threat posed by substances via the human food chain. Substances that do not bioaccumulate pose less of a threat via the human food chain than substances that bioaccumulate, all else being equal. Conversely, substances with high bioaccumulation potentials can pose very significant threats via the human food chain even if they are only moderately toxic, or are present in modest quantities. EPA believes that compiling bioaccumulation potential tables will reduce the effort and resources required to score this factor.

EPA received several comments stating that bioaccumulation potential was not given sufficient weight in the evaluation of human food chain threats. EPA evaluated the use of bioaccumulation potential during the field test and determined that there was considerable uncertainty related to this factor, in part because of major differences in uptake associated with different species in different environments. In addition, bioconcentration values have been computed for only a few species for most substances. In light of this uncertainty, EPA decided that bioaccumulation potential should not be given additional weight in the HRS. In addition, as part of the structural changes discussed in Section III B, the bioaccumulation potential factor was moved from the targets factor category to the waste characteristics factor category so that it is evaluated consistently with the other waste characteristics factors that reflect exposure. As part of these changes, the use of the bioaccumulation potential factor in selecting the substance posing the greatest hazard also has been modified.

The final rule broadens the definition of actual contamination of the human food chain by modifying one criterion and adding a new criterion defining actual contamination. The proposed rule defined a fishery as actually contaminated if (1) the fishery was closed as a result of contamination and a substance for which the fishery was closed had been documented in an observed release from the site, or (2) a tissue sample from a human food chain organism from the fishery was found to contain a hazardous substance at a concentration level exceeding the FDAAL for that substance in fish tissue and the substance had been documented in an observed release from the site. In both cases, at least a portion of the fishery must be within the boundaries of the observed release.

Under the final rule, the former criterion (closed fishery) remains essentially unchanged. The latter criterion (tissue contamination) has been modified: A fishery is considered actually contaminated if the concentration of a hazardous substance in tissue of an essentially sessile benthic human food chain organism from the watershed is at a level that meets the criteria for an observed release from the site and at least a portion of the fishery is within the boundaries of the observed release. A new criterion has also been added: A fishery is considered actually contaminated if a hazardous substance having a bioaccumulation potential factor value of 500 or greater either is present in an observed release established by direct observation or is present in a surface water or sediment sample at a level that meets the criteria for an observed release from the site and at least a portion of the fishery is within the boundaries of the observed release. Only the portion of a fishery within the boundaries of an observed release is considered actually contaminated.

EPA broadened the definition of actually contaminated fisheries on the basis of field test results. With the more narrow definition in the proposed rule, few actually contaminated fisheries were identified because:

(1) Closed fisheries did not exist at most sites;

(2) Hazardous substance concentration data from tissues of applicable organisms were available for only a small portion of fisheries; and

(3) FDAALs exist for only a relatively small number of hazardous substances.

The final rule also introduces two levels of actually contaminated fisheries or portions of fisheries:

- Level I: Applicable when concentrations of site-related hazardous substances meeting the criteria for actual contamination of the fishery equal or exceed the benchmark concentration levels established in the final rule based on FDAALs, screening concentrations corresponding to elevated cancer risks, and screening concentrations corresponding to elevated chronic, non-cancer toxicity risks via oral exposures. The final rule allows Level I contamination to be established based on hazardous

substance concentrations in tissue samples from "organisms other than essentially sessile benthic organisms" (e.g., fish, lobsters, crabs), even though these organisms cannot be used to establish observed releases or actual contamination.

• Level II: Applicable to all actually contaminated fisheries (or portions of actually contaminated fisheries) not meeting Level I criteria.

The final rule assigns human food chain populations associated with Level I concentrations tenfold greater weight than those associated with Level II concentrations. The final rule also describes the procedures for determining, where applicable, the part of a fishery subject to Level I concentrations, the part subject to Level II concentrations, and/or the part subject to potential contamination.

EPA received several comments suggesting that, to be consistent with the other threats, a maximally exposed individual factor should be incorporated into the human food chain threat. The Agency agrees, and to provide this consistency the final rule incorporates a maximally exposed individual factor (the food chain individual) into the human food chain targets factor category. As with similar factors in other pathways and threats, the food chain individual is assigned points according to the level of contamination. Where actual contamination of a fishery is documented, the food chain individual factor is assigned 50 points for Level I and 45 points for Level II concentrations. Where no actual contamination of a fishery is documented, but there is documentation of an observed release of a hazardous substance having a bioaccumulation potential factor value of 500 or greater to a watershed containing a fishery within the target distance limit, the food chain individual is assigned a value of 20 points. Where there are no observed releases to surface water or no observed release of a hazardous substance with a bioaccumulation potential factor value of 500 or greater, but a fishery is present (i.e., there is a potentially contaminated fishery) within the target distance limit, the food chain individual is assigned points ranging from 0 to 20, depending on the dilution weight assigned to the associated surface water body.

The proposed rule estimated human food chain production of actually contaminated or potentially contaminated fisheries based on harvest data or stocking data for those fisheries, if available. Where such data were not available, production estimates were based on productivity of the surface water body or the estimated standing crop of aquatic biota in the fisheries. The proposed rule included a table of standing crop default values for estimating human food chain production of the fishery.

EPA received numerous comments to the effect that the standing crop default table was difficult to use, provided several different values for some water bodies and none for others, and provided unreliable data. Several commenters stated that standing crop values are not an appropriate basis for estimating aquatic human food chain production. One commenter pointed out that standing crop estimates do not correlate well with harvest for various water body types. Another commenter stated that estimates of harvest from fish and game officials are preferable to standing crop default values because standing crop is a measure of biomass (weight of all edible living organisms in the water body) rather than productivity.

EPA agrees with the commenters. In the final rule, estimates of fishery human food chain production are based on fish harvest data (including stocking data) as opposed to standing crop data. When site-specific data are not available, harvest rates are to be estimated based on the average harvest per unit area for the particular water body type under assessment and the geographic area in which the water body is located.

Ground water discharge to surface water. A number of commenters and field test participants suggested that the HRS should consider the potential impact of ground water discharges to surface water because contaminated ground water can be a significant source of surface water contamination. Field test participants noted that some sites have no overland flow route, but surface water can be contaminated through ground water discharges.

EPA agrees and has added a ground water to surface water migration component to the surface water migration pathway. Figure 7 shows the structure of this component. The surface water migration pathway, therefore, now includes two components: The overland flow/flood migration component, which retains the structure of the surface water migration pathway as proposed (except for the changes discussed in this preamble), and the new ground water to surface water migration component. Either or both components may be scored; if both are scored, the surface water migration pathway score is the higher of the two scores. EPA selected the higher of the two scores rather than combining them because, if scores were combined, the amount of hazardous substances at the site available to migrate via each component would have to be apportioned between the two components. The site-specific data needed to determine the appropriate apportionment are rarely available.

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Figure 7

Surface Water Migration Pathway - Ground Water to Surface Water Component[1]

FINAL HRS

Likelihood of Release X **Drinking Water Threat**

Likelihood of Release	Drinking Water Threat	
Observed Release or Potential to Release Containment Net Precipitation Depth to Aquifer Travel Time	**Waste Characteristics** X Toxicity/Mobility/Persistence Hazardous Waste Quantity	**Targets** Nearest Intake Population Resources

+

Human Food Chain Threat

Waste Characteristics	Targets
Toxicity/Mobility/Persistence/ Bioaccumulation Hazardous Waste Quantity	Food Chain Individual Population

+

Environmental Threat

Waste Characteristics	Targets
Ecosystem Toxicity/Mobility/ Persistence/Bioaccumulation Hazardous Waste Quantity	Sensitive Environments

[1] New component.

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The ground water to surface water migration component evaluates three threats: drinking water, human food chain, and environmental. The component is scored only if: (1) A portion of the surface water is within one mile of any source at the site that could release to ground water; (2) there is no discontinuity in the uppermost aquifer between the source and the portion of the surface water within one mile of the source; and (3) the bottom of the surface water is at or below the top of the aquifer. The target distance limit for the component is determined the same way as for the overland flow/flood component. For each threat, likelihood of release is based on either observed release or potential to release. An observed release is established if, and only if, there is an observed release to the uppermost aquifer, while potential to release is based on ground water potential to release factors, except that only the uppermost aquifer is considered. (See § 4.2.2.1.2.)

The hazardous waste quantity factor is scored in the same way it is scored for the overland flow/flood migration component, except that only sources that could release to ground water are considered (see § 4.2.2.2.2). Toxicity, ground water mobility, and surface water persistence are considered in selecting the substance potentially posing the greatest hazard in drinking water (see § 4.2.2.2.1). By considering ground water mobility, the final rule reflects the fraction of a hazardous substance expected to be released from the sources and to migrate through ground water to the surface water body. For human food chain and environmental threats, bioaccumulation (or ecosystem bioaccumulation) potential is also considered in selecting the substance potentially posing the greatest hazard (see § 4.2.3.2.1).

The targets factors in this component are evaluated in the same way as targets factors in the overland flow/flood migration component, except that a dilution-weight adjustment is combined with the surface water dilution weights for populations potentially exposed to contamination. The dilution-weight adjustment was added because the HRS assumes that hazardous substances migrate via ground water in all directions from a site. Under this assumption, except in those instances where the surface water body completely surrounds the site, only a portion of the hazardous substances can be assumed to reach the surface water through the ground water. The dilution-weight adjustment accounts for the portion of the hazardous substances assumed to be available to migrate to surface water through ground water. The probable point of entry is defined as the shortest straight-line distance, within the aquifer boundaries, from the sources at the site to the surface water body. Therefore, the actual targets considered may differ somewhat from targets evaluated in the overland flow/flood migration component because the two probable points of entry may differ. This approach might allow evaluation of intakes, fisheries, and sensitive environments that may be exposed to contamination from a site but are upstream from the point of overland flow entry.

N. Soil Exposure Pathway

The onsite exposure pathway, which was added to the HRS in the proposed rule, has been renamed the soil exposure pathway in the final rule. The pathway was primarily designed to assess the potential threats posed by direct exposure to wastes and contaminated surficial materials at a site. It evaluated two threats—the resident population and the nearby population. In the proposed rule, the resident population threat included three types of targets: High risk population on a property with observed contamination, all other residents and people attending school or day care on a property with observed contamination, and terrestrial sensitive environments in which there is observed contamination. The nearby population was based on people who live or attend school within a one-mile travel distance and who did not meet the criteria for resident population. Figure 8 summarizes the proposed and final rules.

A number of commenters supported the inclusion of the pathway, but raised issues related to its evaluation. For example, commenters objected to evaluating the waste characteristics factor category solely on toxicity. Three commenters objected to limiting the high risk population to children under seven. Other commenters stated that collecting data on the high risk population would be difficult. A number of commenters questioned how the onsite area and area of contamination would be defined and how accessibility of the site was evaluated.

In response to these comments and to the field test results, EPA has made a number of changes to the soil exposure pathway. The name of the pathway has been changed to be more consistent with terminology used in the Superfund human health evaluation process.

As suggested by commenters, the final rule limits the area within which human targets are evaluated for the resident population threat to locations within property boundaries and within a distance limit of 200 feet from an area of observed contamination. The 200-foot limit accounts for those situations where the property boundary is very large, and exposure to contaminated surficial materials is unlikely or infrequent because of the distance of residences, schools, or work places from an area of observed contamination on the same property.

To make the pathway consistent with the other pathways and in response to comments, the final rule includes hazardous waste quantity in the waste characteristics factor category and multiplies it by the factor value for toxicity. New factors, resident individual and nearby individual, have been added to make the pathway consistent with the other pathways, all of which assign values for the maximally exposed individual (e.g., nearest individual or intake). Population is evaluated using two levels of actual contamination based on health-based benchmarks. Separate consideration of the high risk population (children under seven) has been eliminated because the field test indicated that this factor could greatly add to the time and expense of scoring a site yet resulted in little discrimination among sites. This change also makes the soil exposure pathway more consistent with the other pathways.

In the nearby population threat, the hazardous waste quantity factor in the likelihood of exposure factor category has been renamed "area of contamination" to reflect both the intent of the factor and how it is evaluated. The accessibility/frequency of use factor has been revised and renamed the "attractiveness/accessibility" factor. The revised factor emphasizes recreational uses of areas of observed contamination because they are most likely to result in exposures to contaminated surficial materials. In addition, the weighting of the nearby population relative to the resident population has been reduced to better reflect the relative levels of exposure for those threats.

A number of commenters questioned whether workers should be counted when evaluating target populations in the soil exposure pathway. One commenter suggested that soil exposure scoring should "not include activities at facilities that presently are regulated under the Occupational Safety and Health Administration (OSHA)." Other commenters, however, stated that workers should be counted in the target population. One commenter argued that

not counting a facility's work force is inconsistent with other population counting techniques. Another commenter said that workers should be included in the resident population because the proposed method of calculating soil exposure pathway scores can result in inappropriately low scores when onsite workers are exposed to wastes or contaminated soil.

In response to these comments, the Agency investigated statutory, regulatory, and policy conditions that might restrict the inclusion of workers in the target population for the soil exposure pathway. This analysis found no broad statutory or regulatory authority for excluding workers covered by OSHA regulations from consideration as targets in the HRS. Although the definition of a release under CERCLA section 101(22) excludes "any release which results in exposure to persons solely within a workplace * * *" it only does so for purposes of claims by workers who are already covered by State worker compensation laws. The legislative history of section 101(22) specifically anticipated that authority under CERCLA might, in appropriate cases, be used to respond to releases within a workplace. Thus, the Agency concludes that there are no broad statutory or regulatory restrictions against consideration of activities at OSHA-regulated facilities.

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Figure 8

Soil Exposure Pathway

PROPOSED HRS

Resident Population Threat

Likelihood of Exposure	X	Waste Characteristics	X	Targets
Observed Contamination		Toxicity		High Risk Population Total Resident Population Terrestrial Sensitive Environments

+

Nearby Population Threat

Likelihood of Exposure	X	Waste Characteristics	X	Targets
Waste Quantity Accessibility/Frequency of Use		Toxicity		Population Within 1 Mile

FINAL HRS

Resident Population Threat

Likelihood of Exposure	X	Waste Characteristics	X	Targets
Observed Contamination		Toxicity Hazardous Waste Quantity		Resident Individual Resident Population Workers Resources Terrestrial Sensitive Environments

+

Nearby Population Threat

Likelihood of Exposure	X	Waste Characteristics	X	Targets
Attractiveness/Accessibility Area of Contamination		Toxicity Hazardous Waste Quantity		Population Within 1 Mile Nearby Individual

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The soil exposure pathway is designed to account for exposures and health risks resulting from ingestion of contaminated surficial materials. Because ingestion exposures are comparable for some types of workers and residents, the Agency has decided to include workers in the resident population threat. However, substantial variability in the kinds of workers and work activities at sites (e.g., indoor and outdoor) leads to considerable variability in exposure potential. The Agency believes that determining specific categories or types of workers is beyond the scope of HRS data collection. Thus, workers are assigned target points on a prorated basis: 5 points are assigned for sites with up to 100 workers; 10 points for sites with 101 to 1,000 workers, and 15 points for greater than 1,000 workers. Prorating workers will reduce the data collection effort. Evaluation of workers is not affected by health-based benchmarks. (See § 5.1.3.3.) Nearby workers are not counted in the nearby population because the Agency considers it unlikely that workers from nearby workplaces would regularly visit contaminated areas outside the property boundary of their workplace during the workday, and because there is no way to estimate accurately the number of workers who might.

O. Air Migration Pathway

The proposed rule made several significant changes to the air migration pathway in the original HRS. In response to the SARA mandate to consider potential as well as actual releases to air, the proposed rule included an evaluation of the potential to release. The proposed rule also added a mobility factor to the waste characteristics factor category and an MEI factor to the targets category. Finally, the proposed rule added explicit distance weighting factors for evaluating all factors in the targets category. Figure 9 shows the proposed air migration pathway and the final rule pathway.

The public provided numerous comments on these changes and raised new issues as well. The most significant new issue concerned the structural inconsistency in the treatment of gases and particulates in the proposed air migration pathway. For example, commenters observed that in the potential to release evaluation, it was possible to assign a high containment value to a source with good gas containment and poor particulate containment while assigning high source type and mobility values based on the presence of gaseous hazardous substances. This combination would yield an inappropriately high potential to release value. This concern was also noted in discussions with field test personnel.

The Agency agrees with these commenters and investigated methods to better reflect the differences between gases and particulates. As a result of these analyses, EPA has made several changes to the final rule in both the likelihood of release and waste characteristics factor categories.

In the likelihood of release factor category, the final rule evaluates source potential to release separately for gases and particulates. Only those sources containing gaseous hazardous substances are evaluated for gas potential to release, and only those sources containing hazardous substances that can be released as particulates are evaluated for particulate potential to release. This change in potential to release structure necessitated other changes in the scoring of potential to release including development of separate gas and particulate source type factors and migration potential factors. The names of these latter factors were also changed to highlight the differences between potential to release "mobility" and waste characteristics "mobility." (See §§ 6.1.2.1.3, 6.1.2.2.3.)

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Figure 9

Air Migration Pathway

PROPOSED HRS

Likelihood of Release	X	Waste Characteristics	X	Targets
Observed Release or Potential to Release Source Containment Source Type Source Mobility		Toxicity/Mobility Hazardous Waste Quantity		Maximally Exposed Individual Population Land Use Sensitive Environments

FINAL HRS

Likelihood of Release	X	Waste Characteristics	X	Targets
Observed Release or Potential to Release Gas Gas Containment Gas Source Type Gas Migration Potential Particulate Particulate Containment Particulate Source Type Particulate Migration Potential		Toxicity/Mobility Hazardous Waste Quantity		Nearest Individual Population Resources Sensitive Environments

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In addition to these changes in the basic structure of the potential to release factors, the final rule includes several additional changes in the source type list, migration potential factors, and containment factors. Based on the experience gained in the field test, EPA added several source types to the source type list. Some of these additions (e.g., surface impoundment (not buried/backfilled): dry) simply clarify classifications that were implied in the proposed source type list. Other additions, such as source types involving biogas release, were considered early in the development of the proposed HRS but were not included originally in the interest of simplicity. Field test experience, however, indicated that their inclusion in the final rule was necessary. Finally, new distinctions within some source types (e.g., the various types of piles) were added partly in response to comments and partly as a result of field test experience. As applicable, source type values were also revised. (See §§ 6.1.2.1.2, 6.1.2.2.2 and Table 6–4.)

The revised gas and particulate migration potential factors are very similar to the proposed likelihood of release gas and particulate mobility factors. Several commenters questioned the need for including dry relative soil volatility in the final gas migration factor. A simplification analysis indicated that dry relative soil volatility was redundant, as it was almost completely determined by vapor pressure. Hence, the final gas migration potential factor includes only vapor pressure and Henry's law constant. The particulate migration potential factor in the final rule is simply the particulate component of the proposed potential to release mobility factor.

The containment factors were also changed as a result of the field test, a review of recent information on covering systems, the examination of air release rate models, and the public comments on the need for simplicity in the final rule. The final list of containment descriptions eliminated many redundant descriptions and changed others, retaining only those distinctions that are necessary based on type of source. (See §§ 6.1.2.1.1, 6.1.2.2.1 and Tables 6–3, 6–9.) As discussed in Section III F above, two new mobility factors were developed for the waste characteristics factor category.

Commenters generally supported the concept of distance weighting target factors. However, several disagreed with the approach used to develop the proposed factor values. Some commenters suggested basing the factor values on long-term meteorology and the size of the site, while others suggested that additional atmospheric phenomena (e.g., particulate deposition) be reflected in the final values. As a result of these comments, EPA has revised the distance weighting factors used in the final rule to reflect long-term atmospheric phenomena. Analyses indicated that particulate deposition and other similar phenomena as well as site size were not sufficiently significant within four miles of a site to warrant their inclusion in the final factor values. EPA also notes that the distance weighting factor values are now incorporated in the population factor value table. (See § 6.3.2.4 and Table 6–17.)

P. Large Volume Wastes

Mining waste sites. A number of commenters representing mining companies, trade associations, and State and Federal agencies commented on how the proposed HRS would score mining waste sites; commenters representing waste management facilities raised similar issues in regard to their sites. This section summarizes and addresses the major issues addressed by these commenters.

Commenters raised several concerns regarding the appropriate consideration of background levels of metals in documenting direct or indirect releases from mining waste sites. One commenter recommended that in determining direct releases from a mining waste site, EPA should consider the natural characteristics of the site prior to mining and the changes in migration rates resulting from mining. The commenter explained that the concentration of metals in a mining waste pile may be similar to or less than natural concentrations in soil or rocks below and adjacent to the pile. To document indirect releases, the commenter suggested that EPA require collection of detailed information on site geology and hydrological gradients to ensure proper consideration of background levels. Finally, the commenter asserted that although it is appropriate to weight observed releases more heavily than potential releases at sites with synthetic organic hazardous substances, the criteria used to define observed release are not valid at sites with natural sources of metals. Another commenter agreed and suggested that because of background levels of inorganic elements, the proposed HRS could identify as an observed release concentrations unrelated to mining activities.

EPA recognizes that natural background concentrations of metals in soil or rocks can affect the measured concentration necessary to establish an observed release at a mining waste site. This consideration is reflected in the requirement that concentrations significantly above background be shown to establish an observed release. Moreover, EPA has clarified the observed release criteria in the final rule to explain that they specify minimum differences necessary to establish an observed release by chemical analysis.

Several commenters questioned the treatment of metals in the ground water mobility factor. One commenter stated that the proposed HRS is biased against mining waste sites because it gives greater consideration to the accurate assessment of the mobility of organic substances than to that of naturally occurring metals. The commenter noted that the proposed persistence factor for the surface water migration pathway accounts for the degradation of hazardous substances in the environment through four processes. None of these processes, according to the commenter, applies to metallic elements, which received a default value of 3 (the highest possible score for persistence). Another commenter stated that decreased mobility was considered only for organic compounds, even though inorganic compounds are immobile in some situations.

One commenter stated that adding a metals mobility factor, as EPA's Science Advisory Board (SAB) recommended, would allow the HRS to reflect more accurately the potential for metallic elements to migrate in the aqueous phase. Two commenters were concerned that metals would be assigned a "worst-case" default value for mobility. On the other hand, another commenter stated that consideration of the mobility of metals in the revised HRS would at least partially rectify the bias in the current HRS against high-volume, low-concentration mining wastes.

A number of these commenters appear to have misunderstood the proposed rule. Metals were not automatically assigned the maximum value as a default in the ground water mobility factor, but rather were assigned values based on their coefficient of aqueous migration. The final rule automatically assigns the maximum value for mobility only to metals establishing an observed release by chemical analysis, which is the same way organics and nonmetallic inorganics are evaluated. For metals and metal compounds not establishing an observed release by chemical analysis, mobility is based on water solubility and distribution coefficient (K_d), the same as for organics and nonmetallic

inorganics. If none of the hazardous substances (including metals, organics, and nonmetallic inorganics) eligible to be evaluated for the site can be assigned a mobility factor value based on available data, § 3.2.1.2 of the final rule assigns a mobility factor value of 0.002 for all of the hazardous substances. This value was selected based on a review of the range of mobility factor values assigned to those hazardous substances (including metals) for which data were available for assigning mobility factor values. The value of 0.002 is clearly not a worst-case default (which would be 1.0).

EPA believes that the persistence factor is not biased against metals. Elemental metals do not degrade and, therefore, should receive higher scores for persistence than other substances subject to degradation processes.

One commenter claimed that the soil exposure pathway is likely to bias the HRS scores of mining waste sites toward higher values because such sites contain large volumes of waste covering large surface areas, and because of geographic factors, these large areas are seldom secured against direct public access. In addition, according to the commenter, the public may be attracted to mining waste sites. The commenter suggested that the soil exposure pathway incorrectly assumes there is an exposure because there is access to mining waste sites.

EPA does not agree that the soil exposure pathway is biased against mining waste sites. The pathway evaluates exposures of people via contact with surficial hazardous substances. The Agency believes that, all else being equal, large contaminated surface areas with public access, including those associated with mining waste sites, should receive higher scores for the soil exposure pathway than smaller sites with more restricted access. Even sites with large contaminated surface areas are unlikely to be assigned high scores except when they are near residential areas or include a listed sensitive environment. As some commenters representing mining-related activities have noted in the past, most mines are located some distance from inhabited areas.

Three commenters stated that the original HRS was biased against sites such as mining waste sites that are characterized by high volumes of waste with relatively low concentrations of toxic constituents. Two of these commenters suggested that mining wastes would be appropriate for hazardous constituent quantity determination because such wastes are relatively homogeneous (compared to other wastes) and, therefore, have fairly consistent concentrations. One of these two commenters also stated that the hazardous waste quantity factor equations in Table 2–14 of the proposed rule should be revised to be less conservative. The remaining commenter suggested that the proposed HRS was still biased against mining waste sites because they are still scored based on the quantity of waste rather than on the concentration of the waste at the point of exposure.

EPA does not agree that the HRS is biased against high-volume, low-concentration waste sites. The final rule incorporates concentration data in three factors: (1) Likelihood of release (concentration data can be used for establishing an observed release); (2) hazardous waste quantity (concentration data, if available and adequate, can be used for calculating hazardous constituent quantity); and (3) targets (concentrations of hazardous substances present in drinking water wells or at other exposure points can be used to determine weightings for nearest individuals (or wells or intakes), populations, and sensitive environments factors). EPA has not explicitly required concentration data for all sites because of the substantial costs for obtaining these data and the very high degree of uncertainty associated with data collected during SIs.

EPA requested that the SAB review issues related to large-volume waste sites before the NPRM was published. The SAB final report is available in the CERCLA docket. Two commenters stated that the Agency did not adequately consider the SAB's recommendations for revising the HRS, specifically those concerning the use of mobility data.

The SAB, in its review of the original HRS, examined whether large-volume waste sites (e.g., mining waste sites) had been treated differently than other waste sites and concluded that insufficient data were presented to demonstrate that the original HRS was biased against mining waste sites. However, the SAB noted that the original HRS had the potential for such a bias, particularly when scoring potential to release, because the original HRS did not consider mobility, concentration of hazardous constituents, and transport. The SAB suggested several possible modifications to improve the application of the HRS to mining waste sites.

Based in part on the SAB suggestions, EPA proposed several changes to the overall scoring process to make the HRS more accurately reflect risks associated with mining waste sites, notably, addition of a mobility factor to the air and ground water migration pathways, changes in the persistence factor, incorporation of a tiered hazardous waste quantity factor that can account for waste concentration data, and addition of health-based benchmarks for evaluating population. As explained in the NPRM, determining speciation of metals and pH, as the SAB had suggested, is not feasible given the temporal and spatial variations at hazardous waste sites and the limitations on SI data collection. Moreover, determining speciation is not feasible for most substances given EPA's current analytical procedures; requiring speciation analyses would add substantially to the cost of data collection.

Two commenters stated that the proposed HRS can significantly overestimate risks associated with mining waste sites that consist of high-volume, low-concentration wastes. One of these commenters recommended a "preliminary evaluation system" to more accurately reflect the actual risks associated with such sites and remove any bias in the HRS relative to other types of sites. This commenter also suggested that in proposing the HRS revisions, EPA had ignored the results of its own studies under RCRA sections 3001 and 8002, which the commenter believed to be more focused efforts to quantify risks from mining waste sites than the HRS revisions.

EPA does not believe that a separate "preliminary evaluation system" for scoring mining waste sites would be appropriate. A single HRS can be applied uniformly to all sites, allowing the Agency to evaluate sites relative to each other with respect to actual and potential hazards. The Agency examined the RCRA studies cited by the commenter before proposing HRS revisions. Those studies, which focus on the management of wastes at active facilities, concluded that many special study waste sites (e.g., mining) do not present very high risks, while others may present substantial risks. EPA believes that the conclusions of these studies and the Agency's subsequent regulatory determinations (i.e., not to regulate most mining wastes under RCRA Subtitle C) are not inconsistent with a determination that some mining waste releases can require Superfund response actions. Furthermore, the HRS is designed so that it can be applied to closed and abandoned sites as well as active sites.

Other large volume waste sites. Several commenters suggested that the proposed HRS did not meet CERCLA section 125 requirements for sites

involving fossil fuel combustion wastes. These commenters generally agreed that section 125 requires EPA to consider the quantity and concentration of hazardous constituents in fossil fuel combustion wastes and that the proposed HRS had not adequately addressed this requirement.

One commenter supported the Agency's proposal to allow consideration of concentration data when such data are available. Three commenters stated that the proposed HRS would often assign fossil fuel combustion waste sites high scores in part because of the worst-case assumptions or "default values" for certain factors (i.e., hazardous waste quantity, toxicity, target populations). The commenters claimed that fossil fuel combustion waste sites receive high scores merely because of the large quantity of waste, although this waste presents no significant adverse environmental effects, and that these high scores are inconsistent with EPA's findings in the RCRA section 8002 study. One of the three commenters suggested that the proposed HRS retained certain deficiencies of the original HRS, such as assuming that all hazardous substances in the waste consist of the single most toxic constituent in the waste.

EPA does not believe that the approach taken in the final rule creates a bias against fossil fuel combustion wastes. Partly because concentration data are considered in the final rule, fossil fuel combustion waste sites are not expected to score disproportionately high when compared with other types of sites. The HRS assumes that it is not possible to determine in a consistent manner the relative contribution to risk of all hazardous substances found at sites. Given this assumption, EPA has determined that basing the toxicity of the combination of substances at a site on the toxicity of the substance posing the greatest hazard is a reasonable and appropriately conservative approach. In many cases, the substance posing the greatest hazard is not several orders of magnitude more toxic than other hazardous substances at the site. Therefore, the effect of this approach on the toxicity factor value—which is evaluated in one order of magnitude scoring categories—is not as great as some commenters have suggested (see also section III D). In addition, as noted above, worst-case defaults are not assigned for mobility; population factors have no default values.

Two commenters suggested that because CERCLA section 125 contains no statutory deadlines, EPA should take as much time as necessary to adequately respond. These commenters recommended that EPA extend the tiered approach of the hazardous waste quantity factor to other factors to take advantage of the extensive data on fossil fuel combustion wastes generated by the electric utility industry.

The Agency does not agree that the tiered approach used in the hazardous waste quantity factor should be extended to other factors for fossil fuel combustion waste sites (see also section III K). EPA believes that creating a separate HRS to score certain types of sites would not allow the Agency to provide a uniform measure of relative risk at a wide variety of sites, as Congress intended.

One commenter recommended that EPA consider using fate and transport models currently under development to incorporate quantitative representations of specific processes and mechanisms into the HRS. EPA carefully examined this possibility and concluded that although the use of fate and transport models could conceivably increase the accuracy of the HRS for some pathways, collection of the required site-specific data would be far too complex and costly. Fate and transport models are appropriate for a comprehensive risk assessment, but not for a screening tool such as the HRS. In addition, EPA's review suggested that it would be more difficult to achieve consistent results among users of such models than with the HRS. EPA points out that it used fate and transport models to develop the distance weighting factors used in the HRS target calculations, and also that the HRS incorporates several hazardous substance parameters (e.g., mobility) and site parameters (e.g., travel time) that are components of fate and transport models.

Two commenters expressed concern that the proposed HRS fails to account for the leachability of hazardous constituents as required by CERCLA section 125. According to the commenters, some hazardous constituents pose no risk via ground water because they will never be released to that medium. Thus, even if hazardous waste quantity and concentration are considered adequately, hazardous waste quantity scores for fossil fuel combustion sites will be erroneously high unless leachability is considered as well.

EPA examined the availability of leachate data and the feasibility of using such data for calculating hazardous substance quantity for all types of sources and wastes. The Agency decided against using leachate concentrations because:

- Leachate data are not available for all sources and wastes, and available leachate data on high-volume wastes and some landfills have limited applicability for estimating the quantity of leachable hazardous substances;
- Leachate data derived from lab studies are limited and do not realistically represent the universe of field conditions such as heterogeneity of wastes, chemistry of leachate, and density and pore volume of disposed wastes; and
- Any method for using leachate data could not be consistently or uniformly applied to all sites.

EPA also examined the feasibility of developing site-specific leachate data for estimating leachable hazardous substance quantity for the ground water migration pathway. EPA decided against this option because reliable estimation of leachable hazardous substance quantity requires comprehensive sampling of site-specific heterogeneous waste, which would be prohibitively expensive and not feasible. In some cases, such sampling would be technically unfeasible and unsafe.

EPA evaluated alternatives for developing a surrogate for estimating leachable hazardous substance quantity. The Agency found that adding the mobility factor to the ground water migration pathway, based both on solubilities and distribution coefficients (K_ds) of hazardous substances, and multiplying it by the hazardous waste quantity factor would be a feasible alternative for approximating the fraction of hazardous substance quantity expected to be released to ground water.

Q. Consideration of Removal Actions (Current Versus Initial Conditions)

The original HRS based the evaluation of factors on initial conditions. In the preamble to the proposed rule, EPA specifically requested comments on whether sites should be scored on the basis of initial or current conditions. The principal question is whether the effect of response actions, such as the removal of some quantity of the waste, should be considered when sites are scored. Initial conditions are defined by the timing of the response action; that is, initial conditions are the conditions that existed prior to any response action. For sites where no response action has occurred, initial and current conditions are the same for evaluating sites.

Of the 25 commenters responding to this issue, 15—including all industry commenters—supported scoring on current conditions. In the preamble of

the proposed rule, EPA presented two approaches for considering response actions in HRS scores: (1) Consider these actions only for those pathways and factors for which they are most appropriate; and (2) consider these actions in all pathways, but make exceptions at sites where initial conditions more accurately reflect risks.

Those who stated a preference favored the second, specifying that the exceptions should be clearly defined in the final rule. These commenters stated that scoring all pathways on current conditions would encourage responsible parties to clean up sites quickly. They reasoned that if cleanups are delayed, the threat of migration of the hazardous substances increases; therefore, scoring on current conditions is consistent with the intent of CERCLA because it encourages rapid remedial action. One commenter said that scoring on initial conditions made little sense when, as a result of the cleanup, the level of residual contamination was below the level required by CERCLA.

Several proponents of scoring on current conditions stated that EPA's concern that responsible parties would clean up sites just enough to avoid being listed on the NPL was unfounded. They argued that the proposed scoring system is too complicated to manipulate, and that predicting the effect of partial cleanups on the final score would be difficult. Others suggested that where contamination remains, sampling during an SI will discover it.

Ten commenters did not fully support scoring on current conditions. Only one opposed any consideration of current conditions. Several commenters supported scoring the soil exposure and air migration pathways on current conditions. Others stated that response actions should be considered only when the actions are conducted under Federal or State direction, or when the action constitutes a complete cleanup. Several added that State actions should not be considered because it would penalize States with active remedial programs. One commenter suggested scoring sites on both current and initial conditions; if the response action had addressed all hazards, then the current conditions score should be used.

Based on public comment, EPA has decided to change its policy on consideration of removal actions. The Agency agrees that consideration of such actions in HRS scores is likely to increase incentives for rapid actions by responsible parties, reducing risks to the public and allowing for more cost effective expenditure of the Fund. In making this decision, EPA tried to balance the benefits of considering removal actions in HRS scores (e.g., increased incentives for rapid actions) while also ensuring that the HRS score reflects any continuing risks at sites where contamination occurred prior to any response action.

Therefore, EPA will calculate waste quantities based on current conditions. However, EPA believes the accuracy of this approach depends on being able to determine with reasonable confidence the quantity of hazardous constituents remaining in sources at the site and the quantity released into the environment. As a consequence, where the Agency does not have sufficient information to estimate the quantity of hazardous constituents remaining in the sources at the site and in the associated releases, a minimum factor value may be assigned to the hazardous waste quantity factor value. Thus, removal actions may not reduce waste quantity factor values unless the quantity of hazardous constituents remaining in sources and in releases can be estimated with reasonable confidence.

In addition to providing incentives for early response, this approach also provides incentives for potentially responsible parties to ascertain the extent of the remaining contamination at sites. Potentially responsible parties undertaking removal actions will have the primary responsibility for collecting any data needed to support a determination of the quantity of hazardous constituents remaining. EPA expects responsible parties may need to conduct sampling and analyses to determine the extent of hazardous substance migration in soils and other media in order to estimate with reasonable confidence the quantity of hazardous constituents remaining.

EPA decided not to limit the consideration of response actions to certain pathways (e.g., the soil exposure pathway) because this would overstate the risk at sites where removal of wastes has eliminated threats in all pathways. Moreover, a more limited approach to consideration of response actions would provide less incentive for rapid response action.

EPA will evaluate a site based on current conditions provided that response actions actually have removed wastes from the site for proper disposal or destruction in a facility permitted under the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act (TSCA), or by the Nuclear Regulatory Commission. HRS scoring will not consider the effects of responses that do not reduce waste quantities such as providing alternate drinking water supplies to populations with drinking water supplies contaminated by the site. In such cases, EPA believes that the initial targets factor should be used to reflect the adverse impacts caused by contamination of drinking water supplies; otherwise, a contaminated aquifer could be artificially shielded from further remediation. This decision is consistent with SARA section 118(a), which requires that EPA give high priority to sites where contamination from the site results in closed drinking water wells. Similarly, if residents are relocated or if a school is closed because of contamination due to the site, EPA will consider the initial targets in scoring the site.

As noted in the proposed rule preamble, EPA would only consider removals conducted prior to an SI. EPA believes that the SI is the appropriate time to evaluate conditions, because it is the source of most of the data used to score a site. Because response action at sites may be an ongoing process, it would be burdensome to recalculate scores continually to reflect such actions.

In response to commenters, EPA also considered whether response actions should be considered in HRS scores only if they are performed under a State or EPA order. EPA decided not to choose this approach for two reasons. First, it would diminish the incentive for an expeditious response at the site if a signed order were required. Second, because a response action must be conducted before the SI to be considered in the HRS score, there would be little information on site conditions upon which this order could be based.

EPA has also decided not to differentiate between response actions initiated by States and those conducted by other parties. The Agency believes this approach will help ensure consistent application of the HRS by avoiding situations where two similar sites are scored using different sets of rules. Moreover, although the Agency is sympathetic to concerns about disincentives to States for initiating actions, it believes that such cases will be rare. Many State (and Federal) removal actions are interim measures designed to stabilize conditions at the site. Given the more limited definition of response action noted above (e.g., removal of waste from the site for disposal or destruction in a RCRA-permitted facility), many actions conducted by States would not be considered in HRS scoring. In addition, in many cases, State and Federal removal actions are undertaken after an SI has been conducted. As noted above,

EPA will only consider removals conducted before the SI in the HRS score.

R. Cutoff Score

In the NPRM preamble, EPA proposed that the cutoff score for the revised HRS be functionally equivalent to the current cutoff score of 28.5. The Agency also requested comment on three proposed options for determining functional equivalence:

- Option 1: Score sites using both the original and final rule, then use statistical analysis to determine what revised HRS score best corresponds to 28.5;
- Option 2: Choose a score that would result in an NPL of the same size as the NPL that would be created by using the original HRS; and
- Option 3: Identify the risk level that would correspond to 28.5 in the original HRS and then determine what revised HRS score corresponds to that risk level.

Some commenters stated that there cannot be a functional equivalence if the revisions have any meaning. They argued that if the revisions meet the statutory mandate to make the HRS more accurate, the scores should be different and, therefore, cannot be related. Several commenters supported the use of a functional equivalent, but were divided about which option should be used. One commenter stated that the 28.5 score should be evaluated to determine whether it reflected minimum risk levels. If it did, the commenter suggested that a functional equivalent would be appropriate and should be determined using equivalent risk levels (option 3), but also with an eye toward keeping the NPL to a manageable size (option 2).

Commenters not supporting the use of a functional equivalent suggested a variety of alternative approaches, including:

- Establish the cutoff score based on risk, without regard to the current cutoff level or a functional equivalent;
- Leave the score at 28.5;
- Propose a new cutoff score and a description of methodology in a public notice with a 60-day public comment period;
- Lower the cutoff score to provide an incentive to responsible parties to undertake remedial efforts and make it possible for sites where a removal action has taken place to make the NPL, thus reducing the controversy over whether to score sites based on current conditions;
- Raise the cutoff score by at least 20 points;
- Eliminate the present cutoff score by creating categories of sites instead of individual ranks as a means of prioritizing NPL sites;
- Amend the NPL annually to include only those sites that deserve priority attention (e.g., orphaned sites) and are likely to receive Superfund financing; or
- Rank all sites showing any degree of public health and/or environmental risk on a relative scale and perform remedial activities based on available funding.

In addition, four commenters felt that the cutoff score for the final rule should not be fixed until the technical merits and potential scores of representative sites are tested and compared using both the current and proposed HRS. Further, one commenter noted that the field test did not indicate the relationship between the revised HRS score for a given site and the current score; another added that until this equivalency issue is clarified, meaningful comment on any proposed revisions cannot be made.

Based on an analysis of 110 test sites, EPA has decided not to change the cutoff score at this time. This conclusion was reached after applying all three approaches to setting a cutoff score that would be functionally equivalent to 28.5. In its analysis, the Agency scored field test sites with both the original and revised HRS. The data from these test sites show that few sites score in the range of 25 to 30 with the revised HRS model. The Agency believes that this range may represent a breakpoint in the distribution of site scores and that the sites scoring above the range of 25–30 are clearly the types of sites that the Agency should capture with a screening model. Because the analysis did not point to a single number as the appropriate cutoff, the Agency has decided to continue to employ 28.5 as a management tool for identifying sites that are candidates for the National Priorities List.

EPA believes that the cutoff score has been, and should continue to be, a mechanism that allows it to make objective decisions on national priorities. Because the HRS is intended to be a screening system, the Agency has never attached significance to the cutoff score as an indicator of a specific level of risk from a site, nor has the Agency intended the cutoff to reflect a point below which no risk was present. The score of 28.5 is not meant to imply that risky and non-risky sites can be precisely distinguished. Nevertheless, the cutoff score has been a useful screening tool that has allowed the Agency to set priorities and to move forward with studying and, where appropriate, cleaning up hazardous waste sites. The vast majority of sites scoring above 28.5 in the past have been shown to present risks. EPA believes that a cutoff score of 28.5 will continue to serve this crucial function.

IV. Section-by-Section Analysis of Rule Changes

Besides the changes discussed above, EPA has made substantial editorial revisions in the rule being adopted today. Source characterization is discussed in section 2 of the final rule, along with factors that are evaluated in each pathway. These factors include hazardous waste quantity, toxicity, and evaluation of targets based on benchmarks. The order of presentation of the pathways has been changed to ground water, surface water, soil exposure, and air. Following the four sections describing the pathways, a section has been added explaining how to evaluate sites that have radionuclides either as the only hazardous substances at the site or in combination with other hazardous substances.

In general, descriptive text that provided background information has been removed as have references and data sources; the sections have been rewritten to make the rule easier to read and to apply. The figures presenting overviews of the pathways and the scoring sheets have been revised throughout to reflect changes in the rule and assigned values.

This section describes, for each section of the rule and each table, the specific substantive changes; editorial changes that do not affect the content of the rule are not generally noted.

Section 1 Introduction

The text explaining the background of the HRS and describing the rule has been removed. Definitions of a number of additional terms used in the rule have been added for clarity. The definition of "hazardous substance" has been revised for clarification. The definition of "site" has been clarified and now indicates that the area between sources may also be considered part of the site. The definition of "source" has been revised to explain that those volumes of air, ground water, surface water, or surface water sediments that become contaminated by migration of hazardous substances are not considered a source, except contaminated ground water plumes or contaminated surface water sediments may be considered a source if they cannot be attributed to an identified source. In addition, the definition of source now includes soils contaminated by migration of hazardous substances.

Under the original HRS, the Agency took the approach that all feasible efforts should be made to identify sources before listing a site on the NPL. If, after an appropriate effort has failed to identify a source, the Agency believed that the contamination was likely to have originated at the type of source that would be addressed under Superfund, such sites were listed. Subsequent investigations after listing have generally identified a specific source. In some cases, EPA has not listed contaminated media without clearly identified sources because it appeared the source of pollution would not be addressed by Superfund programs; an example of such a source would be extensive, low-level contamination of surface water sediments caused by pesticide applications. EPA has found this approach to be generally workable and will continue to evaluate, on a case-by-case basis, whether sites with no identified sources should be listed.

Where contaminated media with no identified sources exist, the final rule generally assigns a hazardous waste quantity factor value to such contamination, with the value depending on whether there are any targets subject to Level I or Level II concentrations. For contaminated sediments in the surface water migration pathway, if there is a clearly defined direction of flow, target distances are measured from the point of observed sediment contamination that is farthest upstream. For ground water plumes and for contaminated sediments where there is no clear direction of flow, the center of the observed ground water or sediment contamination is used for the purpose of measuring target distance limits.

Section 2 Evaluations Common to Multiple Pathways

This section covers factors and evaluations common to multiple pathways. The major changes to these factors include: observed release criteria have been revised; the toxicity factor has been changed to a linear rather than a log scale; scales for hazardous waste quantity have been made linear and expanded, and the hazardous waste quantity minimum value has been changed; the waste characteristics factor category score is now obtained by multiplying the factor values and using a table to assign the final score; use of benchmarks has been extended to all pathways and to the nearest individual (well/intake) factor; and the methods for comparisons to benchmarks have been changed as have the benchmarks used. The purpose of this part is to make the rule less repetitious by presenting full explanations of the evaluation of certain factors only once rather than in each pathway in which they occur. Exceptions related to radionuclides are noted throughout the rule and referenced to Section 7.

Section 2.1 Overview. Introduces the pathways and threats included in HRS scoring.

Section 2.1.1 Calculation of HRS site score. Provides the equation used to calculate the final HRS score.

Section 2.1.2 Calculation of pathway score. Indicates, in general, how pathway scores are calculated and includes a sample pathway score sheet (Table 2–1).

Section 2.1.3 Common evaluations. Lists evaluations common to all pathways.

Section 2.2 Characterize sources. Introduces source characterization and references Table 2–2, the new sample source characterization worksheet.

Section 2.2.1 Identify sources. Explains that for the three migration pathways, sources are identified, and for the soil exposure pathway, areas of observed contamination are identified.

Section 2.2.2 Identify hazardous substances associated with a source. Covers information previously provided in the introduction to the waste characteristics factor category.

Section 2.2.3 Identify hazardous substances available to a pathway. Explains which hazardous substances may be considered available to each pathway. For the three migration pathways, the primary limitation on availability of a hazardous substance to a pathway is that the substance must be in a source with a containment factor value, for that pathway, greater than 0; that is, the hazardous substance must be available to migrate from its source to the medium evaluated. For the soil exposure pathway, the primary limitation is that the substance must meet the criteria for observed contamination and, for the nearby threat, it must also be accessible.

Section 2.3 Likelihood of release. Specifies the criteria for establishing an observed release (discussed in section III G of this preamble) and explains that potential to release factors are evaluated only when an observed release cannot be documented. Table 2–3, which replaces Table 2–2 in the proposed rule, provides the revised observed release criteria for chemical analyses for the migration pathways. Table 2–3 is also used in establishing observed contamination for the soil exposure pathway.

Section 2.4 Waste characteristics. Defines the waste characteristics factor category.

Section 2.4.1 Selection of substance potentially posing greatest hazard. Explains how to select the substance potentially posing the greatest hazard.

Section 2.4.1.1 Toxicity factor. Explains how to assign toxicity values. Changes in the approach to scoring toxicity are discussed in section III D of this preamble. Table 2–4 (proposed rule Table 2–11) has been revised to make the assigned factor values linear rather than logarithmic values; however, the relationship among the values has not changed. A provision to always assign lead (and its compounds) an HRS toxicity factor value of 10,000 was added as a result of changes since the time of the proposed rule in the way EPA develops chronic toxicity values for lead (i.e., reference doses, in units of intake (mg/kg-day), are no longer developed for lead).

Section 2.4.1.2 Hazardous substance selection. Lists which factors are combined, in each pathway or threat, to select the hazardous substance potentially posing the greatest hazard. For each migration pathway, each substance eligible for consideration is evaluated based on the combination of toxicity (human or ecosystem) and/or mobility, persistence, and bioaccumulation (or ecosystem bioaccumulation) potential. The substances selected for each pathway or threat are those with the highest combined values. For the soil exposure pathway, the substance with the highest toxicity value is selected from among substances that meet the criteria for observed contamination for the threat being evaluated. The use of bioaccumulation in the selection of substances in the human food chain threat has changed as a result of the structural changes discussed above. In the proposed rule, only substances with the highest bioaccumulation values were evaluated for toxicity/persistence; in the final rule, the substance with the highest combined toxicity/persistence/bioaccumulation value is selected in the human food chain threat of the overland flow/flood migration component. For the ground water to surface water migration component, mobility is also considered. This revised method better reflects the overall threat.

Section 2.4.2 Hazardous waste quantity. Describes how to calculate the hazardous waste quantity factor value, as explained in section III D of this preamble. The explanation has been simplified from that presented in the proposed rule, and a discussion of unallocated sources has been added. A discussion clarifying the method for evaluating hazardous waste quantity in the soil exposure pathway was also added, and clarifying language on this

point was inserted throughout the subsections of § 2.4.2. Table 2–13 from the proposed rule has been eliminated.

Section 2.4.2.1 Source hazardous waste quantity. Details the measures that may be considered in evaluating hazardous waste quantity for a source or area of observed contamination.

Section 2.4.2.1.1 Hazardous constituent quantity. Explains how to assign a value to the hazardous constituent quantity factor. An explanation of the treatment of RCRA hazardous wastes has been added to clarify the scoring of these wastes. Table 2–5, Hazardous Waste Quantity Evaluation Equations (proposed rule Table 2–14), has been revised in several ways. The constant divisor of 10 has been moved from these equations and is now incorporated into the factor values assigned using Table 2–6. Two types of surface impoundments are now listed to ensure that buried surface impoundments are treated appropriately. The term "tanks" has been added to containers other than drums to clarify how tanks should be evaluated. Also, equations for calculating hazardous waste quantity based on area have been revised based on a study of waste sites. The study indicated that new depth assumptions should be used for some sources; the land treatment equation was revised based on data from the same study about typical loading rates in land treatment operations.

Section 2.4.2.1.2 Hazardous wastestream quantity. Explains how to assign a value for hazardous wastestream quantity based on the mass of the wastestream. An explanation of the treatment of RCRA hazardous wastes has been added to clarify the scoring of these wastes.

Section 2.4.2.1.3 Volume. Explains how to assign a value for source volume.

Section 2.4.2.1.4 Area. Explains how to assign a value for source area.

Section 2.4.2.1.5 Calculation of source hazardous waste quantity value. Explains how to assign a value to source hazardous waste quantity.

Section 2.4.2.2 Calculation of hazardous waste quantity factor value. Explains how to assign a factor value to hazardous waste quantity using Table 2–6. The values in Table 2–6 include several changes. The cap applied to the factor value (i.e., the lowest hazardous waste quantity value required to assign the maximum factor value) has been increased to reflect more accurately the range of hazardous substance quantities found at waste sites. The cap is set based on the maximum quantity found at current NPL sites. Rather than being assigned a maximum of 100, as in the proposed rule, the assigned factor values range to 1,000,000. Each factor value less than the cap is assigned for quantities that range across two orders of magnitude. The two-order-of-magnitude ranges reflect the uncertainty in estimates of both quantity and concentration of the hazardous substances in sources and associated releases as well as uncertainty in identifying all sources and associated releases. Using the ranges also simplifies documentation requirements. Non-zero values below 1 are rounded to 1 to ensure that sites with small amounts of hazardous substances will receive a non-zero score for waste characteristics. When hazardous constituent quantity data are incomplete, the minimum hazardous waste quantity factor value is 10, except for: (1) Migration pathways that have any target subject to Level I or II concentrations; and (2) migration pathways where there has been a removal action and the hazardous waste quantity factor value would be 100 or greater without consideration of the removal action. In these cases, the minimum hazardous waste quantity factor value has been changed to 100 (see sections III C and III Q above for further discussion of the new minimum values).

Section 2.4.3 Waste characteristics factor category value. Explains how to assign a value to the waste characteristics factor category. As discussed above, the final waste characteristics factor value is capped at 100 (1,000 with bioaccumulation potential). Values are assigned by placing the product of the waste characteristics factors into ranges of one order of magnitude, to a cap of 10^8 (10^{12} if bioaccumulation potential is considered).

Section 2.4.3.1 Factor category value. Explains how to use Table 2–7 to assign a value to waste characteristics when bioaccumulation (or ecosystem bioaccumulation) potential is not considered.

Section 2.4.3.2 Factor category value, considering bioaccumulation potential. Explains how to use Table 2–7 to assign a value to waste characteristics when bioaccumulation (or ecosystem bioaccumulation) potential is considered.

Section 2.5 Targets. Explains how targets factors are evaluated. This approach generally involves three levels of evaluation (Level I, Level II, and Potential) and the use of media-specific concentration benchmarks, as discussed in section III H of this preamble. Level III has been dropped; use of benchmarks has been extended to all pathways and to factors that assign values to the nearest individual (well/intake). Also discusses assigning level based on direct observation and describes when tissue samples that do not establish actual contamination may be used in comparisons to benchmarks.

Section 2.5.1 Determination of level of actual contamination at a sampling location. Explains the approach used for evaluating the level of actual contamination at a sampling location; changes have been made to allow the level of actual contamination in the human food chain threat to be based on tissue samples from aquatic food chain organisms that cannot be used to establish an observed release.

Section 2.5.2 Comparison to benchmarks. Lists benchmarks and explains how to determine whether benchmarks have been equalled or exceeded (see section III H of this preamble); changes have been made to allow the level of actual contamination in the human food chain threat to be based on tissue samples from aquatic food chain organisms that cannot be used to establish an observed release.

Section 3 Ground Water Migration Pathway

The ground water migration pathway evaluates threats resulting from releases or potential releases of hazardous substances to aquifers. The major changes specific only to this pathway include replacement of the depth to aquifer/hydraulic conductivity and sorptive capacity factors with travel time and depth to aquifer factors; a revised approach for assigning mobility values; removal of the ground water use factors and their replacement by a resources factor; evaluation of the nearest well factor based on benchmarks; and revisions to scoring of sites having both karst and non-karst aquifers present.

Section 3.0 Ground Water Migration Pathway. Descriptive text has been removed. Figure 3–1 has been revised to reflect revisions to the factors evaluated, and Table 3–1 has been revised to reflect the new factor category values throughout.

Section 3.0.1 General considerations. The title has been changed.

Section 3.0.1.1 Ground water target distance limit. An explanation of the treatment of contaminated ground water plumes with no identified source has been added. For these plumes, measurement of the target distance limit begins at the center of the area of observed ground water contamination;

the center is determined based on available data.

Section 3.0.1.2 Aquifer boundaries. Descriptive text has been removed.

Section 3.0.1.2.1 Aquifer interconnections. Descriptive text has been removed as have examples of information useful for identifying aquifer interconnections.

Section 3.0.1.2.2 Aquifer discontinuities. Descriptive text has been removed.

Section 3.0.1.3 Karst aquifer. Descriptive text has been removed, and references to factors have been revised to reflect changes in factors. Text was added to clarify that karst aquifers underlying any portion of the sources at a site are given special consideration.

Section 3.1 Likelihood of release. Descriptive text has been removed.

Section 3.1.1 Observed release. Description of the criteria for establishing an observed release has been revised as discussed in Section III G of this preamble.

Section 3.1.2 Potential to release. Text has been revised to reflect changes in the factors evaluated and to clarify that karst aquifers underlying any portion of the sources at a site are given special consideration in evaluating depth to aquifer and travel time.

Section 3.1.2.1 Containment. Explanatory text has been removed and the ground water containment table is referenced. Only sources that meet the minimum size requirement (i.e., that have a source hazardous waste quantity value of 0.5 or higher) are used in assigning containment factor values. This requirement has been added to ensure that very small, uncontained sources do not unduly influence the score. For example, a site might have a large, but highly contained source and a very small, uncontained source; without a minimum size requirement, potential to release could be assigned the maximum value based on the very small source, which could overestimate the potential hazard posed by the site. If no source meets the minimum size requirement, the highest ground water containment factor value assigned to the sources at the site is used as the factor value. Table 3–2—Containment Factor Values for Ground Water Migration Pathway, has been simplified by combining repetitious items and has been moved from an attachment to the proposed rule into the body of the rule.

Section 3.1.2.2 Net precipitation. A new map has been added as Figure 3–2 to assign net precipitation factor values. The equation for calculating monthly potential evapotranspiration was clarified. Descriptive text has been removed.

Section 3.1.2.3 Depth to aquifer. As described in section III L of this preamble, the depth to aquifer factor has replaced the sorptive capacity factor and is no longer combined in a matrix with hydraulic conductivity for scoring. Table 3–5 is new and provides the factor values. The depth to aquifer factor reflects the geochemical retardation capacity of the subsurface materials, which generally increases as the depth increases. Depth to aquifer factor values are assigned to three depth ranges. Clarifying language was added related to karst aquifers.

Section 3.1.2.4 Travel time. As discussed in section III L of this preamble, this factor replaces the depth to aquifer/hydraulic conductivity factor and is based on the least conductive layer(s) rather than on the conductivities of all layers between the hazardous substances and the aquifer. Table 3–7 has been revised to reflect these changes. Table 3–5 from the proposed rule has been renumbered as Table 3–6. Text on how to obtain information to score this factor has been removed. Clarifying language was added related to karst aquifers.

Section 3.1.2.5 Calculation of potential to release factor value. Text has been revised to reflect new factor names.

Section 3.1.3 Calculation of likelihood of release factor category value. New maximum value of 550 based on observed release has been added.

Section 3.2 Waste characteristics. Descriptive text has been removed.

Section 3.2.1 Toxicity/mobility. Descriptive text has been removed.

Section 3.2.1.1 Toxicity. References § 2.4.1.1.

Section 3.2.1.2 Mobility. As discussed in sections III F and III P of this preamble, the method for assigning mobility values to hazardous substances has been revised. Table 3–8 has been revised. Mobility values are now linear rather than categorical place holders and are assigned in a matrix combining water solubility and distribution coefficients. Mobility values may now vary by aquifer for a specific hazardous substance. The maximum mobility value is no longer assigned based on observed release by direct observation. A factor value of 0 is no longer assigned for mobility, as had been the case under the proposed rule, where categorical place-holder values were used; because mobility is now multiplied by toxicity and hazardous waste quantity, assigning a 0 value would result in a pathway score of 0. This result could understate the risk posed by a site with a large volume of highly toxic hazardous substances with low mobility. Furthermore, given the uncertainties about estimates of mobility in ground water and their applicability in site-specific situations, EPA determined that a 0 value should not be assigned to the mobility factor under any conditions.

Section 3.2.1.3 Calculation of toxicity/mobility factor value. Text has been simplified. Table 3–9 (proposed rule Table 3–10), the matrix for assigning factor values, has been revised to reflect the linear nature of the assigned values. Values for a specific hazardous substance may now vary by aquifer.

Section 3.2.2 Hazardous waste quantity. References § 2.4.2.

Section 3.2.3 Calculation of waste characteristics factor category value. Text has been revised to indicate the multiplication of the factors, the new maximum value, and the table used to assign the factor category value.

Section 3.3 Targets. Text has been revised to reflect the new names for factors. Descriptive text has been removed. Table 3–10 (Table 3–12 in the proposed rule) has been modified to list the revised benchmarks in this pathway.

Section 3.3.1 Nearest well. Title has been changed from maximally exposed individual. Text has been added to explain how to evaluate nearest wells with documented contamination (at Level I and II) and those potentially contaminated. Text was added to assign Level II contamination to any drinking water well where an observed release was established by direct observation. This section also explains how to evaluate wells drawing from karst aquifers. Table 3–11 has been renamed and the factor values have been changed. See section III B of this preamble for a discussion of the changes to assigned values for this factor.

Section 3.3.2 Population. As discussed in section III H, population is evaluated using health-based benchmarks for drinking water. For populations potentially exposed, population ranges are used to evaluate the factor. This section explains whom to count for population. Populations served by wells whose water is blended with that from other drinking water sources are to be apportioned based on the well's relative contribution to the total blended system. The rule includes instructions on the type of data to use when determining relative contributions of wells and intakes. This change is intended to reflect more accurately the exposure to populations through blended systems. The rule also includes instructions on how to apportion population for systems with standby wells or standby surface water intakes.

Section 3.3.2.1 Level of contamination. Explains how to evaluate population based on concentrations of hazardous substances in samples. Text was added to assign Level II contamination to any drinking water wells where there is an observed release by direct observation.

Section 3.3.2.2 Level I concentrations. Explains how to evaluate populations exposed to Level I concentrations. The scoring cap was eliminated, and the multiplier (i.e., weight) is now 10.

Section 3.3.2.3 Level II concentrations. Explains how to evaluate populations exposed to Level II concentrations. The scoring cap was eliminated, and the multiplier (i.e., weight) is now 1.

Section 3.3.2.4 Potential contamination. Explains how to assign values to populations potentially exposed to contamination from the site. The formula for calculating population values has been modified to reflect both the revised method for evaluating karst aquifers (see below) and the use of distance-weighted population values from Table 3–12, which has been added to assign distance-weighted values for populations in each distance category. The values are determined for each distance category and are then added across distance categories, and the sum is divided by 10 to derive the factor value for potentially contaminated population. The assigned values in Table 3–12 were determined by statistical simulation to yield the same population value, on average, as the use of the formulas in the proposed rule. The use of range values has been adopted as part of the simplification discussed in section III A. The rounding rules have also changed. The method for evaluating karst aquifers has been simplified and is explained in this section. Table 3–14 in the proposed rule, which included dilution weighting factors for the general case and for two special cases, has been removed, and the two special karst cases are no longer evaluated. (The generally applicable dilution factors for karst have not changed and are all incorporated into the distance-weighted population values in Table 3–12.) The scoring cap was eliminated, and the multiplier (i.e., weight) is now 0.1.

Section 3.3.2.5 Calculation of population factor value. Has been revised to reflect the changes in the evaluation of actually contaminated wells. The rounding rule has also been changed, and the scoring cap was eliminated.

Section 3.3.3 Resources. Describes how points are assigned to resource uses of ground water. Points may be assigned if there are no drinking water wells within the target distance limit, but the water is usable for drinking water. This scoring allows for consideration of potential future uses of the aquifers. (See section III I of this preamble for a discussion of the relative weighting of these factors.)

Section 3.3.4 Wellhead protection area. Explains how to assign values to this factor. The maximum value is assigned when a source or an observed release lies partially or fully within a wellhead protection area applicable to the aquifer being evaluated, and this value has been changed from 50 to 20 to adjust for scale changes. A new criterion for scoring this factor has been added. If a wellhead protection area applicable to the aquifer being evaluated is within the target distance limit and neither of the other conditions is met, a value of five is assigned. This change allows the HRS to place a value on the resource.

Section 3.3.5 Calculation of targets factor category value. Has been revised to reflect changes in the factor names. The rounding rule has been changed, and the scoring cap was eliminated.

Section 3.4 Ground water migration score for an aquifer. Text has been revised to reflect the new divisor for normalizing pathway scores.

Section 3.5 Calculation of ground water migration pathway score. Text has been simplified.

In addition to the above noted changes, the sorptive capacity factor has been eliminated and replaced by the depth to aquifer factor, as have the tables used to assign values to this factor (Tables 3–6 and 3–7 in the proposed rule). The ground water use factors have also been eliminated as have the tables used to assign their values (Tables 3–15 and 3–16 in the proposed rule). Figures 3–2, 3–3, and 3–4 and Tables 3–4, 3–8, 3–9, 3–13 of the proposed rule have been removed .

Section 4 Surface Water Migration Pathway

The surface water migration pathway evaluates threats resulting from releases or potential releases of hazardous substances to surface water bodies. One major change to this pathway is the addition of a new component for scoring ground water discharge to surface water; either this component or the overland flow/flood migration component or both may be scored. For each component, three threats are evaluated: drinking water threat, human food chain threat, and environmental threat. Other major changes specific to this pathway include elimination of the recreational use threat; simplification of overland flow potential to release factors; modifications to the human food chain threat including addition of a food chain individual; modifications to the treatment of bioaccumulation potential and addition of a similar factor, ecosystem bioaccumulation potential, to the evaluation of the environmental threat; modifications to the persistence factor; revisions to the dilution weights; additions of benchmarks, extension of benchmarks to evaluation of the nearest intake, and addition of levels of contamination to the human food chain targets; modifications to criteria for establishing actual food chain contamination; elimination of the surface water use factor; addition of a resources factor to the targets evaluation in the drinking water threat; and revisions to sensitive environments.

Section 4.0 Surface Water Migration Pathway. New structure of the pathway is explained. Descriptive text has been removed. Figure 4–1 has been revised to reflect revisions to the factors evaluated, and Table 4–1 has been revised to reflect the new factor category values throughout.

Section 4.0.1 Migration components. Explains how to score the two migration components.

Section 4.0.2 Surface water categories. A definition of coastal tidal waters has been added. Some surface water bodies that belong in this new category were listed in other categories in the proposed rule (e.g., bays and wetlands contiguous with oceans). Isolated perennial wetlands have been added to the definition of lakes; salt water harbors largely protected by seawalls have been removed from the definition of lakes. Ocean has been defined more precisely as areas seaward from the baseline of the Territorial Sea. Contiguous bays have been removed from, and wetlands contiguous to the Great Lakes have been added to ocean and ocean-like bodies. These definitional changes/clarifications more accurately reflect the different characteristics of the water bodies.

Section 4.1 Overland flow/flood migration component. As discussed in section III M of this preamble, the surface water migration pathway has been divided into two components. The overland flow/flood component is essentially the surface water migration pathway as proposed except that the recreational use threat has been eliminated.

Section 4.1.1 General considerations. Consists of several subsections.

Section 4.1.1.1 Definition of the hazardous substance migration path for overland flow/flood migration component. Text has been simplified.

Section 4.1.1.2 Target distance limit. Explains target distance limits for sites in general and adds an explanation of how to calculate the target distance limit for contaminated sediments with no identified source. For these latter sources only, when there is a clearly defined direction of flow, the target distance limit is measured beginning at the observed sediment contamination farthest upstream; when there is no clearly defined direction of flow, the target distance limit is measured from the center of the area of observed sediment contamination. Discusses the determination of whether surface water targets are subject to actual or potential contamination. Also, text was added to assign Level II to targets subject to actual contamination based on direct observation.

Section 4.1.1.3 Evaluation of the overland flow/flood migration component. Explains that for multiple watersheds, highest score assigned to a watershed is used instead of summing watershed scores as proposed.

Section 4.1.2 Drinking water threat. Descriptive text has been removed.

Section 4.1.2.1 Drinking water threat—likelihood of release. Text has been simplified to clarify when potential to release factors need to be evaluated.

Section 4.1.2.1.1 Observed release. Text has been revised to reflect the changed maximum value.

Section 4.1.2.1.2 Potential to release. Text has been revised to reflect the changed maximum value and has been simplified.

Section 4.1.2.1.2.1 Potential to release by overland flow. Explains when overland flow potential to release is not evaluated.

Section 4.1.2.1.2.1.1 Containment. Text has been revised to reflect changes in the numbering of the containment table. Only sources that meet the minimum size requirement (i.e., that have a source hazardous waste quantity value of 0.5 or higher) are used in assigning containment values. This requirement has been added to ensure that very small, uncontained sources do not unduly influence the score. For example, a site might have a large, but highly contained source and a very small, uncontained source; without a minimum size requirement, the potential to release could be assigned the maximum value based on the very small source, which could overestimate the potential hazard posed by the site. If no source meets the minimum size requirement, the source with the highest surface water containment factor value is used. Descriptive text has been removed. Table 4–2, Containment Factor Values for Surface Water Migration Pathway, has been simplified by combining repetitious items and has been moved from an attachment to the proposed rule into this section of the final rule.

Section 4.1.2.1.2.1.2 Runoff. Text on evaluating rainfall has been simplified by removing explanatory references. The runoff curve number has been simplified by substituting a soil group designation in its place. Table 4–4 (proposed rule Table 4–2) has been revised to list only the soil group designations. Based on analyses of runoff and actual drainage area sizes, Table 4–3 (proposed rule Table 4–3) has been revised by changing the divisions of drainage area size. Table 4–5 (proposed rule Table 4–4) has been revised to reflect the changes related to the use of soil group designations. Table 4–6 (proposed rule Table 4–5) has been revised so that the heading in the table reads Rainfall/Runoff Value; the values assigned have been adjusted on the basis of both the higher maximum value assigned to the factor category and the analyses described above. Explanatory text has been removed.

Section 4.1.2.1.2.1.3 Distance to surface water. Values assigned to distance to surface water factor values in Table 4–7 (proposed rule Table 4–6) have been revised to adjust for the higher maximum assigned to the factor category.

Section 4.1.2.1.2.1.4 Calculation of the factor value for potential to release by overland flow. Has not been changed except for assigned value.

Section 4.1.2.1.2.2 Potential to release by flood. Descriptive text has been removed.

Section 4.1.2.1.2.2.1 Containment (flood). Text in Table 4–8 (proposed rule Table 4–7) has been revised to incorporate new language on required documentation on containment. The requirement for certification by an engineer has been dropped. The new documentation requirements have been added to make the rule consistent with RCRA requirements.

Section 4.1.2.1.2.2.2 Flood frequency. Values assigned to this factor by Table 4–9 (proposed rule Table 4–8) have been revised to better reflect probabilities and to adjust for the higher maximum assigned to the factor category. Descriptive text has been removed.

Section 4.1.2.1.2.2.3 Calculation of the factor value for potential to release by flood. Has been revised to reflect a minimum size requirement for sources.

Section 4.1.2.1.2.3 Calculation of potential to release factor value. Text has been simplified, and the assigned value has been changed.

Section 4.1.2.1.3 Calculation of drinking water threat—likelihood of release factor category value. Text has been simplified. The maximum value has been changed, and the maximum for potential to release is no longer equal to the maximum for observed release.

Section 4.1.2.2 Drinking water threat—waste characteristics. Descriptive text has been removed.

Section 4.1.2.2.1 Toxicity/persistence. Editorial changes have been made.

Section 4.1.2.2.1.1 Toxicity. References § 2.4.1.1.

Section 4.1.2.2.1.2 Persistence. As discussed in section III F of this preamble, several changes have been made to this factor, including the deletion of free-radical oxidation as a decay process and the inclusion of consideration of K_{ow} to account for sorption to sediments. Table 4–10 (proposed rule Table 4–9) has been revised to change the values assigned from categorical numbers to linear scales. The divisions among the half-lives for rivers, oceans, coastal tidal waters, and Great Lakes have changed based on a study of travel time, and the text has been modified to clarify the procedure for determining whether to base the persistence factor on lakes or on rivers, oceans, coastal tidal waters, and Great Lakes. A factor value of 0 is no longer assigned for persistence, as had been the case under the proposed rule, where categorical place-holder values were used; because persistence is now multiplied by toxicity and hazardous waste quantity, assigning a 0 value would result in a pathway score of 0. This result could understate the risk posed by a site with a large volume of highly toxic hazardous substances with low persistence. Furthermore, given the uncertainties about half-life estimates and their applicability in site-specific situations, EPA determined that a 0 value should not be assigned to the persistence factor under any conditions. The text has been modified to clarify selection of an appropriate default value. Table 4–11—Persistence Values—Log K_{ow}, has been added. Descriptive text has been removed.

Section 4.1.2.2.1.3 Calculation of toxicity/persistence factor value. Table reference has been changed to reflect the change in numbering. Table 4–12 (proposed rule Table 4–10) has been changed to reflect the multiplicative relationship.

Section 4.1.2.2.2 Hazardous waste quantity. References § 2.4.2.

Section 4.1.2.2.3 Calculation of drinking water threat—waste characteristics factor category value. Text has been revised to indicate the multiplication of the factors, the new maximum value, and the table used to assign the factor category value.

Section 4.1.2.3 Drinking water threat—targets. Descriptive text has been removed. Text was added to assign Level II to actual contamination based on direct observation.

Section 4.1.2.3.1 Nearest intake. Title and the factor name have been changed. As discussed in Section III B of this preamble, this factor is now assigned values based on health-based benchmarks. Instructions for how to assign dilution weights to closed lakes and lakes with no surface flow entering have been added. Table 4–13, Surface Water Dilution Weights (proposed rule Table 4–11), has been revised to add more types of surface water bodies and to change the dilution weights. These changes have been made to reflect more accurately the flow ranges of water bodies and are based on analysis of data on flow rates and dilution.

Section 4.1.2.3.2 Population. As explained above, population is evaluated based on two levels of actual contamination. Targets potentially contaminated are dilution weighted and are assigned values based on ranges. Populations served by intakes which are blended with water from other drinking water sources are to be apportioned based on the intake's relative contribution to the total blended system. The rule includes instructions on the type of data to use when determining relative contributions of intakes and wells. This change is intended to reflect more accurately the exposure of populations through blended systems. The rule also includes instructions on how to apportion population for systems with standby wells or standby surface water intakes.

Section 4.1.2.3.2.1 Level of contamination. Explains how to evaluate population based on the level of contamination to which they are exposed.

Section 4.1.2.3.2.2 Level I concentrations. Descriptive text has been removed. The scoring cap was eliminated, and the multiplier (i.e., weight) is now 10.

Section 4.1.2.3.2.3 Level II concentrations. Text has been simplified and revised to reflect the changes discussed above. The scoring cap was eliminated, and the multiplier (i.e., weight) is now 1.

Section 4.1.2.3.2.4 Potential contamination. Equation used to calculate this factor has been revised as discussed above. A new table, Table 4–14, Dilution-Weighted Population Values for Potential Contamination Factor for Surface Water Migration Pathway, has been added to assign values, which are then added across different surface water body types and divided by 10 to derive the value for potentially contaminated population. The assigned values in Table 4–14 for each population range category were determined by statistical simulation to yield the same population value, on average, as the use of the formulas in the proposed rule. The use of range values has been added as part of the simplification discussed in section III A. The rounding rule has also been changed, the scoring cap was eliminated, and the multiplier (i.e., weight) is now 0.1.

Section 4.1.2.3.2.5 Calculation of population factor value. Explains how to combine values assigned to the three population groups. The rounding rule has also been changed, and the scoring cap was eliminated.

Section 4.1.2.3.3 Resources. As discussed in section III J of this preamble, this factor has been added to account for the potential impact of surface water contamination on resource uses.

Section 4.1.2.3.4 Calculation of drinking water threat—targets factor category value. Has been revised to reflect the changes in this factor category. The rounding rule has also been changed, and the scoring cap was eliminated.

Section 4.1.2.4 Calculation of drinking water threat score for a watershed. Text has been simplified. The divisor has changed.

Section 4.1.3 Human food chain threat. Descriptive text has been removed.

Section 4.1.3.1 Human food chain threat—likelihood of release. Section references have been changed.

Section 4.1.3.2 Human food chain threat—waste characteristics. Text has been simplified.

Section 4.1.3.2.1 Toxicity/persistence/bioaccumulation. Text has been simplified and modified because of the change in the use of bioaccumulation potential in selecting the substance potentially posing the greatest hazard.

Section 4.1.3.2.1.1 Toxicity. Has been changed to reference § 2.4.1.1. Also changed so that evaluation of toxicity is not limited to substances with the highest bioaccumulation potential.

Section 4.1.3.2.1.2 Persistence. Clarifies how to evaluate persistence for contaminated sediment sources, and adds coastal tidal waters as a category of surface water. Also changed so that evaluation of persistence is not limited to substances with the highest bioaccumulation potential.

Section 4.1.3.2.1.3 Bioaccumulation potential. As described in section III M of this preamble, the method of accounting for bioaccumulation potential in the selection of the substance potentially posing the greatest hazard has been changed. In the final rule, bioaccumulation potential is considered together with toxicity and persistence rather than as a primary selection criterion. This change was made because all three factors are now scored on linear scales. In addition, where data exist, separate bioconcentration factor values are assigned for salt water and fresh water; the text now clarifies that the higher of these values is used for fisheries in brackish water and for sites with fisheries present in both salt water and fresh water. The adjustment for biomagnification has been dropped because it tended to double count bioaccumulation. Both Table 4–15 (Table 4–14 in the proposed rule) and the text have been modified to clarify the data hierarchy for assigning bioaccumulation potential factor values. Also, Table 4–15 now makes it clear that the assigned values for bioaccumulation potential are on a linear scale.

Section 4.1.3.2.1.4 Calculation of toxicity/persistence/bioaccumulation factor value. Explains how to calculate a toxicity/persistence/bioaccumulation value. Table 4–16, Toxicity/Persistence/Bioaccumulation, has been added to assign the factor value.

Section 4.1.3.2.2 Hazardous waste quantity. References § 4.1.2.2.2.

Section 4.1.3.2.3 Calculation of human food chain threat—waste characteristics factor category value. Text has been revised to indicate the multiplication of the toxicity/persistence and hazardous waste quantity factor values, subject to a maximum, and the further multiplication of that product by the bioaccumulation potential factor value, subject to a maximum for this second product, and to reference the table for assigning the factor category value.

Section 4.1.3.3 Human food chain threat—targets. Has been revised to reflect addition of the new food chain individual and the deletion of the fishery use factor. As discussed in section III M of this preamble, criteria for establishing a fishery subject to actual contamination have been revised. Text was added to describe the additional

tissue samples that can be used to establish Level I contamination.

Section 4.1.3.3.1 Food chain individual. As discussed in section III M of this preamble, this factor is new. This section explains how to assign a value to the factor.

Section 4.1.3.3.2 Population. Has been changed as discussed in section III M of this preamble.

Section 4.1.3.3.2.1 Level I concentrations. The approach to calculating this factor value has been revised as discussed in section III M of this preamble. The rounding rule has been changed, the scoring cap was eliminated, and the multiplier (i.e., weight) is now 10.

Section 4.1.3.3.2.2 Level II concentrations. Explains how to assign values as discussed in section III M of this preamble. The rounding rule has been changed, the scoring cap was eliminated, and the multiplier (i.e., weight) is now 1.

Section 4.1.3.3.2.3 Potential human food chain contamination. The approach to calculating this factor value has been revised as discussed in section III M of this preamble. The rounding rule has been changed, the scoring cap was eliminated, and the multiplier (i.e., weight) is now 0.1.

Section 4.1.3.3.2.4 Calculation of the population factor value. Text has been revised to omit the maximum. The rounding rule has been changed, and the scoring cap was eliminated.

Section 4.1.3.3.3 Calculation of human food chain threat—targets factor category value. Explains how to calculate the targets value. The rounding rule has been changed, and the scoring cap was eliminated.

Section 4.1.3.4 Calculation of human food chain threat score for a watershed. Text has been simplified. The divisor has changed.

Section 4.1.4 Environmental threat. Descriptive text has been removed.

Section 4.1.4.1 Environmental threat—likelihood of release. Section references have been changed.

Section 4.1.4.2 Environmental threat—waste characteristics. Descriptive text has been removed.

Section 4.1.4.2.1 Ecosystem toxicity/persistence/bioaccumulation. Text has been revised to include the addition of ecosystem bioaccumulation potential as a multiplicative factor.

Section 4.1.4.2.1.1 Ecosystem toxicity. The approach for evaluating ecosystem toxicity has been revised. Additions have been made to the data hierarchy (see section III J of this preamble), and a default value of 100 was added to cover the situation where appropriate aquatic toxicity data were unavailable for all of the substances being evaluated. Table 4–19 (proposed rule Table 4–23) has been revised to make the factor linear and to eliminate the rating category of 0 (except when data are unavailable for a given substance); these changes make the ecosystem toxicity factor more consistent with the toxicity factor in the other pathways and threats. Text was added to clarify the evaluation of ecosystem toxicity for brackish water.

Section 4.1.4.2.1.2 Persistence. Section references have been changed. Clarifies how to evaluate persistence for contaminated sediment sources, and adds coastal tidal waters as a category of surface water.

Section 4.1.4.2.1.3 Ecosystem bioaccumulation potential. As explained in section III J of this preamble, this factor is new for this threat and is evaluated similarly to (but with several key differences from) the bioaccumulation potential factor in the human food chain threat.

Section 4.1.4.2.1.4 Calculation of ecosystem toxicity/persistence/bioaccumulation factor value. Section references have been changed. Table 4–20 (proposed rule Table 4–24) has been changed to reflect the changes in the values for the factors. Table 4–21, Ecosystem Toxicity/Persistence/Bioaccumulation Values, is new and assigns values for the combined toxicity/persistence/bioaccumulation factor.

Section 4.1.4.2.2 Hazardous waste quantity. Section references have been changed.

Section 4.1.4.2.3 Calculation of environmental threat—waste characteristics factor category value. Text has been revised to indicate the multiplication of the ecosystem toxicity/persistence and hazardous waste quantity factor values, subject to a maximum, and the further multiplication of that product by the ecosystem bioaccumulation potential factor value, subject to a maximum for this second product, and to reference the table for assigning the factor category value.

Section 4.1.4.3 Environmental threat—targets. Descriptive text has been removed.

Section 4.1.4.3.1 Sensitive environments. Explains how to evaluate sensitive environments. Table 4–22, Ecological-Based Benchmarks for Hazardous Substances in Surface Water, has been revised as described in section III H of this preamble. The rounding rule has also been changed.

Section 4.1.4.3.1.1 Level I concentrations. Explains the new method of evaluating wetlands based on wetland frontage, or, in some situations, wetland perimeter. Table 4–23, Sensitive Environments Rating Values, has been revised as discussed in section III J of this preamble. Table 4–24, Wetlands Rating Values for Surface Water Migration Pathway, has been added to assign values to wetlands based on the total length of wetlands. The scoring cap was eliminated, and the multiplier (i.e., weight) is now 10.

Section 4.1.4.3.1.2 Level II concentrations. Has been revised to reflect the method of evaluating wetlands. The scoring cap was eliminated, and the multiplier (i.e., weight) is now 1.

Section 4.1.4.3.1.3 Potential contamination. Has been revised to reflect the method of evaluating wetlands. The rounding rule has also been changed, the scoring cap was eliminated, and the multiplier (i.e., weight) is now 0.1.

Section 4.1.4.3.1.4 Calculation of environmental threat—targets factor category value. Has been revised to remove the maximum from the targets factor category. The rounding rule has also been changed.

Section 4.1.4.4 Calculation of environmental threat score for a watershed. Divisor for the threat has changed. A cap of 60 was explicitly placed on the environmental threat score, which results in the same maximum possible threat score as in the proposed rule. (In the proposed rule, environmental threat targets were capped at 120, which resulted in an environmental threat score maximum of 60.) However, in the final rule the targets category is uncapped and can score higher than 120 to compensate for low scores in other factor categories.

Section 4.1.5 Calculation of overland flow/flood migration component score for a watershed. Explains how to calculate the score for the watershed.

Section 4.1.6 Calculation of overland flow/flood migration component score. Explains how to calculate the score for the component based on the highest watershed score (in the proposed rule watershed scores were summed).

Section 4.2 Ground water to surface water migration component. As discussed in section III M of this preamble, this component has been added to the rule to account for contamination of surface water bodies through ground water migration of hazardous substances. Thus, all sections referring to this component are new.

Section 4.2.1 General considerations.

Section 4.2.1.1 Eligible surface waters. Explains the conditions that must apply before this component is

scored. In general, this component is scored only when there is a surface water within one mile of a source, the top of the uppermost aquifer is at or above the bottom of the surface water, and no aquifer discontinuity is established between the source and the portion of surface water within one mile of the source. Exceptions are also explained.

Section 4.2.1.2 Definition of the hazardous substance migration path for ground water to surface water migration component. Explains that the migration path is defined as shortest straight-line distance, within the aquifer boundary, from a source to surface water.

Section 4.2.1.3 Observed release of a specific hazardous substance to surface water in-water segment. Explains that before an observed release of an individual hazardous substance can be established to the surface water in-water segment, the substance must meet the criteria for an observed release both to ground water and to surface water (this requirement does not affect the actual scoring of observed release). Also clarifies the use of samples from the surface water in-water segment.

Section 4.2.1.4 Target distance limit. Explains the criteria for determining the target distance limit and for establishing whether targets are subject to actual or potential contamination.

Section 4.2.1.5 Evaluation of the ground water to surface water migration component. Explains the general approach for evaluating this component. Figure 4–2, Overview of Ground Water to Surface Water Migration Component, is new. Table 4–25, which is new, provides the scoring sheets for this component.

Section 4.2.2 Drinking water threat. Explains the general approach for evaluating this threat.

Section 4.2.2.1 Drinking water threat—likelihood of release. Explains the general approach for evaluating this factor category.

Section 4.2.2.1.1 Observed release. Explains that scoring an observed release is based on releases to ground water.

Section 4.2.2.1.2 Potential to release. Explains that scoring is based on the scoring of potential release to uppermost aquifer.

Section 4.2.2.1.3 Calculation of drinking water threat—likelihood of release factor category value. Explains how to assign the factor category value.

Section 4.2.2.2 Drinking water threat—waste characteristics. Explains the general approach for evaluating this factor category.

Section 4.2.2.2.1 Toxicity/mobility/persistence. Explains the approach for evaluating these factors.

Section 4.2.2.2.1.1 Toxicity. Explains that toxicity values are assigned to all hazardous substances available to migrate to ground water.

Section 4.2.2.2.1.2 Mobility. Explains that the mobility value is assigned to all hazardous substances available to migrate to ground water.

Section 4.2.2.2.1.3 Persistence. Explains that this factor value is assigned as in the drinking water threat for the overland flow/flood migration component for all hazardous substances available to migrate to ground water.

Section 4.2.2.2.1.4 Calculation of toxicity/mobility/persistence factor value. Explains that the factor value is the highest value assigned to any hazardous substance evaluated using Table 4–26, which is new.

Section 4.2.2.2.2 Hazardous waste quantity. Explains that hazardous waste quantity is calculated for hazardous substances available to migrate to ground water.

Section 4.2.2.2.3 Calculation of drinking water threat—waste characteristics factor category value. Explains how to calculate the factor category value.

Section 4.2.2.3 Drinking water threat—targets. Explains the general approach for evaluating this factor category.

Section 4.2.2.3.1 Nearest intake. Explains how to determine the dilution weight adjustment using Table 4–27, which was added, and how to assign factor values. Figure 4–3 was added to illustrate determination of the ground water to surface water angle. (See section III O of this preamble for a discussion of this adjustment.)

Section 4.2.2.3.2 Population. This section parallels other population factor sections.

Section 4.2.2.3.2.1 Level I concentrations. Parallels the population factor sections in the overland flow/flood migration component.

Section 4.2.2.3.2.2 Level II concentrations. Parallels the population factor sections in the overland flow/flood migration component.

Section 4.2.2.3.2.3 Potential contamination. Parallels the population factor sections in the overland flow/flood migration component, except for addition of the dilution weight adjustment.

Section 4.2.2.3.2.4 Calculation of population factor value. Parallels other population factor sections.

Section 4.2.2.3.3 Resources. Parallels other resources factor sections.

Section 4.2.2.3.4 Calculation of the drinking water threat—targets factor category value. Explains how to calculate the factor category value.

Section 4.2.2.4 Calculation of drinking water threat score for a watershed. Explains how to calculate the score for a watershed.

Section 4.2.3 Human food chain threat. Lists the factors evaluated.

Section 4.2.3.1 Human food chain threat—likelihood of release. Explains how to assign the factor category value.

Section 4.2.3.2 Human food chain threat—waste characteristics. Lists the factors evaluated.

Section 4.2.3.2.1 Toxicity/mobility/persistence/bioaccumulation. Explains how to calculate these factor values using Table 4–28, which is new.

Section 4.2.3.2.1.1 Toxicity. Explains how to calculate this factor value.

Section 4.2.3.2.1.2 Mobility. Explains how to calculate this factor value.

Section 4.2.3.2.1.3 Persistence. Explains how to calculate this factor value.

Section 4.2.3.2.1.4 Bioaccumulation potential. Explains how to calculate this factor value.

Section 4.2.3.2.1.5 Calculation of toxicity/mobility/persistence/bioaccumulation factor value. Explains how to calculate this value using Tables 3–9, 4–26, and 4–28.

Section 4.2.3.2.2 Hazardous waste quantity. Explains how to assign the factor value.

Section 4.2.3.2.3 Calculation of human food chain threat—waste characteristics factor category value. Explains how to calculate this factor category value.

Section 4.2.3.3 Human food chain threat—targets. Explains the factors to be evaluated.

Section 4.2.3.3.1 Food chain individual. Explains how to assign the factor value.

Section 4.2.3.3.2 Population. Explains how to calculate this factor value.

Section 4.2.3.3.2.1 Level I concentrations. Parallels the population factor in the human food chain threat for the overland flow/flood migration component.

Section 4.2.3.3.2.2 Level II concentrations. Parallels the population factor in the human food chain threat for the overland flow/flood migration component.

Section 4.2.3.3.2.3 Potential human food chain contamination. Parallels the population factor in the human food chain threat for the overland flow/flood component, except for addition of the dilution weight adjustment.

Section 4.2.3.3.2.4 Calculation of the population factor value. Explains how to calculate this factor value.

Section 4.2.3.3.3 Calculation of human food chain threat—targets factor category value. Explains how to calculate this factor category value.

Section 4.2.3.4 Calculation of human food chain threat score for a watershed. Explains how to calculate the score for a watershed.

Section 4.2.4 Environmental threat. Lists the factors evaluated.

Section 4.2.4.1 Environmental threat—likelihood of release. Explains how to calculate this factor category value.

Section 4.2.4.2 Environmental threat—waste characteristics. Explains how to calculate this factor category value.

Section 4.2.4.2.1 Ecosystem toxicity/mobility/persistence/bioaccumulation. Explains how to calculate these factor values.

Section 4.2.4.2.1.1 Ecosystem toxicity. Explains how to calculate this factor value.

Section 4.2.4.2.1.2 Mobility. Explains how to calculate this factor value.

Section 4.2.4.2.1.3 Persistence. Explains how to calculate this factor value.

Section 4.2.4.2.1.4 Ecosystem bioaccumulation potential. Parallels the ecosystem bioaccumulation evaluation in the overland flow/flood component, except expands the species considered as discussed in section III J.

Section 4.2.4.2.1.5 Calculation of ecosystem toxicity/mobility/persistence/bioaccumulation factor value. Explains how to calculate this factor value using Tables 3–9, 4–29, and 4–30, which were added.

Section 4.2.4.2.2 Hazardous waste quantity. Explains how to calculate this factor value.

Section 4.2.4.2.3 Calculation of environmental threat—waste characteristics factor category value. Explains how to calculate this factor category value.

Section 4.2.4.3 Environmental threat—targets. Explains how to calculate this factor category value.

Section 4.2.4.3.1 Sensitive environments. Explains how to calculate this factor value.

Section 4.2.4.3.1.1 Level I concentrations. Parallels factor sections in the overland flow/flood migration component.

Section 4.2.4.3.1.2 Level II concentrations. Parallels factor sections in the overland flow/flood migration component.

Section 4.2.4.3.1.3 Potential contamination. Parallels factor sections in the overland flow/flood migration component, except for addition of the dilution weight adjustment.

Section 4.2.4.3.1.4 Calculation of environmental threat—targets factor category value. Explains how to calculate the value for the factor category.

Section 4.2.4.4 Calculation of environmental threat score for a watershed. Explains how to calculate this threat score for a watershed.

Section 4.2.5 Calculation of ground water to surface water migration component score for a watershed. Explains how to calculate a watershed score for this component.

Section 4.2.6 Calculation of ground water to surface water migration component score. Explains how to calculate this score based on the scores for watersheds evaluated for this component.

Section 4.3 Calculation of surface water migration pathway score. Explains how to assign the pathway score.

In addition to the above noted changes, the recreational use threat has been eliminated. The drinking water use and other use factors have also been eliminated as have the tables (4–12 and 4–13 in the proposed rule) that related to scoring these factors. Figures 4–1, 4–2, and 4–3 as well as Tables 4–15, and 4–17 through 4–22 from the proposed rule have been eliminated.

Section 5 Soil Exposure Pathway

The soil exposure pathway evaluates threats resulting from contamination of surface material. The major changes specific to this pathway include revision of the name of the pathway; elimination of children under seven as a population that must be counted and evaluated separately; addition of hazardous waste quantity to the waste characteristics factor category; inclusion of workers in the evaluation of resident population targets; weighting of resident population based on benchmarks; inclusion of the nearest individual factor in both the resident and nearby targets factor category; inclusion of a resources factor in the resident population evaluation; and revisions to the sensitive environments factor.

Section 5.0 Soil Exposure Pathway. The name of the pathway has been changed from onsite exposure to soil exposure. Descriptive text has been removed. Figure 5–1 has been revised to reflect revisions to the factors evaluated. Table 5–1 has been revised to reflect the new factor category values throughout, which were made more consistent with the other pathways.

Section 5.0.1 General considerations. Has been revised to reflect the redefinition of source, discussed in section III N of this preamble. The methods for establishing areas of observed contamination and for determining the hazardous substances associated with an area of observed contamination have been clarified. The instructions have been revised to make clear that any part of a site that is covered by a permanent or otherwise maintained impermeable material such as asphalt is not considered in evaluating the pathway.

Section 5.1 Resident population threat. Has been revised to specify when the resident population threat should be evaluated. The requirements state that this threat is scored when there is an area of observed contamination within the property boundary and within 200 feet of a residence, school, day care center, or workplace, or within the boundaries of terrestrial sensitive environments and specified resources.

Section 5.1.1 Likelihood of exposure. Text has been simplified.

Section 5.1.2 Waste characteristics. Evaluation of waste characteristics has been changed to include hazardous waste quantity as well as toxicity. Hazardous waste quantity was added to the factor category in response to comments that the pathway did not consider the dose relationship; the combination of hazardous waste quantity and toxicity is a surrogate for that relationship and makes the pathway more consistent with the rest of the rule. The text has been revised to reflect the change.

Section 5.1.2.1 Toxicity. References the section explaining how to assign toxicity factor values.

Section 5.1.2.2 Hazardous waste quantity. This section is new and explains how to assign a value to this factor. Table 5–2, Hazardous Waste Quantity Evaluation Equations for Soil Exposure Pathway, is a revision of Table 2–14 from the proposed rule. This table differs from Table 2–5 of the final rule because generally only the top two feet of an area of observed contamination are considered in evaluating the pathway. Landfills, contaminated soils, waste piles, land treatment areas, dry surface impoundments, and buried/backfilled surface impoundments, which can be evaluated based on their volume in Table 2–5, are evaluated for this pathway using the area measure because the area measure now has a two-foot depth built into the equation. Surface impoundments containing

hazardous substances present as liquids, tanks, and containers may be evaluated based on volume because it is possible that a person could wade, swim, reach, or fall to a depth greater than two feet.

Section 5.1.2.3 Calculation of waste characteristics factor category value. Explains how to combine the toxicity and hazardous waste quantity factor values, subject to the new maximum.

Section 5.1.3 Targets. This factor category has been revised substantially. As discussed in section III N above, the high-risk target population has been eliminated, and workers have been added as targets. Table 5–3, Health-Based Benchmarks for Hazardous Substances in Soils, has been added to list benchmarks appropriate for this pathway.

Section 5.1.3.1 Resident individual. The resident individual factor has been added for consistency with other pathways.

Section 5.1.3.2 Resident population. Explains how to evaluate the resident population using health-based benchmarks, described in section III H above, and how to estimate this population.

Section 5.1.3.2.1 Level I concentrations. Explains how to assign a value for this new factor.

Section 5.1.3.2.2 Level II concentrations. Explains how to assign a value for this new factor.

Section 5.1.3.2.3 Calculation of resident population factor value. Explains how to calculate this factor value.

Section 5.1.3.3 Workers. Explains how to evaluate workers.

Section 5.1.3.4 Resources. Explains how to assign values if the area of observed contamination includes land used for commercial agriculture, commercial silviculture, or commercial livestock grazing or production.

Section 5.1.3.5 Terrestrial sensitive environments. The value assigned for this factor has been revised so that the value is based on the sum of the values assigned to terrestrial sensitive environments in areas of observed contamination, rather than on the highest scoring terrestrial sensitive environment. The maximum value that can be assigned to this factor is limited, but is higher than under the proposed rule. The limit is determined by scoring the pathway with only sensitive environments in the targets factor category; the pathway score under these conditions may not exceed 60 points. The sensitive environments listed in Table 5–5 have been modified. The text has been simplified and references changed to correspond to changes in the rule. The rounding rule has been changed.

Section 5.1.3.6 Calculation of resident population targets factor category value. Explains how to calculate the factor category value from the revised factors. The rounding rule has been changed.

Section 5.1.4 Calculation of resident population threat score. Has only minor editorial changes.

Section 5.2 Nearby population threat. Introductory text has been clarified.

Section 5.2.1 Likelihood of exposure. Lists the factors evaluated.

Section 5.2.1.1 Attractiveness/accessibility. As explained in section III N of this preamble, the name of this factor has changed as have the criteria used to assign values. This factor now emphasizes the use of the area by the general public. Descriptive text has been removed. Table 5–6 (proposed rule Table 5–4) has been changed by redefining the criteria and the assigned values, and by adding a value of 0 for sites that are physically inaccessible to the public.

Section 5.2.1.2 Area of contamination. The title of this section has been changed. This factor is now based solely on area of contamination, which relates to the likelihood of exposure, unlike hazardous waste quantity, which serves as part of the surrogate for dose. Values are assigned using Table 5–7, which is new.

Section 5.2.1.3 Likelihood of exposure factor category value. Text has been revised to reflect the new names of the factors. Table 5–8 (proposed rule Table 5–5) has been revised in response to the changes noted above for the attractiveness/accessibility and area of contamination factors.

Section 5.2.2 Waste characteristics. Text has been revised to reflect changes in the factor category.

Section 5.2.2.1 Toxicity. Explains how to evaluate the toxicity factor for the nearby population threat.

Section 5.2.2.2 Hazardous waste quantity. This section is new, as is consideration of this factor in this threat. As discussed above, this factor has been added in response to comments and to make the pathway more consistent with the other pathways. The section explains how to assign the factor value.

Section 5.2.2.3 Calculation of waste characteristics factor category value. Explains how to combine the toxicity and hazardous waste quantity factor values, subject to the new maximum.

Section 5.2.3 Targets. Descriptive text has been removed.

Section 5.2.3.1 Nearby individual. This section is new and explains how to assign a value to the nearby individual (i.e., resident or student with shortest travel distance) if there is no resident individual. The factor has been added to make the nearby threat consistent with other pathways. Table 5–9, Nearby Individual Factor Values, is new.

Section 5.2.3.2 Population within one mile. This section is new and includes the text that previously appeared under the Targets section. The section explains how to assign a value using Table 5–10. The text has been revised for clarity. Table 5–10, Distance-Weighted Population Values for Nearby Population Threat, is new. The table assigns distance-weighted values for population in each travel distance category. The values in the table were determined by statistical simulation to yield the same population, on average, as the use of the formulas in the proposed rule. The distance weights have been modified as follows: for travel distance of >0 to ¼ mile, the assigned distance weight is 0.025; for > ¼ to ½ mile, 0.0125, and for > ½ to 1 mile, 0.00625. The use of population ranges has been adopted as part of the simplification discussed in section III A.

Section 5.2.3.3 Calculation of nearby population targets factor category value. Text has been revised to reflect the changes in the targets factor category and in the rounding rule.

Section 5.2.4 Calculation of nearby population threat score. Minor editorial changes only.

Section 5.3 Calculation of the soil exposure pathway score. Has been changed to reflect the change in the value used as a divisor.

In addition to the above noted changes, Figures 5–2 and 5–3 and Tables 5–4 and 5–6 from the proposed rule have been removed.

Section 6 Air Migration Pathway

The air migration pathway evaluates the relative threat resulting from releases or potential releases of hazardous substances, either as gases or particulates, to the air. The major changes specific to this pathway include separate evaluation of gas and particulates in the likelihood to release factor category; inclusion of benchmarks to evaluate population and the nearest individual; weighting of sensitive environments based on actual or potential contamination; revision of the distance weights; deletion of the land use factor and inclusion of a resources factor in the evaluation of population; and revisions to the mobility factor.

Section 6.0 Air Migration Pathway. Descriptive text has been removed. Figure 6–1 has been revised to reflect revisions to the factors evaluated, and Table 6–1 has been revised to reflect the new factor category values throughout.

Section 6.1 Likelihood of release. Has been revised to eliminate explanatory text and to add instructions about which factors to evaluate for this factor category.

Section 6.1.1 Observed release. As discussed in section III G of this preamble, the specific criteria have been revised.

Section 6.1.2 Potential to release. As explained in section III O of this preamble, the method for evaluating this factor has been revised. Gas potential to release and particulate potential to release are evaluated separately. The explanatory text has been removed.

Section 6.1.2.1 Gas potential to release. Explains how this factor is evaluated. Table 6–2 (proposed rule Table 2–3) has been revised to apply only to the gas potential to release factors.

Section 6.1.2.1.1 Gas containment. Descriptive text has been removed. Table 6–3 (proposed rule Table 2–5) has been simplified. The depth requirements and other containment requirements have been revised based on public comment, the field test, and a review of recent information on covering systems. Consideration of biogas releases has been added. Assigned values have been revised and also reflect the revised maximum value for the factor.

Section 6.1.2.1.2 Gas source type. New source types have been added to Table 6–4 (proposed rule Table 2–6), and the assigned values have been revised. As explained in section III O of this preamble, new source types and subgroups for specific types have been added, in response to comments and the field test, to make this factor easier to evaluate. Treatment of sources when no source meets the minimum size has been clarified.

Section 6.1.2.1.3 Gas migration potential. As explained in section III O of this preamble, this section has been renamed and the approach for assigning values changed slightly. This section explains how to assign values to each substance and subsequently to the source using Tables 6–5, 6–6, and 6–7. Dry soil relative volatility has been removed as a measure of gas migration potential. The footnotes have been removed from Table 6–5 (proposed rule Table 2–7) and the name has been changed to "Values for Vapor Pressure and Henry's Constant." The titles of Tables 6–6 and 6–7 have been changed. The values assigned have also been changed to reflect the revised maximum value for the factor category. Descriptive text has been removed.

Section 6.1.2.1.4 Calculation of gas potential to release value. Explains how to calculate this value.

Section 6.1.2.2 Particulate potential to release. Explains how this factor is evaluated. Table 6–8 (proposed rule Table 2–3) has been revised to apply only to the particulate potential to release factors.

Section 6.1.2.2.1 Particulate containment. References Table 6–9 (Table 2–5 from the proposed rule). The criteria and values assigned using this table have been changed, as discussed in section III O of this preamble. Considerations of depth have been added for particulates.

Section 6.1.2.2.2 Particulate source type. In response to comments, new kinds of source types and subgroups of source types have been added to make this factor easier to score. The values assigned have been revised to reflect the changed factor category maximum. Treatment of sources when no source meets the minimum size has been clarified.

Section 6.1.2.2.3 Particulate migration potential. Has been renamed. Descriptive text has been removed. Proposed rule Figure 2–3 has been simplified, expanded, and renumbered as Figure 6–2. Proposed rule Table 2–9 has been renumbered as Table 6–10.

Section 6.1.2.2.4 Calculation of particulate potential to release value. Describes how to calculate this value.

Section 6.1.2.3 Calculation of potential to release factor value for the site. Text has been simplified and modified to account for gas and particulate potential to release.

Section 6.1.3 Calculation of likelihood of release factor category value. Describes calculation procedure.

Section 6.2 Waste characteristics. Descriptive text has been removed.

Section 6.2.1 Toxicity/mobility. Text has been simplified.

Section 6.2.1.1 Toxicity. Descriptive text has been removed and § 2.4.1.1 is referenced.

Section 6.2.1.2 Mobility. As explained in section III F of this preamble, the scoring of this factor has changed. Gas mobility is now based only on vapor pressure. The maximum value assigned for particulate mobility is no longer the same as the maximum assigned for gas mobility. The particulate mobility values are assigned based on Figure 6–3 or the equation in the text along with Table 6–12. The values assigned have been put on linear scales to be consistent with the new structure of the waste characteristics factor category. The text has been simplified.

Section 6.2.1.3 Calculation of toxicity/mobility factor value. Table 6–13, proposed rule Table 2–12, the matrix for assigning toxicity/mobility factor values has been revised to reflect the changes in values assigned to both factors.

Section 6.2.2 Hazardous waste quantity. Descriptive text has been removed and § 2.4.2 is referenced.

Section 6.2.3 Calculation of waste characteristics factor category value. The text has been revised to indicate the multiplication of the component factors, the new maximum value, and the table used to assign the factor category value.

Section 6.3 Targets. The target distance limit has been modified to include targets beyond four miles when an observed release extends beyond that distance. Text has been added to explain how to evaluate populations and sensitive environments exposed to actual contamination. Text was added to clarify that actual contamination based on an observed release established by direct observation should be considered Level II. Table 6–14, Health-Based Benchmarks for Hazardous Substances in Air, has been added to list the benchmarks used for this pathway. Table 6–15, Air Migration Pathway Distance Weights (proposed rule Table 2–16), has been revised to reflect changes in the distance weights discussed in section III O of this preamble.

Section 6.3.1 Nearest individual. The title has been changed from maximally exposed individual. As discussed above, this factor is now evaluated based on actual contamination and potential contamination. The name of Table 6–16 (proposed rule Table 2–15) has been changed and the values have been revised based on changes to the distance weights. Descriptive text has been removed.

Section 6.3.2 Population. Evaluation of population based on health-based benchmarks has been added as discussed in section III H of this preamble.

Section 6.3.2.1 Level of contamination. Explains how to evaluate population based on concentrations of hazardous substances in samples.

Section 6.3.2.2 Level I concentrations. Explains how to evaluate populations exposed to Level I concentrations. The scoring cap was eliminated, and the multiplier (i.e., weight) is now 10.

Section 6.3.2.3 Level II concentrations. Explains how to

evaluate populations exposed to Level II concentrations.

Section 6.3.2.4 Potential contamination. Explains how to assign values to populations potentially exposed to contamination from the site. The formula for calculating population values has been revised. Table 6–17, which assigns distance-weighted values for populations in each distance category, has been added. The values in the table were determined by statistical simulation to yield the same population, on average, as the use of the formulas in the proposed rule. The use of population ranges has been adopted as part of the simplification discussed in section III A. The rounding rule has been changed, the scoring cap was eliminated, and the multiplier (i.e., weight) is now 0.1.

Section 6.3.2.5 Calculation of the population factor value. Explains how to calculate the factor value. The scoring cap was eliminated.

Section 6.3.3 Resources. Explains how to assign points to resources, which in this pathway is based on the presence of commercial agriculture, commercial silviculture, and major or designated recreation areas.

Section 6.3.4 Sensitive environments. Explains how sensitive environments are evaluated based on actual and potential contamination. The maximum value that can be assigned to this factor is limited, but is greater than in the proposed rule. The limit is determined by scoring the pathway with only sensitive environments in the targets factor category; the pathway score under these conditions may not exceed 60 points.

Section 6.3.4.1 Actual contamination. Explains how to assign factor values for sensitive environments subject to actual contamination and how to assign values to wetlands based on total acreage. A new Table 6–18, Wetlands Rating Values for the Air Migration Pathway, has been added to assign values to wetlands based on acreage.

Section 6.3.4.2 Potential contamination. Explains how to calculate the factor value for potentially contaminated sensitive environments and how to assign values to wetlands based on total acreage within each distance category. The rounding rule has been changed.

Section 6.3.4.3 Calculation of sensitive environments factor value. Explains how to calculate the factor value. The rounding rule has been changed.

Section 6.3.5 Calculation of targets factor category value. Text has been revised to reflect the new names for factors.

Section 6.4 Calculation of air migration pathway score. Text has been revised to reflect the new divisor.

In addition to the above noted changes, the land use factor, Figure 2–2, and Tables 2–2, 2–3, 2–13, 2–17, and 2–19 in the proposed rule have been removed.

Section 7 Sites Containing Radioactive Substances

This entire part of the rule is new. As discussed in section III E of the preamble, this section has been added to provide direction on evaluating sites containing radioactive substances. Table 7–1 lists factors evaluated differently for such sites.

Section 7.1 Likelihood of release/likelihood of exposure. Explains the approach to evaluating the factor category.

Section 7.1.1 Observed release/observed contamination. Explains how to evaluate observed release (observed contamination) for radionuclides. The evaluation differs for radionuclides that occur naturally or are ubiquitous in the environment, for man-made radionuclides without ubiquitous background concentrations in the environment, and for gamma-emitting radionuclides in the soil exposure pathway. This section also explains the appropriate procedures for sites with mixed radioactive and other hazardous substances.

Section 7.1.2 Potential to release. Explains that potential to release factors are evaluated on the physical and chemical properties of radionuclides, not their radioactivity.

Section 7.2 Waste characteristics. Lists the factors evaluated.

Section 7.2.1 Human toxicity. Explains how to assign toxicity values to radioactive substances and describes appropriate procedures for sites containing mixed radionuclides and other hazardous substances.

Section 7.2.2 Ecosystem toxicity. Explains that ecosystem toxicity for radionuclides is assigned a value in the same way as is human toxicity except that the default value is 100 rather than 1,000.

Section 7.2.3 Persistence. Explains that radioactive substances are assigned persistence values based solely on half-life—radioactive half-life and volatilization half-life. Explains how to evaluate persistence for mixed radioactive and other hazardous substances.

Section 7.2.4 Selection of the substance potentially posing greatest hazard. The section explains how to select the substance potentially posing the greatest hazard.

Section 7.2.5 Hazardous waste quantity. Explains how to evaluate the hazardous waste quantity factor for sites containing radioactive substances.

Section 7.2.5.1 Source hazardous waste quantity for radionuclides. Describes differences between the migration pathways and the soil exposure pathway.

Section 7.2.5.1.1 Radionuclide constituent quantity (Tier A). Explains how to evaluate radionuclide constituent quantity for radionuclides.

Section 7.2.5.1.2 Radionuclide wastestream quantity (Tier B). Explains how to evaluate radionuclide wastestream quantity for radionuclides.

Section 7.2.5.1.3 Calculation of source hazardous waste quantity value for radionuclides. Explains how to assign a source value.

Section 7.2.5.2 Calculation of hazardous waste quantity factor value for radionuclides. Explains how to calculate the hazardous waste quantity factor value for radionuclides and describes use of the minimum value, which is either 10 or 100 (as described in section 2.4.2.2 above).

Section 7.2.5.3 Calculation of hazardous waste quantity factor value for sites containing mixed radioactive and other hazardous substances. Explains how to calculate the factor value for these sites.

Section 7.3 Targets. Explains how to evaluate targets at sites containing radioactive substances and sites containing radioactive and other hazardous substances.

Section 7.3.1 Level of contamination at a sampling location. Explains how to determine the appropriate level of contamination.

Section 7.3.2 Selection of benchmarks and comparisons with observed release/observed contamination. This section lists the benchmarks and explains how they are used in determining the level of contamination.

V. Required Analyses

A. Executive Order No. 12291

Under Executive Order No. 12291, the Agency must judge whether a regulation is "major" and thus subject to the requirement of a Regulatory Impact Analysis. The rule published today is not major because the rule will not result in an effect on the economy of $100 million or more, will not result in increased costs or prices, will not have significant adverse effects on competition, employment, investment, productivity, and innovation, and will

not significantly disrupt domestic and export markets.

To estimate the costs associated with the final rule, a final economic analysis entitled "Economic Impact Analysis of the Revised Hazard Ranking System" was prepared as an addendum to the December 1987 economic impact analysis (EIA) to incorporate new data. As in the January 1988 EIA, the total annual cost of implementing the final rule is estimated as a function of the number of Screening SIs (SSI) and Listing SIs (LSI) that will be conducted annually and the unit cost of each. In the January 1988 EIA, estimates of total costs were developed assuming 1,130 SSIs and 100 LSIs would be conducted annually. The Agency now estimates that 1,100 SIs will be conducted annually (EPA is no longer using the terms SSI and LSI). The total annual cost is estimated to be $78.8 million, the sum of the cost of conducting 1,000 SIs at a unit cost of $55,000, 70 SIs for NPL sites (without monitoring wells) at a unit cost of $100,000, and 30 SIs for NPL sites (with monitoring wells) at a unit cost of $160,000.

To estimate the incremental cost of implementing the final revised version of the HRS, the unit cost of conducting all preremedial listing activities using the current HRS from the January 1988 EIA is updated. That cost was estimated to be $58,200 in the January 1988 EIA, and was developed assuming the PA had already been conducted. The 1988 estimate is a function of 480 hours of Field Investigation Team (FIT) technical time valued at $40 per hour and 30 samples being evaluated at a unit cost of $1,300 per sample. To compare the costs of the current HRS to those developed above for the final revised version of the HRS, the FIT technical time is valued at $50 per hour and each sample evaluation is estimated to cost $1,000. The revised total cost of conducting all listing activities beyond the PA for the current HRS, therefore, is estimated to be $54,000. In addition, the average level of effort for a PA under the current HRS is estimated to be 60 hours, and the unit cost of the PA, assuming a $50 FIT hourly rate, is estimated to be $3,000.

Based on these revisions, the annual cost of using the current HRS is estimated to be $65.4 million, the sum of the cost of conducting 2,000 PAs at a unit cost of $3,000 ($6 million) and the cost of conducting 1,100 SIs at a unit cost of $54,000 ($59.4 million). Compared to the current HRS, the annual incremental cost of using the final revised version of the HRS is estimated to be $13.4 million. On the basis of this evaluation, implementing the final revised version of the HRS would not constitute a major rule, because the annual incremental cost of the final rule is less than $100 million. No negative economic effects are anticipated from this rule.

B. Regulatory Flexibility Determination

Appendix A of the December 1987 EIA includes an assessment of the ability of responsible parties to pay the costs of HRS scoring under the current HRS and the three alternative scoring mechanisms considered at that time. That analysis evaluated the impact of HRS costs under each ranking methodology on the financial viability of 15 sample companies. Under that analysis, only the smallest sample firm (one with an average net income of $53,700) was expected to have difficulty in paying the costs of conducting a complete SI under each of the alternative ranking scenarios. The new unit cost of a complete SI developed during the Phase I field test and used in this economic analysis falls within the range of costs already evaluated in appendix A of the December 1987 EIA. Given the previous analysis, EPA concludes that most sample firms are healthy enough financially to be able to afford the expenditures associated with HRS site inspections. Responsible Parties (RPs) that are financially similar to the smallest firm (Firm 15 in appendix A of the December 1987 RIA), however, do not have the assets or the income to enable them to assume payments similar to the estimates derived for the SI done under the current HRS or the final revised version of the HRS.

The Regulatory Flexibility Act of 1980 requires that Federal agencies explicitly consider the effects of proposed and existing regulations on small entities and examine alternative regulations that would reduce significant adverse impacts on small entities. The small entities that could be affected by the revisions to the HRS are small businesses and small municipalities that are responsible for hazardous wastes at a site. Based on the updated analysis presented here, EPA concludes that using the final rule is unlikely to result in a significant impact on a substantial number of small entities. As discussed in the December 1987 EIA, this conclusion is drawn because small firms are no more or less likely to be responsible parties than are large firms. In addition, when they are RPs, small firms usually are one of several companies responsible for a site and probably would not bear the full burden of liability for HRS expenditures and other cleanup costs.

C. Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, and has assigned OMB control number 2050-0095.

Public reporting burden for this collection of information is estimated to be 620 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM—U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460; and the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

D. Federalism Implications

E.O. 12612 requires agencies to assess whether a regulation will have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. EPA has determined that this regulation does not have federalism implications and that, therefore, a Federalism Assessment is not required.

List of Subjects in 40 CFR Part 300

Air pollution controls, Chemicals, Hazardous materials, Intergovernmental relations, Natural resources, Oil pollution, Reporting and recordkeeping, Superfund, Waste treatment and disposal, Water pollution control, Water supply.

Dated: November 9, 1990.

William K. Reilly,

Administrator.

40 CFR part 300 is amended as follows:

PART 300—[AMENDED]

1. The authority citation for part 300 continues to read as follows:

Authority: 42 U.S.C. 9605; 33 U.S.C. 1321(c)(2); E.O. No. 117535, 38 FR 21243; E.O No. 12580, 52 FR 2923.

2. Part 300, appendix A is revised to read as follows:

Appendix A to Part 300—The Hazard Ranking System

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1.0 Introduction

The Hazard Ranking System (HRS) is the principal mechanism the U.S. Environmental Protection Agency (EPA) uses to place sites on the National Priorities List (NPL). The HRS serves as a screening device to evaluate the potential for releases of uncontrolled hazardous substances to cause human health or environmental damage. The HRS provides a measure of relative rather than absolute risk. It is designed so that it can be consistently applied to a wide variety of sites.

1.1 Definitions

Acute toxicity: Measure of toxicological responses that result from a single exposure to a substance or from multiple exposures within a short period of time (typically several days or less). Specific measures of acute toxicity used within the HRS include lethal $dose_{50}$ (LD_{50}) and lethal $concentration_{50}$ (LC_{50}), typically measured within a 24-hour to 96-hour period.

Ambient Aquatic Life Advisory Concentrations (AALACs): EPA's advisory concentration limit for acute or chronic toxicity to aquatic organisms as established under section 304(a)(1) of the Clean Water Act, as amended.

Ambient Water Quality Criteria (AWQC): EPA's maximum acute or chronic toxicity concentrations for protection of aquatic life and its uses as established under section 304(a)(1) of the Clean Water Act, as amended.

Bioconcentration factor (BCF): Measure of the tendency for a substance to accumulate in the tissue of an aquatic organism. BCF is determined by the extent of partitioning of a substance, at equilibrium, between the tissue of an aquatic organism and water. As the ratio of concentration of a substance in the organism divided by the concentration in water, higher BCF values reflect a tendency for substances to accumulate in the tissue of aquatic organisms. [unitless].

Biodegradation: Chemical reaction of a substance induced by enzymatic activity of microorganisms.

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (Pub. L. 96-510, as amended).

Chronic toxicity: Measure of toxicological responses that result from repeated exposure to a substance over an extended period of time (typically 3 months or longer). Such responses may persist beyond the exposure or may not appear until much later in time than the exposure. HRS measures of chronic toxicity include Reference Dose (RfD) values.

Contract Laboratory Program (CLP): Analytical program developed for CERCLA waste site samples to fill the need for legally defensible analytical results supported by a high level of quality assurance and documentation.

Contract-Required Detection Limit (CRDL): Term equivalent to contract-required quantitation limit, but used primarily for inorganic substances.

Contract-Required Quantitation Limit (CRQL): Substance-specific level that a CLP laboratory must be able to routinely and reliably detect in specific sample matrices. It is not the lowest detectable level achievable, but rather the level that a CLP laboratory should reasonably quantify. The CRQL may or may not be equal to the quantitation limit of a given substance in a given sample. For HRS purposes, the term CRQL refers to both the contract-required quantitation limit and the contract-required detection limit.

Curie (Ci): Measure used to quantify the amount of radioactivity. One curie equals 37 billion nuclear transformations per second, and one picocurie (pCi) equals 10^{-12} Ci.

Decay product: Isotope formed by the radioactive decay of some other isotope. This newly formed isotope possesses physical and chemical properties that are different from

those of its parent isotope, and may also be radioactive.

Detection Limit (DL): Lowest amount that can be distinguished from the normal random "noise" of an analytical instrument or method. For HRS purposes, the detection limit used is the method detection limit (MDL) or, for real-time field instruments, the detection limit of the instrument as used in the field.

Dilution weight: Parameter in the HRS surface water migration pathway that reduces the point value assigned to targets as the flow or depth of the relevant surface water body increases. [unitless].

Distance weight: Parameter in the HRS air migration, ground water migration, and soil exposure pathways that reduces the point value assigned to targets as their distance increases from the site. [unitless].

Distribution coefficient (K_d): Measure of the extent of partitioning of a substance between geologic materials (for example, soil, sediment, rock) and water (also called partition coefficient). The distribution coefficient is used in the HRS in evaluating the mobility of a substance for the ground water migration pathway. [ml/g].

ED_{10} (10 percent effective dose): Estimated dose associated with a 10 percent increase in response over control groups. For HRS purposes, the response considered is cancer. [milligrams toxicant per kilogram body weight per day (mg/kg-day)].

Food and Drug Administration Action Level (FDAAL): Under section 408 of the Federal Food, Drug and Cosmetic Act, as amended, concentration of a poisonous or deleterious substance in human food or animal feed at or above which FDA will take legal action to remove adulterated products from the market. Only FDAALs established for fish and shellfish apply in the HRS.

Half-life: Length of time required for an initial concentration of a substance to be halved as a result of loss through decay. The HRS considers five decay processes: biodegradation, hydrolysis, photolysis, radioactive decay, and volatilization.

Hazardous substance: CERCLA hazardous substances, pollutants, and contaminants as defined in CERCLA sections 101(14) and 101(33), except where otherwise specifically noted in the HRS.

Hazardous wastestream: Material containing CERCLA hazardous substances (as defined in CERCLA section 101[14]) that was deposited, stored, disposed, or placed in, or that otherwise migrated to, a source.

HRS *"factor"*: Primary rating elements internal to the HRS.

HRS *"factor category"*: Set of HRS factors (that is, likelihood of release [or exposure], waste characteristics, targets).

HRS *"migration pathways"*: HRS ground water, surface water, and air migration pathways.

HRS *"pathway"*: Set of HRS factor categories combined to produce a score to measure relative risks posed by a site in one of four environmental pathways (that is, ground water, surface water, soil, and air).

HRS *"site score"*: Composite of the four HRS pathway scores.

Henry's law constant: Measure of the volatility of a substance in a dilute solution of water at equilibrium. It is the ratio of the vapor pressure exerted by a substance in the gas phase over a dilute aqueous solution of that substance to its concentration in the solution at a given temperature. For HRS purposes, use the value reported at or near 25° C. [atmosphere-cubic meters per mole (atm-m³/mol)].

Hydrolysis: Chemical reaction of a substance with water.

Karst: Terrain with characteristics of relief and drainage arising from a high degree of rock solubility in natural waters. The majority of karst occurs in limestones, but karst may also form in dolomite, gypsum, and salt deposits. Features associated with karst terrains typically include irregular topography, sinkholes, vertical shafts, abrupt ridges, caverns, abundant springs, and/or disappearing streams. Karst aquifers are associated with karst terrain.

LC_{50} (lethal concentration, 50 percent): Concentration of a substance in air [typically micrograms per cubic meter ($\mu g/m^3$)] or water [typically micrograms per liter ($\mu g/l$)] that kills 50 percent of a group of exposed organisms. The LC_{50} is used in the HRS in assessing acute toxicity.

LD_{50} (lethal dose, 50 percent): Dose of a substance that kills 50 percent of a group of exposed organisms. The LD_{50} is used in the HRS in assessing acute toxicity [milligrams toxicant per kilogram body weight (mg/kg)].

Maximum Contaminant Level (MCL): Under section 1412 of the Safe Drinking Water Act, as amended, the maximum permissible concentration of a substance in water that is delivered to any user of a public water supply.

Maximum Contaminant Level Goal (MCLG): Under section 1412 of the Safe Drinking Water Act, as amended, a nonenforceable concentration for a substance in drinking water that is protective of adverse human health effects and allows an adequate margin of safety.

Method Detection Limit (MDL): Lowest concentration of analyte that a method can detect reliably in either a sample or blank.

Mixed radioactive and other hazardous substances: Material containing both radioactive hazardous substances and nonradioactive hazardous substances, regardless of whether these types of substances are physically separated, combined chemically, or simply mixed together.

National Ambient Air Quality Standards (NAAQS): Primary standards for air quality established under sections 108 and 109 of the Clean Air Act, as amended.

National Emission Standards for Hazardous Air Pollutants (NESHAPs): Standards established for substances listed under section 112 of the Clean Air Act, as amended. Only those NESHAPs promulgated in ambient concentration units apply in the HRS.

Octanol-water partition coefficient (K_{ow} [or P]): Measure of the extent of partitioning of a substance between water and octanol at equilibrium. The K_{ow} is determined by the ratio between the concentration in octanol divided by the concentration in water at equilibrium. [unitless].

Organic carbon partition coefficient (K_{oc}): Measure of the extent of partitioning of a substance, at equilibrium, between organic carbon in geologic materials and water. The higher the K_{oc}, the more likely a substance is to bind to geologic materials than to remain in water. [ml/g].

Photolysis: Chemical reaction of a substance caused by direct absorption of solar energy (direct photolysis) or caused by other substances that absorb solar energy (indirect photolysis).

Radiation: Particles (alpha, beta, neutrons) or photons (x- and gamma-rays) emitted by radionuclides.

Radioactive decay: Process of spontaneous nuclear transformation, whereby an isotope of one element is transformed into an isotope of another element, releasing excess energy in the form of radiation.

Radioactive half-life: Time required for one-half the atoms in a given quantity of a specific radionuclide to undergo radioactive decay.

Radioactive substance: Solid, liquid, or gas containing atoms of a single radionuclide or multiple radionuclides.

Radioactivity: Property of those isotopes of elements that exhibit radioactive decay and emit radiation.

Radionuclide/radioisotope: Isotope of an element exhibiting radioactivity. For HRS purposes, "radionuclide" and "radioisotope" are used synonymously.

Reference dose (RfD): Estimate of a daily exposure level of a substance to a human population below which adverse noncancer health effects are not anticipated. [milligrams toxicant per kilogram body weight per day (mg/kg-day)].

Removal action: Action that removes hazardous substances from the site for proper disposal or destruction in a facility permitted under the Resource Conservation and Recovery Act or the Toxic Substances Control Act or by the Nuclear Regulatory Commission.

Roentgen (R): Measure of external exposures to ionizing radiation. One roentgen equals that amount of x-ray or gamma radiation required to produce ions carrying a charge of 1 electrostatic unit (esu) in 1 cubic centimeter of dry air under standard conditions. One microroentgen (μR) equals 10^{-6} R.

Sample quantitation limit (SQL): Quantity of a substance that can be reasonably quantified given the limits of detection for the methods of analysis and sample characteristics that may affect quantitation (for example, dilution, concentration).

Screening concentration: Media-specific benchmark concentration for a hazardous substance that is used in the HRS for comparison with the concentration of that hazardous substance in a sample from that media. The screening concentration for a specific hazardous substance corresponds to its reference dose for inhalation exposures or for oral exposures, as appropriate, and, if the substance is a human carcinogen with a weight-of-evidence classification of A, B, or C, to that concentration that corresponds to its 10^{-6} individual lifetime excess cancer risk for inhalation exposures or for oral exposures, as appropriate.

Site: Area(s) where a hazardous substance has been deposited, stored, disposed, or placed, or has otherwise come to be located. Such areas may include multiple sources and may include the area between sources.

Slope factor (also referred to as cancer potency factor): Estimate of the probability of response (for example, cancer) per unit intake of a substance over a lifetime. The slope factor is typically used to estimate upper-bound probability of an individual developing cancer as a result of exposure to a particular level of a human carcinogen with a weight-of-evidence classification of A, B, or C. [$(mg/kg\text{-}day)^{-1}$ for non-radioactive substances and $(pC_i)^{-1}$ for radioactive substances].

Source: Any area where a hazardous substance has been deposited, stored, disposed, or placed, plus those soils that have become contaminated from migration of a hazardous substance. Sources do not include those volumes of air, ground water, surface water, or surface water sediments that have become contaminated by migration, except: in the case of either a ground water plume with no identified source or contaminated surface water sediments with no identified source, the plume or contaminated sediments may be considered a source.

Target distance limit: Maximum distance over which targets for the site are evaluated. The target distance limit varies by HRS pathway.

Uranium Mill Tailings Radiation Control Act (UMTRCA) Standards: Standards for radionuclides established under sections 102, 104, and 108 of the Uranium Mill Tailings Radiation Control Act, as amended.

Vapor pressure: Pressure exerted by the vapor of a substance when it is in equilibrium with its solid or liquid form at a given temperature. For HRS purposes, use the value reported at or near 25° C. [atmosphere or torr].

Volatilization: Physical transfer process through which a substance undergoes a change of state from a solid or liquid to a gas.

Water solubility: Maximum concentration of a substance in pure water at a given temperature. For HRS purposes, use the value reported at or near 25° C. [milligrams per liter (mg/l)].

Weight-of-evidence: EPA classification system for characterizing the evidence supporting the designation of a substance as a human carcinogen. EPA weight-of-evidence groupings include:

Group A: Human carcinogen--sufficient evidence of carcinogenicity in humans.
Group B1: Probable human carcinogen--limited evidence of carcinogenicity in humans.
Group B2: Probable human carcinogen--sufficient evidence of carcinogenicity in animals.
Group C: Possible human carcinogen--limited evidence of carcinogenicity in animals.
Group D: Not classifiable as to human carcinogenicity--applicable when there is no animal evidence, or when human or animal evidence is inadequate.
Group E: Evidence of noncarcinogenicity for humans.

2.0 Evaluations Common to Multiple Pathways

2.1 *Overview.* The HRS site score (S) is the result of an evaluation of four pathways:

- Ground Water Migration (S_{gw}).
- Surface Water Migration (S_{sw}).
- Soil Exposure (S_s).
- Air Migration (S_a).

The ground water and air migration pathways use single threat evaluations, while the surface water migration and soil exposure pathways use multiple threat evaluations. Three threats are evaluated for the surface water migration pathway: drinking water, human food chain, and environmental. These threats are evaluated for two separate migration components--overland/flood migration and ground water to surface water migration. Two threats are evaluated for the soil exposure pathway: resident population and nearby population.

The HRS is structured to provide a parallel evaluation for each of these pathways and threats. This section focuses on these parallel evaluations, starting with the calculation of the HRS site score and the individual pathway scores.

2.1.1 *Calculation of HRS site score.* Scores are first calculated for the individual pathways as specified in sections 2 through 7 and then are combined for the site using the following root-mean-square equation to determine the overall HRS site score, which ranges from 0 to 100:

$$S = \sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2}{4}}$$

2.1.2 *Calculation of pathway score.* Table 2-1, which is based on the air migration pathway, illustrates the basic parameters used to calculate a pathway score. As Table 2-1 shows, each pathway (or threat) score is the product of three "factor categories": likelihood of release, waste characteristics, and targets. (The soil exposure pathway uses likelihood of exposure rather than likelihood of release.) Each of the three factor categories contains a set of factors that are assigned numerical values and combined as specified in sections 2 through 7. The factor values are rounded to the nearest integer, except where otherwise noted.

2.1.3 *Common evaluations.* Evaluations common to all four HRS pathways include:

- Characterizing sources.
  - -Identifying sources (and, for the soil exposure pathway, areas of observed contamination [see section 5.0.1]).
  - -Identifying hazardous substances associated with each source (or area of observed contamination).
  - -Identifying hazardous substances available to a pathway.

TABLE 2-1.—SAMPLE PATHWAY SCORESHEET

Factor category	Maximum value	Value assigned
Likelihood of Release		
1. Observed Release	550	
2. Potential to Release	500	
3. Likelihood of Release (higher of lines 1 and 2)	550	
Waste Characteristics		
4. Toxicity/Mobility	(a)	
5. Hazardous Waste Quantity	(a)	
6. Waste Characteristics	100	
Targets		
7. Nearest Individual		
7a. Level I	50	
7b. Level II	45	
7c. Potential Contamination	20	
7d. Nearest Individual (higher of lines 7a, 7b, or 7c)	50	
8. Population		
8a. Level I	(b)	
8b. Level II	(b)	
8c. Potential Contamination	(b)	
8d. Total Population (lines 8a+8b+8c)	(b)	
9. Resources	5	
10. Sensitive Environments	(b)	
10a. Actual Contamination	(b)	
10b. Potential Contamination	(b)	
10c. Sensitive Environments (lines 10a+10b)	(b)	
11. Targets (lines 7d+8d+9+10c)	(b)	
12. **Pathway Score** is the product of Likelihood of Release, Waste Characteristics, and Targets, divided by 82,500. Pathway scores are limited to a maximum of 100 points.		

[a] Maximum value applies to waste characteristics category. The product of lines 4 and 5 is used in Table 2-7 to derive the value for the waste characteristics factor category.

[b] There is no limit to the human population or sensitive environments factor values. However, the pathway score based solely on sensitive environments is limited to a maximum of 60 points.

- Scoring likelihood of release (or likelihood of exposure) factor category.
  - -Scoring observed release (or observed contamination).
  - -Scoring potential to release when there is no observed release.
- Scoring waste characteristics factor category.
  - -Evaluating toxicity.
  - -Combining toxicity with mobility, persistence, and/or bioaccumulation (or ecosystem bioaccumulation) potential, as appropriate to the pathway (or threat).
  - -Evaluating hazardous waste quantity.
  - -Combining hazardous waste quantity with the other waste characteristics factors.
  - -Determining waste characteristics factor category value.
- Scoring targets factor category.
  - -Determining level of contamination for targets.

These evaluations are essentially identical for the three migration pathways (ground water, surface water, and air). However, the

evaluations differ in certain respects for the soil exposure pathway.

Section 7 specifies modifications that apply to each pathway when evaluating sites containing radioactive substances.

Section 2 focuses on evaluations common at the pathway and threat levels. Note that for the ground water and surface water migration pathways, separate scores are calculated for each aquifer (see section 3.0) and each watershed (see sections 4.1.1.3 and 4.2.1.5) when determining the pathway scores for a site. Although the evaluations in section 2 do not vary when different aquifers or watersheds are scored at a site, the specific factor values (for example, observed release, hazardous waste quantity, toxicity/mobility) that result from these evaluations can vary by aquifer and by watershed at the site. This can occur through differences both in the specific sources and targets eligible to be evaluated for each aquifer and watershed and in whether observed releases can be established for each aquifer and watershed. Such differences in scoring at the aquifer and watershed level are addressed in sections 3 and 4, not section 2.

2.2 *Characterize sources.* Source characterization includes identification of the following:

- Sources (and areas of observed contamination) at the site.
- Hazardous substances associated with these sources (or areas of observed contamination).
- Pathways potentially threatened by these hazardous substances.

Table 2–2 presents a sample worksheet for source characterization.

2.2.1 *Identify sources.* For the three migration pathways, identify the sources at the site that contain hazardous substances. Identify the migration pathway(s) to which each source applies. For the soil exposure pathway, identify areas of observed contamination at the site (see section 5.0.1).

TABLE 2–2.—SAMPLE SOURCE CHARACTERIZATION WORKSHEET

Source: _____

A. Source dimensions and hazardous waste quantity.

Hazardous constituent quantity: _____

Hazardous wastestream quantity: _____

Volume: _____

Area: _____

Area of observed contamination: _____

B. Hazardous substances associated with the source.

Hazardous substance	Available to pathway						
	Air		Ground water (GW)	Surface water (SW)		Soil	
	Gas	Particulate		Overland/flood	GW to SW	Resident	Nearby

2.2.2 *Identify hazardous substances associated with a source.* For each of the three migration pathways, consider those hazardous substances documented in a source (for example, by sampling, labels, manifests, oral or written statements) to be associated with that source when evaluating each pathway. In some instances, a hazardous substance can be documented as being present at a site (for example, by labels, manifests, oral or written statements), but the specific source(s) containing that hazardous substance cannot be documented. For the three migration pathways, in those instances when the specific source(s) cannot be documented for a hazardous substance, consider the hazardous substance to be present in each source at the site, except sources for which definitive information indicates that the hazardous substance was not or could not be present.

For an area of observed contamination in the soil exposure pathway, consider only those hazardous substances that meet the criteria for observed contamination for that area (see section 5.0.1) to be associated with that area when evaluating the pathway.

2.2.3 *Identify hazardous substances available to a pathway.* In evaluating each migration pathway, consider the following hazardous substances available to migrate from the sources at the site to the pathway:

- Ground water migration.
  - –Hazardous substances that meet the criteria for an observed release (see section 2.3) to ground water.
  - –All hazardous substances associated with a source with a ground water containment factor value greater than 0 (see section 3.1.2.1).
- Surface water migration—overland/flood component.
  - –Hazardous substances that meet the criteria for an observed release to surface water in the watershed being evaluated.
  - –All hazardous substances associated with a source with a surface water containment factor value greater than 0 for the watershed (see sections 4.1.2.1.2.1.1 and 4.1.2.1.2.2.1).
- Surface water migration—ground water to surface water component.
  - –Hazardous substances that meet the criteria for an observed release to ground water.
  - –All hazardous substances associated with a source with a ground water containment factor value greater than 0 (see sections 4.2.2.1.2 and 3.1.2.1).
- Air migration.
  - –Hazardous substances that meet the criteria for an observed release to the atmosphere.
  - –All gaseous hazardous substances associated with a source with a gas containment factor value greater than 0 (see section 6.1.2.1.1).
  - –All particulate hazardous substances associated with a source with a particulate containment factor value greater than 0 (see section 6.1.2.2.1).
- For each migration pathway, in those instances when the specific source(s) containing the hazardous substance cannot be documented, consider that hazardous substance to be available to migrate to the pathway when it can be associated (see section 2.2.2) with at least one source having a containment factor value greater than 0 for that pathway.

In evaluating the soil exposure pathway, consider the following hazardous substances available to the pathway:

• Soil exposure—resident population threat.

–All hazardous substances that meet the criteria for observed contamination at the site (see section 5.0.1).

• Soil exposure—nearby population threat.

–All hazardous substances that meet the criteria for observed contamination at areas with an attractiveness/accessibility factor value greater than 0 (see section 5.2.1.1).

2.3 *Likelihood of release.* Likelihood of release is a measure of the likelihood that a waste has been or will be released to the environment. The likelihood of release factor category is assigned the maximum value of 550 for a migration pathway whenever the criteria for an observed release are met for that pathway. If the criteria for an observed release are met, do not evaluate potential to release for that pathway. When the criteria for an observed release are not met, evaluate potential to release for that pathway, with a maximum value of 500. The evaluation of potential to release varies by migration pathway (see sections 3, 4 and 6).

Establish an observed release either by direct observation of the release of a hazardous substance into the media being evaluated (for example, surface water) or by chemical analysis of samples appropriate to the pathway being evaluated (see sections 3, 4, and 6). The minimum standard to establish an observed release by chemical analysis is analytical evidence of a hazardous substance in the media significantly above the background level. Further, some portion of the release must be attributable to the site. Use the criteria in Table 2–3 as the standard for determining analytical significance. (The criteria in Table 2–3 are also used in establishing observed contamination for the soil exposure pathway, see section 5.0.1.) Separate criteria apply to radionuclides (see section 7.1.1).

TABLE 2–3.—OBSERVED RELEASE CRITERIA FOR CHEMICAL ANALYSIS

Sample Measurement < Sample Quantitation Limit [a]

No observed release is established.

Sample Measurement ≥ SAMPLE QUANTITATION LIMIT [a]

An observed release is established as follows:

• If the background concentration is not detected (or is less than the detection limit), an observed release is established when the sample measurement equals or exceeds the sample quantitation limit.[a]

• If the background concentration equals or exceeds the detection limit, an observed release is established when the sample measurement is 3 times or more above the background concentration.

[a] If the sample quantitation limit (SQL) cannot be established, determined if there is an observed release as follows:

—If the sample analysis was performed under the EPA Contract Laboratory Program, use the EPA contract-required quantitation limit (CRQL) in place of the SQL.

—If the sample analysis is not performed under the EPA Contract Laboratory Program, use the detection limit (DL) in place of the SQL.

2.4 *Waste characteristics.* The waste characteristics factor category includes the following factors: hazardous waste quantity, toxicity, and as appropriate to the pathway or threat being evaluated, mobility, persistence, and/or bioaccumulation (or ecosystem bioaccumulation) potential.

2.4.1 *Selection of substance potentially posing greatest hazard.* For all pathways (and threats), select the hazardous substance potentially posing the greatest hazard for the pathway (or threat) and use that substance in evaluating the waste characteristics category of the pathway (or threat). For the three migration pathways (and threats), base the selection of this hazardous substance on the toxicity factor value for the substance, combined with its mobility, persistence, and/or bioaccumulation (or ecosystem bioaccumulation) potential factor values, as applicable to the migration pathway (or threat). For the soil exposure pathway, base the selection on the toxicity factor alone.

Evaluation of the toxicity factor is specified in section 2.4.1.1. Use and evaluation of the mobility, persistence, and/or bioaccumulation (or ecosystem bioaccumulation) potential factors vary by pathway (or threat) and are specified under the appropriate pathway (or threat) section. Section 2.4.1.2 identifies the specific factors that are combined with toxicity in evaluating each pathway (or threat).

2.4.1.1 *Toxicity factor.* Evaluate toxicity for those hazardous substances at the site that are available to the pathway being scored. For all pathways and threats, except the surface water environmental threat, evaluate human toxicity as specified below. For the surface water environmental threat, evaluate ecosystem toxicity as specified in section 4.1.4.2.1.1.

Establish human toxicity factor values based on quantitative dose-response parameters for the following three types of toxicity:

• Cancer– –Use slope factors (also referred to as cancer potency factors) combined with weight-of-evidence ratings for carcinogenicity. If a slope factor is not available for a substance, use its ED_{10} value to estimate a slope factor as follows:

$$\text{Slope factor} = \frac{1}{6\ (ED_{10})}$$

• Noncancer toxicological responses of chronic exposure– –use reference dose (RfD) values.

• Noncancer toxicological responses of acute exposure– –use acute toxicity parameters, such as the LD_{50}.

Assign human toxicity factor values to a hazardous substance using Table 2–4, as follows:

• If RfD and slope factor values are both available for the hazardous substance, assign the substance a value from Table 2–4 for each. Select the higher of the two values assigned and use it as the overall toxicity factor value for the hazardous substance.

• If either an RfD or slope factor value is available, but not both, assign the hazardous substance an overall toxicity factor value from Table 2–4 based solely on the available value (RfD or slope factor).

• If neither an RfD nor slope factor value is available, assign the hazardous substance an overall toxicity factor value from Table 2–4 based solely on acute toxicity. That is, consider acute toxicity in Table 2–4 only when both RfD and slope factor values are not available.

• If neither an RfD, nor slope factor, nor acute toxicity value is available, assign the hazardous substance an overall toxicity factor value of 0 and use other hazardous substances for which information is available in evaluating the pathway.

TABLE 2–4.—TOXICITY FACTOR EVALUATION

Chronic Toxicity (Human)

Reference dose (RfD) (mg/kg-day)	Assigned value
RfD < 0.0005	10,000
0.0005 ≤ RfD < 0.005	1,000
0.005 ≤ RfD < 0.05	100
0.05 ≤ RfD < 0.5	10
0.5 ≤ RfD	1
RfD not available	0

Carcinogenicity (Human)

Weight-of-evidence[a]/slope factor (mg/kg-day)$^{-1}$			Assigned value
A	B	C	
0.5 ≤ SF[b]	5 ≤ SF	50 ≤ SF	10,000
0.05 ≤ SF < 0.5	0.5 ≤ SF < 5	5 ≤ SF < 50	1,000
SF < 0.05	0.05 ≤ SF < 0.5	0.5 ≤ SF < 5	100
— — —	SF < 0.05	SF < 0.5	10
Slope factor not available.	Slope factor not available.	Slope factor not available.	0

[a] A, B, and C refer to weight-of-evidence categories. Assign substances with a weight-of-evidence category of D (inadequate evidence of carcinogenicity) or E (evidence of lack of carcinogenicity) a value of 0 for carcinogenicity.

[b] SF = Slope factor.

TABLE 2-4.—TOXICITY FACTOR EVALUATION—CONCLUDED

Acute Toxicity (Human)

Oral LD_{50} (mg/kg)	Dermal LD_{50} (mg/kg)	Dust or mist LC_{50} (mg/l)	Gas or vapor LC_{50} (ppm)	Assigned value
— — —	— — —	— — —	— — —	— — —
$LD_{50} < 5$	$LD_{50} < 2$	$LC_{50} < 0.2$	$LC_{50} < 20$	1,000
$5 \leq LD_{50} < 50$	$2 \leq LD_{50} < 20$	$0.2 \leq LC_{50} < 2$	$20 \leq LC_{50} < 200$	100
$50 \leq LD_{50} < 500$	$20 \leq LD_{50} < 200$	$2 \leq LC_{50} < 20$	$200 \leq LC_{50} < 2,000$	10
$500 \leq LD_{50}$	$200 \leq LD_{50}$	$20 \leq LC_{50}$	$2,000 \leq LC_{50}$	1
LD_{50} not available	LD_{50} not available	LC_{50} not available	LC_{50} not available	0

If a toxicity factor value of 0 is assigned to all hazardous substances available to a particular pathway (that is, insufficient toxicity data are available for evaluating all the substances), use a default value of 100 as the overall human toxicity factor value for all hazardous substances available to the pathway. For hazardous substances having usable toxicity data for multiple exposure routes (for example, inhalation and ingestion), consider all exposure routes and use the highest assigned value, regardless of exposure route, as the toxicity factor value.

For HRS purposes, assign both asbestos and lead (and its compounds) a human toxicity factor value of 10,000.

Separate criteria apply for assigning factor values for human toxicity and ecosystem toxicity for radionuclides (see sections 7.2.1 and 7.2.2).

2.4.1.2 *Hazardous substance selection.* For each hazardous substance evaluated for a migration pathway (or threat), combine the human toxicity factor value (or ecosystem toxicity factor value) for the hazardous substance with a mobility, persistence, and/or bioaccumulation (or ecosystem bioaccumulation) potential factor value as follows:

- Ground water migration.
  - –Determine a combined human toxicity/mobility factor value for the hazardous substance (see section 3.2.1).
- Surface water migration-overland/flood migration component.
  - –Determine a combined human toxicity/persistence factor value for the hazardous substance for the drinking water threat (see section 4.1.2.2.1).
  - –Determine a combined human toxicity/persistence/bioaccumulation factor value for the hazardous substance for the human food chain threat (see section 4.1.3.2.1).
  - –Determine a combined ecosystem toxicity/persistence/bioaccumulation factor value for the hazardous substance for the environmental threat (see section 4.1.4.2.1).
- Surface water migration-ground water to surface water migration component.
  - –Determine a combined human toxicity/mobility/persistence factor value for the hazardous substance for the drinking water threat (see section 4.2.2.2.1).
  - –Determine a combined human toxicity/mobility/persistence/bioaccumulation factor value for the hazardous substance for the human food chain threat (see section 4.2.3.2.1).
  - –Determine a combined ecosystem toxicity/mobility/persistence/bioaccumulation factor value for the hazardous substance for the environmental threat (see section 4.2.4.2.1).
- Air migration.
  - –Determine a combined human toxicity/mobility factor value for the hazardous substance (see section 6.2.1).

Determine each combined factor value for a hazardous substance by multiplying the individual factor values appropriate to the pathway (or threat). For each migration pathway (or threat) being evaluated, select the hazardous substance with the highest combined factor value and use that substance in evaluating the waste characteristics factor category of the pathway (or threat).

For the soil exposure pathway, select the hazardous substance with the highest human toxicity factor value from among the substances that meet the criteria for observed contamination for the threat evaluated and use that substance in evaluating the waste characteristics factor category.

2.4.2 *Hazardous waste quantity.* Evaluate the hazardous waste quantity factor by first assigning each source (or area of observed contamination) a source hazardous waste quantity value as specified below. Sum these values to obtain the hazardous waste quantity factor value for the pathway being evaluated.

In evaluating the hazardous waste quantity factor for the three migration pathways, allocate hazardous substances and hazardous wastestreams to specific sources in the manner specified in section 2.2.2, except: consider hazardous substances and hazardous wastestreams that cannot be allocated to any specific source to constitute a separate "unallocated source" for purposes of evaluating only this factor for the three migration pathways. Do not, however, include a hazardous substance or hazardous wastestream in the unallocated source for a migration pathway if there is definitive information indicating that the substance or wastestream could only have been placed in sources with a containment factor value of 0 for that migration pathway.

In evaluating the hazardous waste quantity factor for the soil exposure pathway, allocate to each area of observed contamination only those hazardous substances that meet the criteria for observed contamination for that area of observed contamination and only those hazardous wastestreams that contain hazardous substances that meet the criteria for observed contamination for that area of observed contamination. Do not consider other hazardous substances or hazardous wastestreams at the site in evaluating this factor for the soil exposure pathway.

2.4.2.1 *Source hazardous waste quantity.* For each of the three migration pathways, assign a source hazardous waste quantity value to each source (including the unallocated source) having a containment factor value greater than 0 for the pathway being evaluated. Consider the unallocated source to have a containment factor value greater than 0 for each migration pathway.

For the soil exposure pathway, assign a source hazardous waste quantity value to each area of observed contamination, as applicable to the threat being evaluated.

For all pathways, evaluate source hazardous waste quantity using the following four measures in the following hierarchy:

- Hazardous constituent quantity.
- Hazardous wastestream quantity.
- Volume.
- Area.

For the unallocated source, use only the first two measures.

Separate criteria apply for assigning a source hazardous waste quantity value for radionuclides (see section 7.2.5).

2.4.2.1.1 *Hazardous constituent quantity.* Evaluate hazardous constituent quantity for the source (or area of observed contamination) based solely on the mass of CERCLA hazardous substances (as defined in CERCLA section 101(14), as amended) allocated to the source (or area of observed contamination), except:

- For a hazardous waste listed pursuant to section 3001 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. 6901 et seq., determine its mass for the evaluation of this measure as follows:
  - –If the hazardous waste is listed solely for Hazard Code T (toxic waste), include only the mass of constituents in the hazardous waste that are CERCLA hazardous substances and not the mass of the entire hazardous waste.
  - –If the hazardous waste is listed for any other Hazard Code (including T plus any other Hazard Code), include the mass of the entire hazardous waste.
- For a RCRA hazardous waste that exhibits the characteristics identified under section 3001 of RCRA, as amended, determine its mass for the evaluation of this measure as follows:

–If the hazardous waste exhibits only the characteristic of toxicity (or only the characteristic of EP toxicity), include only the mass of constituents in the hazardous waste that are CERCLA hazardous substances and not the mass of the entire hazardous waste.

–If the hazardous waste exhibits any other characteristic identified under section 3001 (including any other characteristic plus the characteristic of toxicity [or the characteristic of EP toxicity]), include the mass of the entire hazardous waste.

Based on this mass, designated as C, assign a value for hazardous constituent quantity as follows:

• For the migration pathways, assign the source a value for hazardous constituent quantity using the Tier A equation of Table 2–5.

• For the soil exposure pathway, assign the area of observed contamination a value using the Tier A equation of Table 5–2 (section 5.1.2.2).

If the hazardous constituent quantity for the source (or area of observed contamination) is adequately determined (that is, the total mass of all CERCLA hazardous substances in the source and releases from the source [or in the area of observed contamination] is known or is estimated with reasonable confidence), do not evaluate the other three measures discussed below. Instead assign these other three measures a value of 0 for the source (or area of observed contamination) and proceed to section 2.4.2.1.5.

If the hazardous constituent quantity is not adequately determined, assign the source (or area of observed contamination) a value for hazardous constituent quantity based on the available data and proceed to section 2.4.2.1.2.

TABLE 2–5.—HAZARDOUS WASTE QUANTITY EVALUATION EQUATIONS

Tier	Measure	Units	Equation for assigning value [a]
A	**Hazardous constituent quantity (C)**	lb	C
B [b]	**Hazardous wastestream quantity (W)**	lb	W/5,000
C [b]	**Volume (V)**		
	Landfill	yd^3	V/2,500
	Surface impoundment	yd^3	V/2.5
	Surface impoundment (buried/backfilled)	yd^3	V/2.5
	Drums [c]	gallon	V/500
	Tanks and containers other than drums	yd^3	V/2.5
	Contaminated soil	yd^3	V/2,500
	Pile	yd^3	V/2.5
	Other	yd^3	V/2.5
D [b]	**Area (A)**		
	Landfill	ft^2	A/3,400
	Surface impoundment	ft^2	A/13
	Surface impoundment (buried/backfilled)	ft^2	A/13
	Land treatment	ft^2	A/270
	Pile [d]	ft^2	A/13
	Contaminated soil	ft^2	A/34,000

[a] Do not round to nearest integer.
[b] Convert volume to mass when necessary: 1 ton=2,000 pounds=1 cubic yard=4 drums=200 gallons.
[c] If actual volume of drums is unavailable, assume 1 drum=50 gallons.
[d] Use land surface area under pile, not surface area of pile.

2.4.2.1.2 *Hazardous wastestream quantity.* Evaluate hazardous wastestream quantity for the source (or area of observed contamination) based on the mass of hazardous wastestreams plus the mass of any additional CERCLA pollutants and contaminants (as defined in CERCLA section 101[33], as amended) that are allocated to the source (or area of observed contamination). For a wastestream that consists solely of a hazardous waste listed pursuant to section 3001 of RCRA, as amended or that consists solely of a RCRA hazardous waste that exhibits the characteristics identified under section 3001 of RCRA, as amended, include the mass of that entire hazardous waste in the evaluation of this measure.

Based on this mass, designated as W, assign a value for hazardous wastestream quantity as follows:

• For the migration pathways, assign the source a value for hazardous wastestream quantity using the Tier B equation of Table 2–5.

• For the soil exposure pathway, assign the area of observed contamination a value using the Tier B equation of Table 5–2 (section 5.1.2.2).

Do not evaluate the volume and area measures described below if the source is the unallocated source or if the following condition applies:

• The hazardous wastestream quantity for the source (or area of observed contamination) is adequately determined—that is, total mass of all hazardous wastestreams and CERCLA pollutants and contaminants for the source and releases from the source (or for the area of observed contamination) is known or is estimated with reasonable confidence.

If the source is the unallocated source or if this condition applies, assign the volume and area measures a value of 0 for the source (or area of observed contamination) and proceed to section 2.4.2.1.5. Otherwise, assign the source (or area of observed contamination) a value for hazardous wastestream quantity based on the available data and proceed to section 2.4.2.1.3.

2.4.2.1.3 *Volume.* Evaluate the volume measure using the volume of the source (or the volume of the area of observed contamination). For the soil exposure pathway, restrict the use of the volume measure to those areas of observed contamination specified in section 5.1.2.2.

Based on the volume, designated as V, assign a value to the volume measure as follows:

• For the migration pathways, assign the source a value for volume using the appropriate Tier C equation of Table 2–5.

• For the soil exposure pathway, assign the area of observed contamination a value for volume using the appropriate Tier C equation of Table 5–2 (section 5.1.2.2).

If the volume of the source (or volume of the area of observed contamination, if applicable) can be determined, do not evaluate the area measure. Instead, assign the area measure a value of 0 and proceed to section 2.4.2.1.5. If the volume cannot be determined (or is not applicable for the soil exposure pathway), assign the source (or area of observed contamination) a value of 0 for the volume measure and proceed to section 2.4.2.1.4.

2.4.2.1.4 *Area.* Evaluate the area measure using the area of the source (or the area of the area of observed contamination). Based on this area, designated as A, assign a value to the area measure as follows:

• For the migration pathways, assign the source a value for area using the appropriate Tier D equation of Table 2–5.

• For the soil exposure pathway, assign the area of observed contamination a value for area using the appropriate Tier D equation of Table 5–2 (section 5.1.2.2).

2.4.2.1.5 *Calculation of source hazardous waste quantity value.* Select the highest of the values assigned to the source (or area of observed contamination) for the hazardous constituent quantity, hazardous wastestream quantity, volume, and area measures. Assign this value as the source hazardous waste quantity value. Do not round to the nearest integer.

2.4.2.2 *Calculation of hazardous waste quantity factor value.* Sum the source hazardous waste quantity values assigned to all sources (including the unallocated source) or areas of observed contamination for the pathway being evaluated and round this sum to the nearest integer, except: if the sum is greater than 0, but less than 1, round it to 1. Based on this value, select a hazardous waste quantity factor value for the pathway from Table 2–6.

TABLE 2–6.—HAZARDOUS WASTE QUANTITY FACTOR VALUES

Hazardous waste quantity value	Assigned value
0	0
1 [a] to 100	1 [b]
Greater than 100 to 10,000	100
Greater than 10,000 to 1,000,000	10,000
Greater than 1,000,000	1,000,000

[a] If the hazardous waste quantity value is greater than 0, but less than 1, round it to 1 as specified in text.
[b] For the pathway, if hazardous constituent quantity is not adequately determined, assign a value as specified in the text; do not assign the value of 1.

For a migration pathway, if the hazardous constituent quantity is adequately determined (see section 2.4.2.1.1) for all sources (or all portions of sources and releases remaining after a removal action), assign the value from Table 2-6 as the hazardous waste quantity factor value for the pathway. If the hazardous constituent quantity is not adequately determined for one or more sources (or one or more portions of sources or releases remaining after a removal action) assign a factor value as follows:

• If any target for that migration pathway is subject to Level I or Level II concentrations (see section 2.5), assign either the value from Table 2-6 or a value of 100, whichever is greater, as the hazardous waste quantity factor value for that pathway.

• If none of the targets for that pathway is subject to Level I or Level II concentrations, assign a factor value as follows:

-If there has been no removal action, assign either the value from Table 2-6 or a value of 10, whichever is greater, as the hazardous waste quantity factor value for that pathway.

-If there has been a removal action:

--Determine values from Table 2-6 with and without consideration of the removal action.

--If the value that would be assigned from Table 2-6 without consideration of the removal action would be 100 or greater, assign either the value from Table 2-6 with consideration of the removal action or a value of 100, whichever is greater, as the hazardous waste quantity factor value for the pathway.

--If the value that would be assigned from Table 2-6 without consideration of the removal action would be less than 100, assign a value of 10 as the hazardous waste quantity factor value for the pathway.

For the soil exposure pathway, if the hazardous constituent quantity is adequately determined for all areas of observed contamination, assign the value from Table 2-6 as the hazardous waste quantity factor value. If the hazardous constituent quantity is not adequately determined for one or more areas of observed contamination, assign either the value from Table 2-6 or a value of 10, whichever is greater, as the hazardous waste quantity factor value.

2.4.3 *Waste characteristics factor category value.* Determine the waste characteristics factor category value as specified in section 2.4.3.1 for all pathways and threats, except the surface water-human food chain threat and the surface water-environmental threat. Determine the waste characteristics factor category value for these latter two threats as specified in section 2.4.3.2.

2.4.3.1 *Factor category value.* For the pathway (or threat) being evaluated, multiply the toxicity or combined factor value, as appropriate, from section 2.4.1.2 and the hazardous waste quantity factor value from section 2.4.2.2, subject to a maximum product of 1×10^8. Based on this waste characteristics product, assign a waste characteristics factor category value to the pathway (or threat) from Table 2-7.

TABLE 2-7.—WASTE CHARACTERISTICS FACTOR CATEGORY VALUES

Waste characteristics product	Assigned value
0	0
Greater than 0 to less than 10	1
10 to less than 1×10^2	2
1×10^2 to less than 1×10^3	3
1×10^3 to less than 1×10^4	6
1×10^4 to less than 1×10^5	10
1×10^5 to less than 1×10^6	18
1×10^6 to less than 1×10^7	32
1×10^7 to less than 1×10^8	56
1×10^8 to less than 1×10^9	100
1×10^9 to less than 1×10^{10}	180
1×10^{10} to less than 1×10^{11}	320
1×10^{11} to less than 1×10^{12}	560
1×10^{12}	1,000

2.4.3.2 *Factor category value, considering bioaccumulation potential.* For the surface water-human food chain threat and the surface water-environmental threat, multiply the toxicity or combined factor value, as appropriate, from section 2.4.1.2 and the hazardous waste quantity factor value from section 2.4.2.2, subject to:

• A maximum product of 1×10^{12}, *and*

• A maximum product exclusive of the bioaccumulation (or ecosystem bioaccumulation) potential factor of 1×10^8.

Based on the total waste characteristics product, assign a waste characteristics factor category value to these threats from Table 2-7.

2.5 *Targets.*

The types of targets evaluated include the following:

• Individual (factor name varies by pathway and threat).

• Human population.

• Resources (these vary by pathway and threat).

• Sensitive environments (included for all pathways except ground water migration).

The factor values that may be assigned to each type of target have the same range for each pathway for which that type of target is evaluated. The factor value for most types of targets depends on whether the target is subject to actual or potential contamination for the pathway and whether the actual contamination is Level I or Level II:

• Actual contamination: Target is associated either with a sampling location that meets the criteria for an observed release (or observed contamination) for the pathway or with an observed release based on direct observation for the pathway (additional criteria apply for establishing actual contamination for the human food chain threat in the surface water migration pathway, see sections 4.1.3.3 and 4.2.3.3). sections 3 through 6 specify how to determine the targets associated with a sampling location or with an observed release based on direct observation. Determine whether the actual contamination is Level I or Level II as follows:

-Level I:

--Media-specific concentrations for the target meet the criteria for an observed release (or observed contamination) for the pathway and are at or above media-specific benchmark values. These benchmark values (see section 2.5.2) include both screening concentrations and concentrations specified in regulatory limits (such as Maximum Contaminant Level (MCL) values), or

--For the human food chain threat in the surface water migration pathway, concentrations in tissue samples from aquatic human food chain organisms are at or above benchmark values. Such tissue samples may be used in addition to media-specific concentrations only as specified in sections 4.1.3.3 and 4.2.3.3.

-Level II:

--Media-specific concentrations for the target meet the criteria for an observed release (or observed contamination) for the pathway, but are less than media-specific benchmarks. If none of the hazardous substances eligible to be evaluated for the sampling location has an applicable benchmark, assign Level II to the actual contamination at the sampling location, or

--For observed releases based on direct observation, assign Level II to targets as specified in sections 3, 4, and 6, or

--For the human food chain threat in the surface water migration pathway, concentrations in tissue samples from aquatic human food chain organisms, when applicable, are below benchmark values.

-If a target is subject to both Level I and Level II concentrations for a pathway (or threat), evaluate the target using Level I concentrations for that pathway (or threat).

• Potential contamination: Target is subject to a potential release (that is, target is not associated with actual contamination for that pathway or threat).

Assign a factor value for individual risk as follows (select the highest value that applies to the pathway or threat):

• 50 points if any individual is exposed to Level I concentrations.

• 45 points if any individual is exposed to Level II concentrations.

• Maximum of 20 points if any individual is subject to potential contamination. The value assigned is 20 multiplied by the distance or dilution weight appropriate to the pathway.

Assign factor values for population and sensitive environments as follows:

• Sum Level I targets and multiply by 10. (Level I is not used for sensitive environments in the soil exposure and air migration pathways.)

• Sum Level II targets.

• Multiply potential targets by distance or dilution weights appropriate to the pathway, sum, and divide by 10. Distance or dilution weighting accounts for diminishing exposure

with increasing distance or dilution within the different pathways.

• Sum the values for the three levels.

In addition, resource value points are assigned within all pathways for welfare-related impacts (for example, impacts to agricultural land), but do not depend on whether there is actual or potential contamination.

2.5.1 *Determination of level of actual contamination at a sampling location.* Determine whether Level I concentrations or Level II concentrations apply at a sampling location (and thus to the associated targets) as follows:

• Select the benchmarks applicable to the pathway (or threat) being evaluated.

• Compare the concentrations of hazardous substances in the sample (or comparable samples) to their benchmark concentrations for the pathway (or threat), as specified in section 2.5.2.

• Determine which level applies based on this comparison.

• If none of the hazardous substances eligible to be evaluated for the sampling location has an applicable benchmark, assign Level II to the actual contamination at that sampling location for the pathway (or threat).

In making the comparison, consider only those samples, and only those hazardous substances in the sample, that meet the criteria for an observed release (or observed contamination) for the pathway, except: tissue samples from aquatic human food chain organisms may also be used as specified in sections 4.1.3.3 and 4.2.3.3 of the surface water-human food chain threat. If any hazardous substance is present in more than one comparable sample for the sampling location, use the highest concentration of that hazardous substance from any of the comparable samples in making the comparisons.

Treat sets of samples that are not comparable separately and make a separate comparison for each such set.

2.5.2 *Comparison to benchmarks.* Use the following media-specific benchmarks for making the comparisons for the indicated pathway (or threat):

• Maximum Contaminant Level Goals (MCLGs)—ground water migration pathway and drinking water threat in surface water migration pathway. Use only MCLG values greater than 0.

• Maximum Contaminant Levels (MCLs)—ground water migration pathway and drinking water threat in surface water migration pathway.

• Food and Drug Administration Action Level (FDAAL) for fish or shellfish—human food chain threat in surface water migration pathway.

• EPA Ambient Water Quality Criteria (AWQC) for protection of aquatic life—environmental threat in surface water migration pathway.

• EPA Ambient Aquatic Life Advisory Concentrations (AALAC)—environmental threat in surface water migration pathway.

• National Ambient Air Quality Standards (NAAQS)—air migration pathway.

• National Emission Standards for Hazardous Air Pollutants (NESHAPs)—air migration pathway. Use only those NESHAPs promulgated in ambient concentration units.

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• Screening concentration for cancer corresponding to that concentration that corresponds to the 10^{-6} individual cancer risk for inhalation exposures (air migration pathway) or for oral exposures (ground water migration pathway; drinking water and human food chain threats in surface water migration pathway; and soil exposure pathway).

• Screening concentration for noncancer toxicological responses corresponding to the RfD for inhalation exposures (air migration pathway) or for oral exposures (ground water migration pathway; drinking water and human food chain threats in surface water migration pathway; and soil exposure pathway).

Select the benchmark(s) applicable to the pathway (or threat) being evaluated as specified in sections 3 through 6. Compare the concentration of each hazardous substance from the sampling location to its benchmark concentration(s) for that pathway (or threat). Use only those samples and only those hazardous substances in the sample that meet the criteria for an observed release (or observed contamination) for the pathway, except: tissue samples from aquatic human food chain organisms may be used as specified in sections 4.1.3.3 and 4.2.3.3. If the concentration of any applicable hazardous substance from any sample equals or exceeds its benchmark concentration, consider the sampling location to be subject to Level I concentrations for that pathway (or threat). If more than one benchmark applies to the hazardous substance, assign Level I if the concentration of the hazardous substance equals or exceeds the lowest applicable benchmark concentration.

If no hazardous substance individually equals or exceeds its benchmark concentration, but more than one hazardous substance either meets the criteria for an observed release (or observed contamination) for the sample (or comparable samples) or is eligible to be evaluated for a tissue sample (see sections 4.1.3.3 and 4.2.3.3), calculate the indices I and J specified below based on these hazardous substances.

For those hazardous substances that are carcinogens (that is, those having a carcinogen weight-of-evidence classification of A, B, or C), calculate an index I for the sample location as follows:

$$I = \sum_{i=1}^{n} \frac{C_i}{SC_i}$$

where:

C_i = Concentration of hazardous substance i in sample (or highest concentration of hazardous substance i from among comparable samples).

SC_i = Screening concentration for cancer corresponding to that concentration that corresponds to its 10^{-6} individual cancer risk for applicable exposure (inhalation or oral) for hazardous substance i.

n = Number of applicable hazardous substances in sample (or comparable samples) that are carcinogens and for which an SC_i is available.

For those hazardous substances for which an RfD is available, calculate an index J for the sample location as follows:

$$J = \sum_{j=1}^{m} \frac{C_j}{CR_j}$$

where:

C_j = Concentration of hazardous substance j in sample (or highest concentration of hazardous substance j from among comparable samples).

CR_j = Screening concentration for noncancer toxicological responses corresponding to RfD for applicable exposure (inhalation or oral) for hazardous substance j.

m = Number of applicable hazardous substances in sample (or comparable samples) for which a CR_j is available.

If either I or J equals or exceeds 1, consider the sampling location to be subject to Level I concentrations for that pathway (or threat). If both I and J are less than 1, consider the sampling location to be subject to Level II concentrations for that pathway (or threat). If, for the sampling location, there are sets of samples that are not comparable, calculate I and J separately for each such set, and use the highest calculated values of I and J to assign Level I and Level II.

See sections 7.3.1 and 7.3.2 for criteria for determining the level of contamination for radioactive substances.

3.0 Ground Water Migration Pathway

Evaluate the ground water migration pathway based on three factor categories: likelihood of release, waste characteristics, and targets. Figure 3-1 indicates the factors included within each factor category.

Determine the ground water migration pathway score (S_{gw}) in terms of the factor category values as follows:

$$S_{gw} = \frac{(LR)\,(WC)\,(T)}{SF}$$

where:

LR = Likelihood of release factor category value.

WC = Waste characteristics factor category value.

T = Targets factor category value.

SF = Scaling factor.

Table 3-1 outlines the specific calculation procedure.

Calculate a separate ground water migration pathway score for each aquifer, using the factor category values for that aquifer for likelihood of release, waste characteristics, and targets. In doing so, include both the targets using water from that aquifer and the targets using water from all overlying aquifers through which the hazardous substances would migrate to reach the aquifer being evaluated. Assign the highest ground water migration pathway score that results for any aquifer as the ground water migration pathway score for the site.

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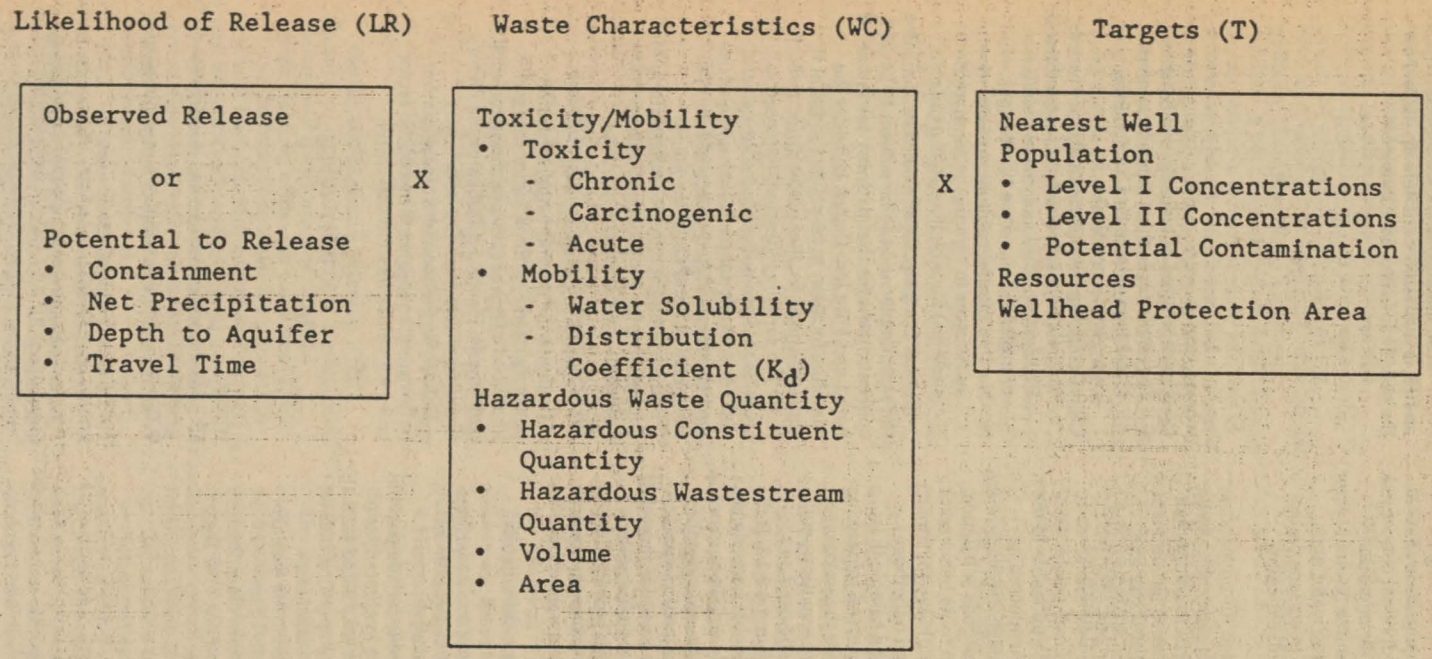

FIGURE 3-1
OVERVIEW OF GROUND WATER MIGRATION PATHWAY

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TABLE 3-1.—GROUND WATER MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum value	Value assigned
Likelihood of Release to an Aquifer:		
1. Observed Release	550	___
2. Potential to Release:		
2a. Containment	10	___
2b. Net Precipitation	10	___
2c. Depth to Aquifer	5	___
2d. Travel Time	35	___
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	___
3. Likelihood of Release (higher of lines 1 and 2e)	550	___
Waste Characteristics:		
4. Toxicity/Mobility	(a)	___
5. Hazardous Waste Quantity	(a)	___
6. Waste Characteristics	100	___
Targets:		
7. Nearest Well	50	___
8. Population:		
8a. Level I Concentrations	(b)	___
8b. Level II Concentrations	(b)	___
8c. Potential Contamination	(b)	___
8d. Population (lines 8a+8b+8c)	(b)	___
9. Resources	5	___
10. Wellhead Protection Area	20	___
11. Targets (lines 7+8d+9+10)	(b)	___
Ground Water Migration Score for an Aquifer:		
12. Aquifer Score [(lines 3 x 6 x 11)/82,500] [c]	100	___
Ground Water Migration Pathway Score:		
13. Pathway Score (S_{gw}), (highest value from line 12 for all aquifers evaluated)[c]	100	___

[a] Maximum value applies to waste characteristics category.
[b] Maximum value not applicable.
[c] Do not round to nearest integer.

3.0.1 *General considerations*

3.0.1.1 *Ground water target distance limit.* The target distance limit defines the maximum distance from the sources at the site over which targets are evaluated. Use a target distance limit of 4 miles for the ground water migration pathway, except when aquifer discontinuities apply (see section 3.0.1.2.2). Furthermore, consider any well with an observed release from a source at the site (see section 3.1.1) to lie within the target distance limit of the site, regardless of the well's distance from the sources at the site.

For sites that consist solely of a contaminated ground water plume with no identified source, begin measuring the 4-mile target distance limit at the center of the area of observed ground water contamination. Determine the area of observed ground water contamination based on available samples that meet the criteria for an observed release.

3.0.1.2 *Aquifer boundaries.* Combine multiple aquifers into a single hydrologic unit for scoring purposes if aquifer interconnections can be established for these aquifers. In contrast, restrict aquifer boundaries if aquifer discontinuities can be established.

3.0.1.2.1 *Aquifer interconnections.* Evaluate whether aquifer interconnections occur within 2 miles of the sources at the site. If they occur within this 2-mile distance, combine the aquifers having interconnections in scoring the site. In addition, if observed ground water contamination attributable to the sources at the site extends beyond 2 miles from the sources, use any locations within the limits of this observed ground water contamination in evaluating aquifer interconnections. If data are not adequate to establish aquifer interconnections, evaluate the aquifers as separate aquifers.

3.0.1.2.2 *Aquifer discontinuities.* Evaluate whether aquifer discontinuities occur within the 4-mile target distance limit. An aquifer discontinuity occurs for scoring purposes only when a geologic, topographic, or other structure or feature entirely transects an aquifer within the 4-mile target distance limit, thereby creating a continuous boundary to ground water flow within this limit. If two or more aquifers can be combined into a single hydrologic unit for scoring purposes, an aquifer discontinuity occurs only when the structure or feature entirely transects the boundaries of this single hydrologic unit.

When an aquifer discontinuity is established within the 4-mile target distance limit, exclude that portion of the aquifer beyond the discontinuity in evaluating the ground water migration pathway. However, if hazardous substances have migrated across an apparent discontinuity within the 4-mile target distance limit, do not consider this to be a discontinuity in scoring the site.

3.0.1.3 *Karst aquifer.* Give a karst aquifer that underlies any portion of the sources at the site special consideration in the evaluation of two potential to release factors (depth to aquifer in section 3.1.2.3 and travel time in section 3.1.2.4), one waste characteristics factor (mobility in section 3.2.1.2), and two targets factors (nearest well in section 3.3.1 and potential contamination in section 3.3.2.4).

3.1 *Likelihood of release.* For an aquifer, evaluate the likelihood of release factor category in terms of an observed release factor or a potential to release factor.

3.1.1 *Observed release.* Establish an observed release to an aquifer by demonstrating that the site has released a hazardous substance to the aquifer. Base this demonstration on either:

- Direct observation—a material that contains one or more hazardous substances has been deposited into or has been observed entering the aquifer.
- Chemical analysis—an analysis of ground water samples from the aquifer indicates that the concentration of hazardous substance(s) has increased significantly above the background concentration for the site (see section 2.3). Some portion of the significant increase must be attributable to the site to establish the observed release, except: when the source itself consists of a ground water plume with no identified source, no separate attribution is required.

If an observed release can be established for the aquifer, assign the aquifer an observed release factor value of 550, enter this value in Table 3-1, and proceed to section 3.1.3. If an observed release cannot be established for the aquifer, assign an observed release factor value of 0, enter this value in Table 3-1, and proceed to section 3.1.2.

3.1.2 *Potential to release.* Evaluate potential to release only if an observed release cannot be established for the aquifer. Evaluate potential to release based on four factors: containment, net precipitation, depth to aquifer, and travel time. For sources overlying karst terrain, give any karst aquifer that underlies any portion of the sources at the site special consideration in evaluating depth to aquifer and travel time, as specified in sections 3.1.2.3 and 3.1.2.4.

3.1.2.1 *Containment.* Assign a containment factor value from Table 3-2 to each source at the site. Select the highest containment factor value assigned to those sources with a source hazardous waste quantity value of 0.5 or more (see section

2.4.2.1.5). (Do not include this minimum size requirement in evaluating any other factor of this pathway.) Assign this highest value as the containment factor value for the aquifer being evaluated. Enter this value in Table 3-1.

If no source at the site meets the minimum size requirement, then select the highest value assigned to the sources at the site and assign it as the containment factor value for the aquifer being evaluated. Enter this value in Table 3-1.

3.1.2.2 *Net precipitation.* Assign a net precipitation factor value to the site. Figure 3-2 provides computed net precipitation factor values, based on site location. Where necessary, determine the net precipitation factor value as follows:

- Determine monthly precipitation and monthly evapotranspiration:
  - –Use local measured monthly averages.
  - –When local data are not available, use monthly averages from the nearest National Oceanographic and Atmospheric Administration weather station that is in a similar geographic setting.

TABLE 3-2.—CONTAINMENT FACTOR VALUES FOR GROUND WATER MIGRATION PATHWAY

Source	Assigned value
All Sources (Except Surface Impoundments, Land Treatment, Containers, and Tanks)	
Evidence of hazardous substance migration from source area (i.e., source area includes source and any associated containment structures).	10
No liner	10
No evidence of hazardous substance migration from source area, a liner, *and*:	
(a) None of the following present: (1) maintained engineered cover, or (2) functioning and maintained run-on control system and runoff management system, or (3) functioning leachate collection and removal system immediately above liner.	10
(b) Any one of the three items in (a) present	9
(c) Any two of the items in (a) present	7
(d) All three items in (a) present plus a functioning ground water monitoring system	5
(e) All items in (d) present, plus no bulk or non-containerized liquids nor materials containing free liquids deposited in source area.	3
No evidence of hazardous substance migration from source area, double liner with functioning leachate collection and removal system above and between liners, functioning ground water monitoring system, *and*:	
(f) Only one of the following deficiencies present in containment: (1) bulk or noncontainerized liquids or materials containing free liquids deposited in source area, or (2) no or nonfunctioning or nonmaintained run-on control system and runoff management system, or (3) no or nonmaintained engineered cover.	3
(g) None of the deficiencies in (f) present	0
Source area inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate is generated, liquids or materials containing free liquids not deposited in source area, and functioning and maintained run-on control present.	0
Surface Impoundment	
Evidence of hazardous substance migration from surface impoundment	10
No liner	10
Free liquids present with either no diking, unsound diking, or diking that is not regularly inspected and maintained	10
No evidence of hazardous substance migration from surface impoundment, free liquids present, sound diking that is regularly inspected and maintained, adequate freeboard, *and*:	
(a) Liner	9
(b) Liner with functioning leachate collection and removal system below liner, and functioning ground water monitoring system.	5
(c) Double liner with functioning leachate collection and removal system between liners, and functioning ground water monitoring system.	3
No evidence of hazardous substance migration from surface impoundment and all free liquids eliminated at closure (either by removal of liquids or solidification of remaining wastes and waste residues).	Evaluate using **All sources** criteria (with no bulk or free liquid deposited).
Land Treatment	
Evidence of hazardous substance migration from land treatment zone	10
No functioning, maintained, run-on control and runoff management system	10
No evidence of hazardous substance migration from land treatment zone *and*:	
(a) Functioning and maintained run-on control and runoff management system	7
(b) Functioning and maintained run-on control and runoff management system, and vegetative cover established over entire land treatment area.	5
(c) Land treatment area maintained in compliance with 40 CFR 264.280	0

TABLE 3-2.—CONTAINMENT FACTOR VALUES FOR GROUND WATER MIGRATION PATHWAY—Continued

Source	Assigned value
Containers	
All containers buried	Evaluate using **All sources** criteria.
Evidence of hazardous substance migration from container area (i.e., container area includes containers and any associated containment structures).	10
No liner (or no essentially impervious base) under container area	10
No diking (or no similar structure) surrounding container area	10
Diking surrounding container area unsound or not regularly inspected and maintained	10
No evidence of hazardous substance migration from container area, container area surrounded by sound diking that is regularly inspected and maintained, *and*:	
(a) Liner (or essentially impervious base) under container area	9
(b) Essentially impervious base under container area with liquids collection and removal system	7
(c) Containment system includes essentially impervious base, liquids collection system, sufficient capacity to contain 10 percent of volume of all containers, and functioning and maintained run-on control; plus functioning ground water monitoring system, and spilled or leaked hazardous substances and accumulated precipitation removed in timely manner to prevent overflow of collection system, at least weekly inspection of containers, hazardous substances in leaking or deteriorating containers transferred to containers in good condition, and containers sealed except when waste is added or removed.	5
(d) Free liquids present, containment system has sufficient capacity to hold total volume of all containers and to provide adequate freeboard, single liner under container area with functioning leachate collection and removal system below liner, and functioning ground water monitoring system.	5
(e) Same as (d) except: double liner under container area with functioning leachate collection and removal system between liners.	3
Containers inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate would be generated from any unsealed or ruptured containers, liquids or materials containing free liquids not deposited in any container, and functioning and maintained run-off control present.	0
No evidence of hazardous substance migration from container area, containers leaking, and all free liquids eliminated at closure (either by removal of liquid or solidification of remaining wastes and waste residues).	Evaluate using **All sources** criteria (with no bulk or free liquid deposited).
Tank	
Below-ground tank	Evaluate using **All sources** criteria.
Evidence of hazardous substance migration from tank area (i.e., tank area includes tank, ancillary equipment such as piping, and any associated containment structures).	10
Tank and ancillary equipment not provided with secondary containment (e.g., liner under tank area, vault system, double wall).	10
No diking (or no similar structure) surrounding tank and ancillary equipment	10
Diking surrounding tank and ancillary equipment unsound or not regularly inspected and maintained	10
No evidence of hazardous substance migration from tank area, tank and ancillary equipment surrounded by sound diking that is regularly inspected and maintained, *and*:	
(a) Tank and ancillary equipment provided with secondary containment	9
(b) Tank and ancillary equipment provided with secondary containment with leak detection and collection system.	7
(c) Tank and ancillary equipment provided with secondary containment system that detects and collects spilled or leaked hazardous substances and accumulated precipitation and has sufficient capacity to contain 110 percent of volume of largest tank within containment area, spilled or leaked hazardous substances and accumulated precipitation removed in timely manner, at least weekly inspection of tank and secondary containment system, all leaking or unfit-for-use tank systems promptly responded to, and functioning ground water monitoring system.	5
(d) Containment system has sufficient capacity to hold volume of all tanks within tank containment area and to provide adequate freeboard, single liner under that containment area with functioning leachate collection and removal system below liner, and functioning ground water monitoring system.	5
(e) Same as (d) except: double liner under tank containment area with functioning leachate collection and removal system between liners.	3
Tank is above ground, and inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate would be generated from any material released from tank, liquids or materials containing free liquids not deposited in any tank, and functioning and maintained run-on control present.	0

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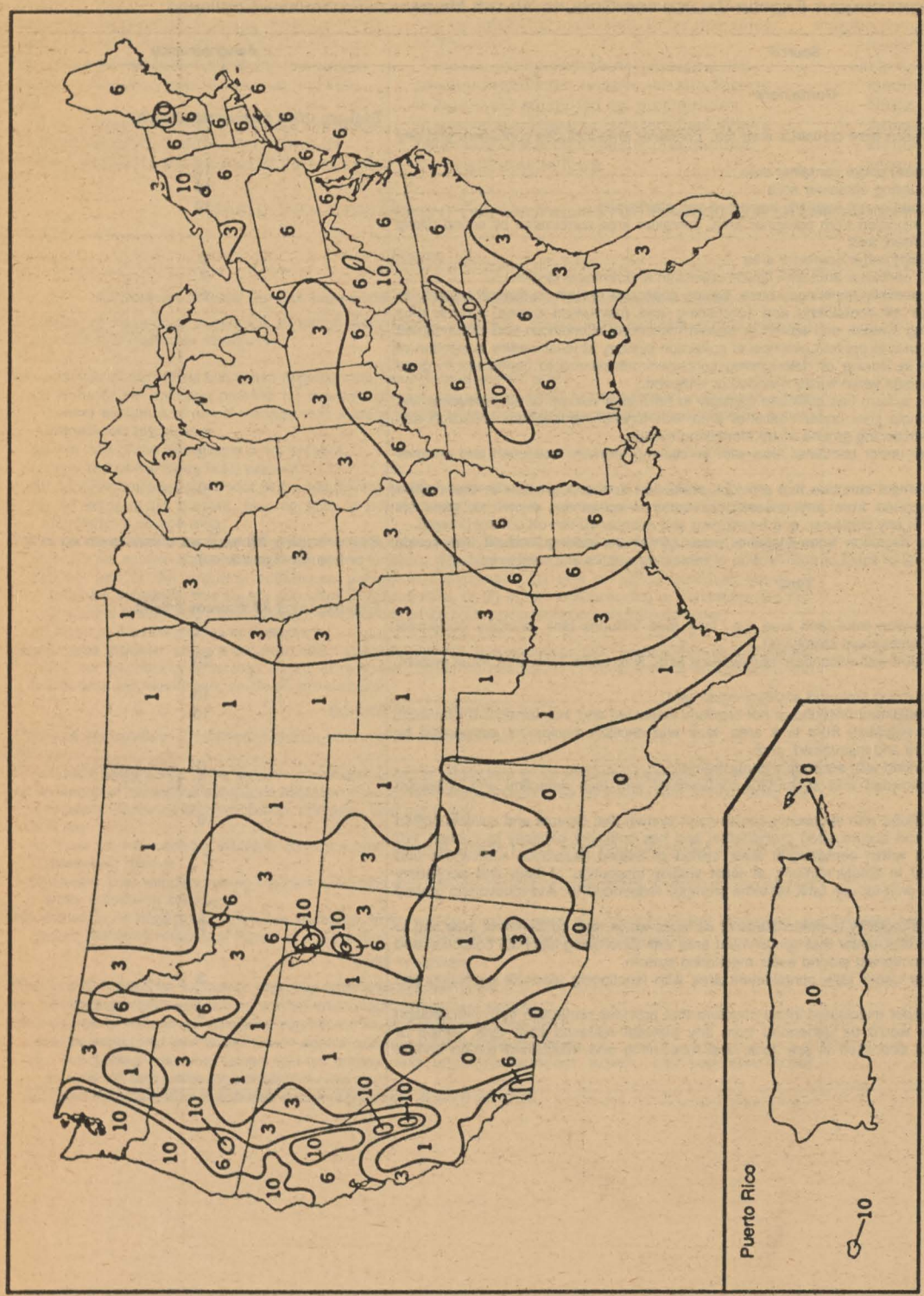
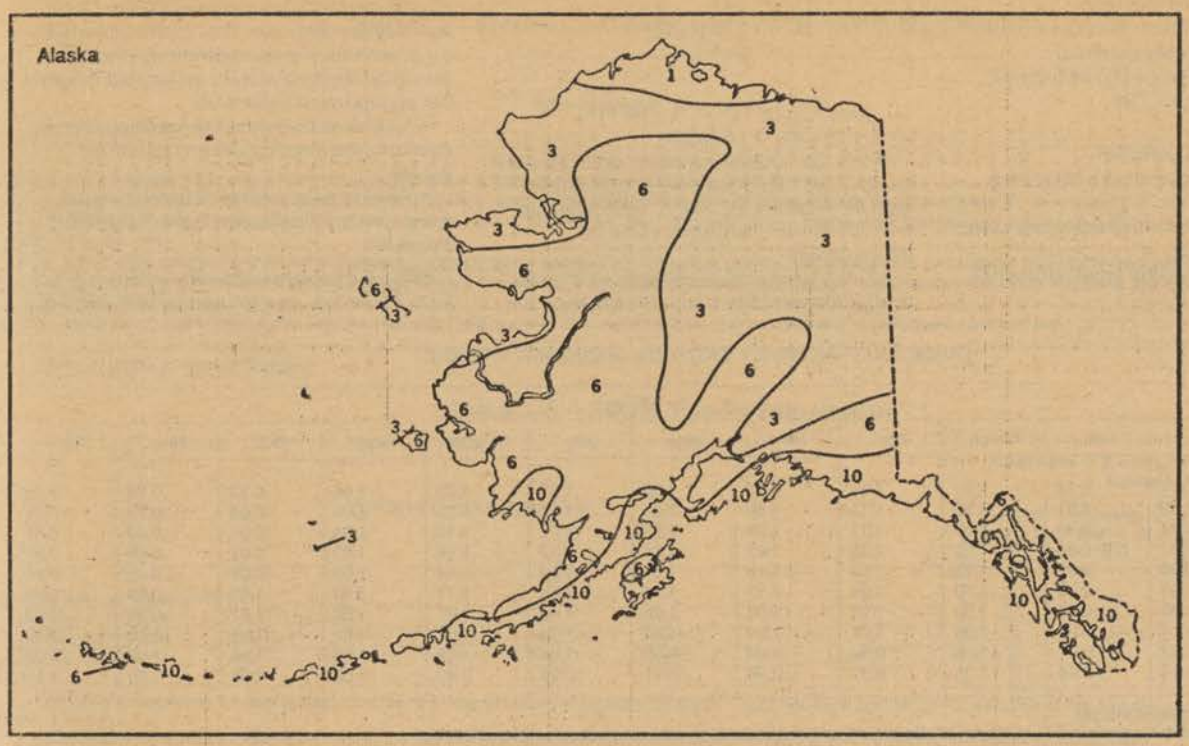


FIGURE 3-2
NET PRECIPITATION FACTOR VALUES



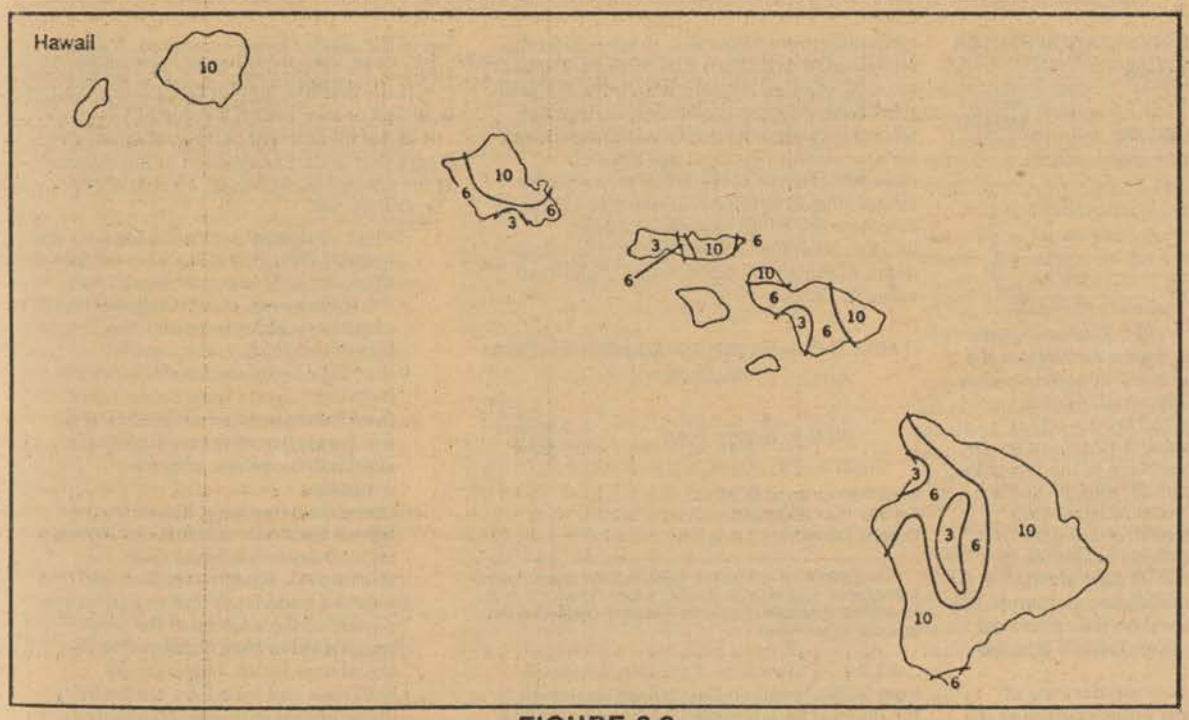


FIGURE 3-2
NET PRECIPITATION FACTOR VALUES
(CONCLUDED)

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–When measured monthly evapotranspiration is not available, calculate monthly potential evapotranspiration (E_i) as follows:

$$E_i = 0.6\, F_i\, (10\, T_i/I)^a$$

where:

E_i = Monthly potential evapotranspiration (inches) for month i.

F_i = Monthly latitude adjusting value for month i.

T_i = Mean monthly temperature (°C) for month i.

$$I = \sum_{i=1}^{12} (T_i/5)^{1.514}$$

$$a = 6.75 \times 10^{-7} I^3 - 7.71 \times 10^{-5} I^2 + 1.79 \times 10^{-2} I + 0.49239$$

Select the latitude adjusting value for each month from Table 3–3. For latitudes lower than 50° North or 20° South, determine the monthly latitude adjusting value by interpolation.

• Calculate monthly net precipitation by subtracting monthly evapotranspiration (or monthly potential evapotranspiration) from monthly precipitation. If evapotranspiration (or potential evapotranspiration) exceeds precipitation for a month, assign that month a net precipitation value of 0.

• Calculate the annual net precipitation by summing the monthly net precipitation values.

• Based on the annual net precipitation, assign a net precipitation factor value from Table 3–4.

Enter the value assigned from Figure 3–2 or from Table 3–4, as appropriate, in Table 3–1.

TABLE 3–3.—MONTHLY LATITUDE ADJUSTING VALUES[a]

Latitude[b] (degrees)	Month											
	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
≥50 N	0.74	0.78	1.02	1.15	1.33	1.36	1.37	1.25	1.06	0.92	0.76	0.70
45 N	0.80	0.81	1.02	1.13	1.28	1.29	1.31	1.21	1.04	0.94	0.79	0.75
40 N	0.84	0.83	1.03	1.11	1.24	1.25	1.27	1.18	1.04	0.96	0.83	0.81
35 N	0.87	0.85	1.03	1.09	1.21	1.21	1.23	1.16	1.03	0.97	0.89	0.85
30 N	0.90	0.87	1.03	1.08	1.18	1.17	1.20	1.14	1.03	0.98	0.89	0.88
20 N	0.95	0.90	1.03	1.05	1.13	1.11	1.14	1.11	1.02	1.00	0.93	0.94
10 N	1.00	0.91	1.03	1.03	1.08	1.06	1.08	1.07	1.02	1.02	0.98	0.99
0	1.04	0.94	1.04	1.01	1.04	1.01	1.04	1.04	1.01	1.04	1.01	1.04
10 S	1.08	0.97	1.05	0.99	1.00	0.96	1.00	1.02	1.00	1.06	1.05	1.09
20 S	1.14	0.99	1.05	0.97	0.96	0.91	0.95	0.99	1.00	1.08	1.09	1.15

[a] Do not round to nearest integer.
[b] For unlisted latitudes lower than 50° North or 20° South, determine the latitude adjusting value by interpolation.

TABLE 3–4.—NET PRECIPITATION FACTOR VALUES

Net precipitation (inches)	Assigned value
0	0
Greater than 0 to 5	1
Greater than 5 to 15	3
Greater than 15 to 30	6
Greater than 30	10

3.1.2.3 *Depth to aquifer.* Evaluate depth to aquifer by determining the depth from the lowest known point of hazardous substances at a site to the top of the aquifer being evaluated, considering all layers in that interval. Measure the depth to an aquifer as the distance from the surface to the top of the aquifer minus the distance from the surface to the lowest known point of hazardous substances eligible to be evaluated for that aquifer. In evaluating depth to aquifer in karst terrain, assign a thickness of 0 feet to a karst aquifer that underlies any portion of the sources at the site. Based on the calculated depth, assign a value from Table 3–5 to the depth to aquifer factor.

Determine the depth to aquifer only at locations within 2 miles of the sources at the site, except: if observed ground water contamination attributable to sources at the site extends more than 2 miles beyond these sources, use any location within the limits of this observed ground water contamination when evaluating the depth to aquifer factor for any aquifer that does not have an observed release. If the necessary geologic information is available at multiple locations, calculate the depth to aquifer at each location. Use the location having the smallest depth to assign the factor value. Enter this value in Table 3–1.

TABLE 3–5.—DEPTH TO AQUIFER FACTOR VALUES

Depth to aquifer* (feet)	Assigned value
Less than or equal to 25	5
Greater than 25 to 250	3
Greater than 250	1

* Use depth of all layers between the hazardous substances and aquifer. Assign a thickness of 0 feet to any karst aquifer that underlies any portion of the sources at the site.

3.1.2.4 *Travel time.* Evaluate the travel time factor based on the geologic materials in the interval between the lowest known point of hazardous substances at the site and the top of the aquifer being evaluated. Assign a value to the travel time factor as follows.

• If the depth to aquifer (see section 3.1.2.3) is 10 feet or less, assign a value of 35.

• If, for the interval being evaluated, all layers that underlie a portion of the sources at the site are karst, assign a value of 35.

• Otherwise:

–Select the lowest hydraulic conductivity layer(s) from within the above interval. Consider only layers at least 3 feet thick. However, do not consider layers or portions of layers within the first 10 feet of the depth to the aquifer.

–Determine hydraulic conductivities for individual layers from Table 3–6 or from in-situ or laboratory tests. Use representative, measured, hydraulic conductivity values whenever available.

–If more than one layer has the same lowest hydraulic conductivity, include all such layers and sum their thicknesses. Assign a thickness of 0 feet to a karst layer that underlies any portion of the sources at the site.

–Assign a value from Table 3–7 to the travel time factor, based on the thickness and hydraulic conductivity of the lowest hydraulic conductivity layer(s).

TABLE 3-6.—HYDRAULIC CONDUCTIVITY OF GEOLOGIC MATERIALS

Type of material	Assigned hydraulic conductivity [a] (cm/sec)
Clay; low permeability till (compact unfractured till); shale; unfractured metamorphic and igneous rocks	10^{-8}
Silt; loesses; silty clays; sediments that are predominantly silts; moderately permeable till (fine-grained, unconsolidated till, or compact till with some fractures); low permeability limestones and dolomites (no karst); low permeability sandstone; low permeability fractured igneous and metamorphic rocks	[illegible]
Sands; sandy silts; sediments that are predominantly sand; highly permeable till (coarse-grained, unconsolidated or compact and highly fractured); peat; moderately permeable limestones and dolomites (no karst); moderately permeable sandstone; moderately permeable fractured igneous and metamorphic rocks	10^{-4}
Gravel; clean sand; highly permeable fractured igneous and metamorphic rocks; permeable basalt; karst limestones and dolomites	10^{-2}

[a] Do not round to nearest integer.

TABLE 3-7.—TRAVEL TIME FACTOR VALUES [a]

Hydraulic conductivity (cm/sec)	Thickness of lowest hydraulic conductivity layer(s)[b] (feet)			
	Greater than 3 to 5	Greater than 5 to 100	Greater than 100 to 500	Greater than 500
Greater than or equal to 10^{-3}	35	35	35	25
Less than 10^{-3} to 10^{-5}	35	25	15	15
Less than 10^{-5} to 10^{-7}	15	15	5	5
Less than 10^{-7}	5	5	1	1

[a] If depth to aquifer is 10 feet or less or if, for the interval being evaluated, all layers that underlie a portion of the sources at the site are karst, assign a value of 35.

[b] Consider only layers at least 3 feet thick. Do not consider layers or portions of layers within the first 10 feet of the depth to the aquifer.

Determine travel time only at locations within 2 miles of the sources at the site, except: if observed ground water contamination attributable to sources at the site extends more than 2 miles beyond these sources, use any location within the limits of this observed ground water contamination when evaluating the travel time factor for any aquifer that does not have an observed release. If the necessary subsurface geologic information is available at multiple locations, evaluate the travel time factor at each location. Use the location having the highest travel time factor value to assign the factor value for the aquifer. Enter this value in Table 3-1.

3.1.2.5 *Calculation of potential to release factor value.* Sum the factor values for net precipitation, depth to aquifer, and travel time, and multiply this sum by the factor value for containment. Assign this product as the potential to release factor value for the aquifer. Enter this value in Table 3-1.

3.1.3 *Calculation of likelihood of release factor category value.* If an observed release is established for an aquifer, assign the observed release factor value of 550 as the likelihood of release factor category value for that aquifer. Otherwise, assign the potential to release factor value for that aquifer as the likelihood of release value. Enter the value assigned in Table 3-1.

3.2 *Waste characteristics.* Evaluate the waste characteristics factor category for an aquifer based on two factors: toxicity/mobility and hazardous waste quantity. Evaluate only those hazardous substances available to migrate from the sources at the site to ground water. Such hazardous substances include:

- Hazardous substances that meet the criteria for an observed release to ground water.
- All hazardous substances associated with a source that has a ground water containment factor value greater than 0 (see sections 2.2.2, 2.2.3, and 3.1.2.1).

3.2.1 *Toxicity/mobility.* For each hazardous substance, assign a toxicity factor value, a mobility factor value, and a combined toxicity/mobility factor value as specified in the following sections. Select the toxicity/mobility factor value for the aquifer being evaluated as specified in section 3.2.1.3.

3.2.1.1 *Toxicity.* Assign a toxicity factor value to each hazardous substance as specified in Section 2.4.1.1.

3.2.1.2 *Mobility.* Assign a mobility factor value to each hazardous substance for the aquifer being evaluated as follows:

- For any hazardous substance that meets the criteria for an observed release by chemical analysis to one or more aquifers underlying the sources at the site, regardless of the aquifer being evaluated, assign a mobility factor value of 1.
- For any hazardous substance that does not meet the criteria for an observed release by chemical analysis to at least one of the aquifers, assign that hazardous substance a mobility factor value from Table 3-8 for the aquifer being evaluated, based on its water solubility and distribution coefficient (K_d).
- If the hazardous substance cannot be assigned a mobility factor value because data on its water solubility or distribution coefficient are not available, use other hazardous substances for which information is available in evaluating the pathway.

TABLE 3-8.—GROUND WATER MOBILITY FACTOR VALUES [a]

Water solubility (mg/l)	Distribution coefficient (K_d) (ml/g)			
	Karst [c]	≤10	>10 to 1,000	>1,000
Present as liquid [b]	1	1	0.01	0.0001
Greater than 100	1	1	0.01	0.0001
Greater than 1 to 100	0.2	0.2	0.002	2×10^{-5}
Greater than 0.01 to 1	0.002	0.002	2×10^{-5}	2×10^{-7}
Less than or equal to 0.01	2×10^{-5}	2×10^{-5}	2×10^{-7}	2×10^{-9}

[a] Do not round to nearest integer.

[b] Use if the hazardous substance is present or deposited as a liquid.

[c] Use if the entire interval from the source to the aquifer being evaluated is karst.

• If none of the hazardous substances eligible to be evaluated can be assigned a mobility factor value, use a default value of 0.002 as the mobility factor value for all these hazardous substances.

Determine the water solubility to be used in Table 3–8 for the hazardous substance as follows (use this same water solubility for all aquifers):

• For any hazardous substance that does not meet the criteria for an observed release by chemical analysis, if the hazardous substance is present or deposited as a liquid, use the water solubility category "Present as Liquid" in Table 3–8 to assign the mobility factor value to that hazardous substance.

• Otherwise:

–For any hazardous substance that is a metal (or metalloid) and that does not meet the criteria for an observed release by chemical analysis, establish a water solubility for the hazardous substance as follows:

– –Determine the overall range of water solubilities for compounds of this hazardous substance (consider all compounds for which adequate water solubility information is available, not just compounds identified as present at the site).

– –Calculate the geometric mean of the highest and the lowest water solubility in this range.

– –Use this geometric mean as the water solubility in assigning the hazardous substance a mobility factor value from Table 3–8.

–For any other hazardous substance (either organic or inorganic) that does not meet the criteria for an observed release by chemical analysis, use the water solubility of that hazardous substance to assign a mobility factor value from Table 3–8 to the hazardous substance.

For the aquifer being evaluated, determine the distribution coefficient to be used in Table 3–8 for the hazardous substance as follows:

• For any hazardous substance that does not meet the criteria for an observed release by chemical analysis, if the entire interval from a source at the site to the aquifer being evaluated is karst, use the distribution coefficient category "Karst" in Table 3–8 in assigning the mobility factor value for that hazardous substance for that aquifer.

• Otherwise:

–For any hazardous substance that is a metal (or metalloid) and that does not meet the criteria for an observed release by chemical analysis, use the distribution coefficient for the metal or (metalloid) to assign a mobility factor value from Table 3–8 for that hazardous substance.

–For any other inorganic hazardous substance that does not meet the criteria for an observed release by chemical analysis, use the distribution coefficient for that inorganic hazardous substance, if available, to assign a mobility factor value from Table 3–8. If the distribution coefficient is not available, use a default value of "less than 10" as the distribution coefficient, except: for asbestos use a default value of "greater than 1,000" as the distribution coefficient.

–For any hazardous substance that is organic and that does not meet the criteria for an observed release by chemical analysis, establish a distribution coefficient for that hazardous substance as follows:

– –Estimate the K_d range for the hazardous substance using the following equation:

$K_d = (K_{oc})(f_s)$

where:

K_{oc} = Soil-water partition coefficient for organic carbon for the hazardous substance.

f_s = Sorbent content (fraction of clays plus organic carbon) in the subsurface.

– –Use f_s values of 0.03 and 0.77 in the above equation to establish the upper and lower values of the K_d range for the hazardous substance.

– –Calculate the geometric mean of the upper and lower K_d range values. Use this geometric mean as the distribution coefficient in assigning the hazardous substance a mobility factor value from Table 3–8.

3.2.1.3 *Calculation of toxicity/mobility factor value.* Assign each hazardous substance a toxicity/mobility factor value from Table 3–9, based on the values assigned to the hazardous substance for the toxicity and mobility factors. Use the hazardous substance with the highest toxicity/mobility factor value for the aquifer being evaluated to assign the value to the toxicity/mobility factor for that aquifer. Enter this value in Table 3–1.

TABLE 3–9.—TOXICITY/MOBILITY FACTOR VALUES *

Mobility factor value	Toxicity factor value					
	10,000	1,000	100	10	1	0
1.0	10,000	1,000	100	10	1	0
0.2	2,000	200	20	2	0.2	0
0.01	100	10	1	0.1	0.01	0
0.002	20	2	0.2	0.02	0.002	0
0.0001	1	0.1	0.01	0.001	1×10^{-4}	0
2×10^{-5}	0.2	0.02	0.002	2×10^{-4}	2×10^{-5}	0
2×10^{-7}	0.002	2×10^{-4}	2×10^{-5}	2×10^{-6}	2×10^{-7}	0
2×10^{-9}	2×10^{-5}	2×10^{-6}	2×10^{-7}	2×10^{-8}	2×10^{-9}	0

* Do not round to nearest integer.

3.2.2 *Hazardous waste quantity.* Assign a hazardous waste quantity factor value for the ground water pathway (or aquifer) as specified in section 2.4.2. Enter this value in Table 3–1.

3.2.3 *Calculation of waste characteristics factor category value.* Multiply the toxicity/mobility and hazardous waste quantity factor values, subject to a maximum product of 1×10^8. Based on this product, assign a value from Table 2–7 (section 2.4.3.1) to the waste characteristics factor category. Enter this value in Table 3–1.

3.3 *Targets.* Evaluate the targets factor category for an aquifer based on four factors: nearest well, population, resources, and Wellhead Protection Area. Evaluate these four factors based on targets within the target distance limit specified in section 3.0.1.1 and the aquifer boundaries specified in section 3.0.1.2. Determine the targets to be included in evaluating these factors for an aquifer as specified in section 3.0.

3.3.1 *Nearest well.* In evaluating the nearest well factor, include both the drinking water wells drawing from the aquifer being evaluated and those drawing from overlying aquifers as specified in section 3.0. Include standby wells in evaluating this factor only if they are used for drinking water supply at least once every year.

If there is an observed release by direct observation for a drinking water well within the target distance limit, assign Level II concentrations to that well. However, if one or more samples meet the criteria for an observed release for that well, determine if that well is subject to Level I or Level II concentrations as specified in sections 2.5.1 and 2.5.2. Use the health-based benchmarks from Table 3–10 in determining the level of contamination.

Assign a value for the nearest well factor as follows:

• If one or more drinking water wells is subject to Level I concentrations, assign a value of 50.

• If not, but if one or more drinking water wells is subject to Level II concentrations, assign a value of 45.

• If none of the drinking water wells is subject to Level I or Level II concentrations, assign a value as follows:

–If one of the target aquifers is a karst aquifer that underlies any portion of the sources at the site and any well draws drinking water from this karst aquifer within the target distance limit, assign a value of 20.

–If not, determine the shortest distance to any drinking water well, as measured from any source at the site with a ground water containment factor value greater than 0. Select a value from Table 3–11 based on this distance. Assign it as the value for the nearest well factor.

Enter the value assigned to the nearest well factor in Table 3–1.

TABLE 3–10.—HEALTH-BASED BENCHMARKS FOR HAZARDOUS SUBSTANCES IN DRINKING WATER

• Concentration corresponding to Maximum Contaminant Level (MCL).
• Concentration corresponding to a nonzero Maximum Contaminant Level Goal (MCLG).
• Screening concentration for cancer corresponding to that concentration that corresponds to the 10^{-6} individual cancer risk for oral exposures.
• Screening concentration for noncancer toxicological responses corresponding to the Reference Dose (RfD) for oral exposures.

TABLE 3–11.—NEAREST WELL FACTOR VALUES

Distance from source (miles)	Assigned value
Level I concentrations*	50
Level II concentrations*	45
0 to ¼	20
Greater than ¼ to ½	18
Greater than ½ to 1	9
Greater than 1 to 2	5
Greater than 2 to 3	3
Greater than 3 to 4	2
Greater than 4	0

* Distance does not apply.

3.3.2 *Population.* In evaluating the population factor, include those persons served by drinking water wells within the target distance limit specified in section 3.0.1.1. For the aquifer being evaluated, count those persons served by wells in that aquifer and those persons served by wells in overlying aquifers as specified in section 3.0. Include residents, students, and workers who regularly use the water. Exclude transient populations such as customers and travelers passing through the area. Evaluate the population based on the location of the water supply wells, not on the location of residences, work places, etc. When a standby well is maintained on a regular basis so that water can be withdrawn, include it in evaluating the population factor.

In estimating residential population, when the estimate is based on the number of residences, multiply each residence by the average number of persons per residence for the county in which the residence is located.

In determining the population served by a well, if the water from the well is blended with other water (for example, water from other ground water wells or surface water intakes), apportion the total population regularly served by the blended system to the well based on the well's relative contribution to the total blended system. In estimating the well's relative contribution, assume each well and intake contributes equally and apportion the population accordingly, except: if the relative contribution of any one well or intake exceeds 40 percent based on average annual pumpage or capacity, estimate the relative contribution of the wells and intakes considering the following data, if available:

• Average annual pumpage from the ground water wells and surface water intakes in the blended system.

• Capacities of the wells and intakes in the blended system.

For systems with standby ground water wells or standby surface water intakes, apportion the total population regularly served by the blended system as described above, except:

• Exclude standby surface water intakes in apportioning the population.

• When using pumpage data for a standby ground water well, use average pumpage for the period during which the standby well is used rather than average annual pumpage.

• For that portion of the total population that could be apportioned to a standby ground water well, assign that portion of the population either to that standby well or to the other ground water well(s) and surface water intake(s) that serve that population; do not assign that portion of the population both to the standby well and to the other well(s) and intake(s) in the blended system. Use the apportioning that results in the highest population factor value. (Either include all standby well(s) or exclude some or all of the standby well(s) as appropriate to obtain this highest value.) Note that the specific standby well(s) included or excluded and, thus, the specific apportioning may vary in evaluating different aquifers and in evaluating the surface water pathway.

3.3.2.1 *Level of contamination.* Evaluate the population served by water from a point of withdrawal based on the level of contamination for that point of withdrawal. Use the applicable factor: Level I concentrations, Level II concentrations, or potential contamination.

If no samples meet the criteria for an observed release for a point of withdrawal and there is no observed release by direct observation for that point of withdrawal, evaluate that point of withdrawal using the potential contamination factor in section 3.3.2.4. If there is an observed release by direct observation, use Level II concentrations for that point of withdrawal. However, if one or more samples meet the criteria for an observed release for the point of withdrawal, determine which factor (Level I or Level II concentrations) applies to that point of withdrawal as specified in sections 2.5.1 and 2.5.2. Use the health-based benchmarks from Table 3–10 in determining the level of contamination. Evaluate the point of withdrawal using the Level I concentrations factor in section 3.3.2.2 or the Level II concentrations factor in section 3.3.2.3, as appropriate.

For the potential contamination factor, use population ranges in evaluating the factor as specified in section 3.3.2.4. For the Level I and Level II concentrations factors, use the population estimate, not population ranges, in evaluating both factors.

3.3.2.2 *Level I concentrations.* Sum the number of people served by drinking water from points of withdrawal subject to Level I concentrations. Multiply this sum by 10. Assign this product as the value for this factor. Enter this value in Table 3–1.

3.3.2.3 *Level II concentrations.* Sum the number of people served by drinking water from points of withdrawal subject to Level II concentrations. Do not include those people already counted under the Level I concentrations factor. Assign this sum as the value for this factor. Enter this value in Table 3–1.

3.3.2.4 *Potential contamination.* Determine the number of people served by drinking water from points of withdrawal subject to potential contamination. Do not include those people already counted under the Level I and Level II concentrations factors.

Assign distance-weighted population values from Table 3–12 to this population as follows:

• Use the "Karst" portion of Table 3–12 to assign values only for that portion of the population served by points of withdrawal that draw drinking water from a karst aquifer that underlies any portion of the sources at the site.

–For this portion of the population, determine the number of people included within each "Karst" distance category in Table 3–12.

TABLE 3-12.—DISTANCE-WEIGHTED POPULATION VALUES FOR POTENTIAL CONTAMINATION FACTOR FOR GROUND WATER MIGRATION PATHWAY [a]

Distance category (miles)	Number of people within the distance category												
	0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000
Other Than Karst [b]:													
0 to ¼	0	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455
Greater than ¼ to ½	0	2	11	33	102	324	1,013	3,233	10,122	32,325	101,213	323,243	1,012,122
Greater than ½ to 1	0	1	5	17	52	167	523	1,669	5,224	16,684	52,239	166,835	522,385
Greater than 1 to 2	0	0.7	3	10	30	94	294	939	2,939	9,385	29,384	93,845	293,842
Greater than 2 to 3	0	0.5	2	7	21	68	212	678	2,122	6,778	21,222	67,777	212,219
Greater than 3 to 4	0	0.3	1	4	13	42	131	417	1,306	4,171	13,060	41,709	130,596
Karst [c]:													
0 to ¼	0	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455
Greater than ¼ to ½	0	2	11	33	102	324	1,013	3,233	10,122	32,325	101,213	323,243	1,012,122
Greater than ½ to 1	0	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227
Greater than 1 to 2	0	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227
Greater than 2 to 3	0	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227
Greater than 3 to 4	0	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227

[a] Round the number of people present within a distance category to nearest integer. Do not round the assigned distance-weighted population value to nearest integer.
[b] Use for all aquifers, except karst aquifers underlying any portion of the sources at the site.
[c] Use only for karst aquifers underlying any portion of the sources at the site.

–Assign a distance-weighted population value for each distance category based on the number of people included within the distance category.

• Use the "Other Than Karst" portion of Table 3-12 for the remainder of the population served by points of withdrawal subject to potential contamination.

–For this portion of the population, determine the number of people included within each "Other Than Karst" distance category in Table 3-12.

–Assign a distance-weighted population value for each distance category based on the number of people included within the distance category.

Calculate the value for the potential contamination factor (PC) as follows:

$$PC = \frac{1}{10} \sum_{i=1}^{n} (W_i + K_i)$$

where:

W_i = Distance-weighted population from "Other Than Karst" portion of Table 3-12 for distance category i.

K_i = Distance-weighted population from "Karst" portion of Table 3-12 for distance category i.

n = Number of distance categories.

If PC is less than 1, do not round it to the nearest integer; if PC is 1 or more, round to the nearest integer. Enter this value in Table 3-1.

3.3.2.5 *Calculation of population factor value.* Sum the factor values for Level I concentrations, Level II concentrations, and potential contamination. Do not round this sum to the nearest integer. Assign this sum as the population factor value for the aquifer. Enter this value in Table 3-1.

3.3.3 *Resources.* To evaluate the resources factor, select the highest value specified below that applies for the aquifer being evaluated. Assign this value as the resources factor value for the aquifer. Enter this value in Table 3-1.

Assign a resources value of 5 if water drawn from any target well for the aquifer being evaluated or overlying aquifers (as specified in section 3.0) is used for one or more of the following purposes:

• Irrigation (5-acre minimum) of commercial food crops or commercial forage crops.

• Watering of commercial livestock.

• Ingredient in commercial food preparation.

• Supply for commercial aquaculture.

• Supply for a major or designated water recreation area, excluding drinking water use.

Assign a resources value of 5 if no drinking water wells are within the target distance limit, but the water in the aquifer being evaluated or any overlying aquifers (as specified in section 3.0) is usable for drinking water purposes.

Assign a resources value of 0 if none of the above applies.

3.3.4 *Wellhead Protection Area.* Evaluate the Wellhead Protection Area factor based on Wellhead Protection Areas designated according to section 1428 of the Safe Drinking Water Act, as amended. Consider only those Wellhead Protection Areas applicable to the aquifer being evaluated or overlying aquifers (as specified in section 3.0). Select the highest value below that applies. Assign it as the value for the Wellhead Protection Area factor for the aquifer being evaluated. Enter this value in Table 3-1.

Assign a value of 20 if either of the following criteria applies for the aquifer being evaluated or overlying aquifers:

• A source with a ground water containment factor value greater than 0 lies, either partially or fully, within or above the designated Wellhead Protection Area.

• Observed ground water contamination attributable to the sources at the site lies, either partially or fully, within the designated Wellhead Protection Area.

If neither criterion applies, assign a value of 5, if, within the target distance limit, there is a designated Wellhead Protection Area applicable to the aquifer being evaluated or overlying aquifers.

Assign a value of 0 if none of the above applies.

3.3.5 *Calculation of targets factor category value.* Sum the factor values for nearest well, population, resources, and Wellhead Protection Area. Do not round this sum to the nearest integer. Use this sum as the targets factor category value for the aquifer. Enter this value in Table 3-1.

3.4 *Ground water migration score for an aquifer.* For the aquifer being evaluated, multiply the factor category values for likelihood of release, waste characteristics, and targets, and round the product to the nearest integer. Then divide by 82,500. Assign the resulting value, subject to a maximum value of 100, as the ground water migration pathway score for the aquifer. Enter this score in Table 3-1.

3.5 *Calculation of ground water migration pathway score.* Calculate a ground water migration score for each aquifer underlying the sources at the site, as appropriate. Assign the highest ground water migration score for an aquifer as the ground water migration pathway score (S_{gw}) for the site. Enter this score in Table 3-1.

4.0 *Surface Water Migration Pathway.*

4.0.1 *Migration components.* Evaluate the surface water migration pathway based on two migration components:

• Overland/flood migration to surface water (see section 4.1).

• Ground water to surface water migration (see section 4.2).

Evaluate each component based on the same three threats: drinking water threat, human food chain threat, and environmental threat.

Score one or both components, considering their relative importance. If only one component is scored, assign its score as the surface water migration pathway score. If

both components are scored, select the higher of the two scores and assign it as the surface water migration pathway score.

4.0.2 *Surface water categories.* For HRS purposes, classify surface water into four categories: rivers, lakes, oceans, and coastal tidal waters.

Rivers include:

• Perennially flowing waters from point of origin to the ocean or to coastal tidal waters, whichever comes first, and wetlands contiguous to these flowing waters.

• Aboveground portions of disappearing rivers.

• Man-made ditches only insofar as they perennially flow into other surface water.

• Intermittently flowing waters and contiguous intermittently flowing ditches only in arid or semiarid areas with less than 20 inches of mean annual precipitation.

Lakes include:

• Natural and man-made lakes (including impoundments) that lie along rivers, but excluding the Great Lakes.

• Isolated, but perennial, lakes, ponds, and wetlands.

• Static water channels or oxbow lakes contiguous to rivers.

• Small rivers, without diking, that merge into surrounding perennially inundated wetlands.

• Wetlands contiguous to water bodies defined here as lakes.

Ocean and ocean-like water bodies include:

• Ocean areas seaward from the baseline of the Territorial Sea. (This baseline represents the generalized coastline of the United States. It is parallel to the seaward limit of the Territorial Sea and other maritime limits such as the inner boundary of Federal fisheries jurisdiction and the limit of States jurisdiction under the Submerged Lands Act, as amended.)

• The Great Lakes.

• Wetlands contiguous to the Great Lakes.

Coastal tidal waters include:

• Embayments, harbors, sounds, estuaries, back bays, lagoons, wetlands, etc. seaward from mouths of rivers and landward from the baseline of the Territorial Sea.

4.1 *Overland/flood migration component.* Use the overland/flood migration component to evaluate surface water threats that result from overland migration of hazardous substances from a source at the site to surface water. Evaluate three types of threats for this component: drinking water threat, human food chain threat, and environmental threat.

4.1.1 *General considerations.*

4.1.1.1 *Definition of hazardous substance migration path for overland/flood migration component.* The hazardous substance migration path includes both the overland segment and the in-water segment that hazardous substances would take as they migrate away from sources at the site:

• Begin the overland segment at a source and proceed downgradient to the probable point of entry to surface water.

• Begin the in-water segment at this probable point of entry.

–For rivers, continue the in-water segment in the direction of flow (including any tidal flows) for the distance established by the target distance limit (see section 4.1.1.2).

–For lakes, oceans, coastal tidal waters, or Great Lakes, do not consider flow direction. Instead apply the target distance limit as an arc.

–If the in-water segment includes both rivers and lakes (or oceans, coastal tidal waters, or Great Lakes), apply the target distance limit to their combined in-water segments.

For sites that consist of contaminated sediments with no identified source, the hazardous substance migration path consists solely of the in-water segment specified in section 4.1.1.2.

Consider a site to be in two or more watersheds for this component if two or more hazardous substance migration paths from the sources at the site do not reach a common point within the target distance limit. If the site is in more than one watershed, define a separate hazardous substance migration path for each watershed. Evaluate the overland/flood migration component for each watershed separately as specified in section 4.1.1.3.

4.1.1.2 *Target distance limit.* The target distance limit defines the maximum distance over which targets are considered in evaluating the site. Determine a separate target distance limit for each watershed as follows:

• If there is no observed release to surface water in the watershed or if there is an observed release only by direct observation (see section 4.1.2.1.1), begin measuring the target distance limit for the watershed at the probable point of entry to surface water and extend it for 15 miles along the surface water from that point.

• If there is an observed release from the site to the surface water in the watershed that is based on sampling, begin measuring the target distance limit for the watershed at the probable point of entry; extend the target distance limit either for 15 miles along the surface water or to the most distant sample point that meets the criteria for an observed release to that watershed, whichever is greater.

In evaluating the site, include only surface water targets (for example, intakes, fisheries, sensitive environments) that are within or contiguous to the hazardous substance migration path and located, partially or wholly, at or between the probable point of entry and the target distance limit applicable to the watershed:

• If flow within the hazardous substance migration path is reversed by tides, evaluate upstream targets only if there is documentation that the tidal run could carry substances from the site as far as those upstream targets.

• Determine whether targets within or contiguous to the hazardous substance migration path are subject to actual or potential contamination as follows:

–If a target is located, partially or wholly, either at or between the probable point of entry and any sampling point that meets the criteria for an observed release to the watershed or at a point that meets the criteria for an observed release by direct observation, evaluate that target as subject to actual contamination, except as otherwise specified for fisheries in section 4.1.3.3 and for wetlands in section 4.1.4.3.1.1. If the actual contamination is based on direct observation, assign Level II to the actual contamination. However, if the actual contamination is based on samples, determine whether the actual contamination is at Level I or Level II concentrations as specified in sections 4.1.2.3, 4.1.3.3, and 4.1.4.3.1.

–If a target is located, partially or wholly, within the target distance limit for the watershed, but not at or between the probable point of entry and any sampling point that meets the criteria for an observed release to the watershed, nor at a point that meets the criteria for an observed release by direct observation, evaluate it as subject to potential contamination.

For sites consisting solely of contaminated sediments with no identified source, determine the target distance limit as follows:

• If there is a clearly defined direction of flow for the surface water body (or bodies) containing the contaminated sediments, begin measuring the target distance limit at the point of observed sediment contamination that is farthest upstream (that is, at the location of the farthest available upstream sediment sample that meets the criteria for an observed release); extend the target distance limit either for 15 miles along the surface water or to the most distant downstream sample point that meets the criteria for an observed release to that watershed, whichever is greater.

• If there is no clearly defined direction of flow, begin measuring the target distance limit at the center of the area of observed sediment contamination. Extend the target distance limit as an arc either for 15 miles along the surface water or to the most distant sample point that meets the criteria for an observed release to that watershed, whichever is greater. Determine the area of observed sediment contamination based on available samples that meet the criteria for an observed release.

Note that the hazardous substance migration path for these contaminated sediment sites consists solely of the in-water segment defined by the target distance limit; there is no overland segment.

For these contaminated sediment sites, include only those targets (for example, intakes, fisheries, sensitive environments) that are within or contiguous to the hazardous substance migration path and located, wholly or partially, within the target distance limit for the site. Determine whether these targets are subject to actual or potential contamination as follows:

• If a target is located, partially or wholly, within the area of observed sediment contamination, evaluate it as subject to actual contamination, except as otherwise specified for fisheries in section 4.1.3.3 and wetlands in section 4.1.4.3.1.1.

–If a drinking water target is subject to actual contamination, evaluate it using Level II concentrations.

–If a human food chain target or environmental target is subject to actual contamination, evaluate it using Level I or Level II concentrations, as appropriate (see sections 4.1.3.3 and 4.1.4.3.1).

• If a target is located, partially or wholly, within the target distance limit for the watershed, but not within the area of observed sediment contamination, evaluate it as subject to potential contamination.

4.1.1.3 *Evaluation of overland/flood migration component.* Evaluate the drinking water threat, human food chain threat, and environmental threat for each watershed for this component based on three factor categories: likelihood of release, waste characteristics, and targets. Figure 4–1 indicates the factors included within each factor category for each type of threat.

Determine the overland/flood migration component score (S_{of}) for a watershed in terms of the factor category values as follows:

$$S_{of} = \sum_{i=1}^{3} \frac{(LR_i)(WC_i)(T_i)}{SF}$$

where:

LR_i = Likelihood of release factor category value for threat i (that is, drinking water, human food chain, or environmental threat).

WC_i = Waste characteristics factor category value for threat i.

T_i = Targets factor category value for threat i.

SF = Scaling factor.

Table 4–1 outlines the specific calculation procedure.

If the site is in only one watershed, assign the overland/flood migration score for that watershed as the overland/flood migration component score for the site.

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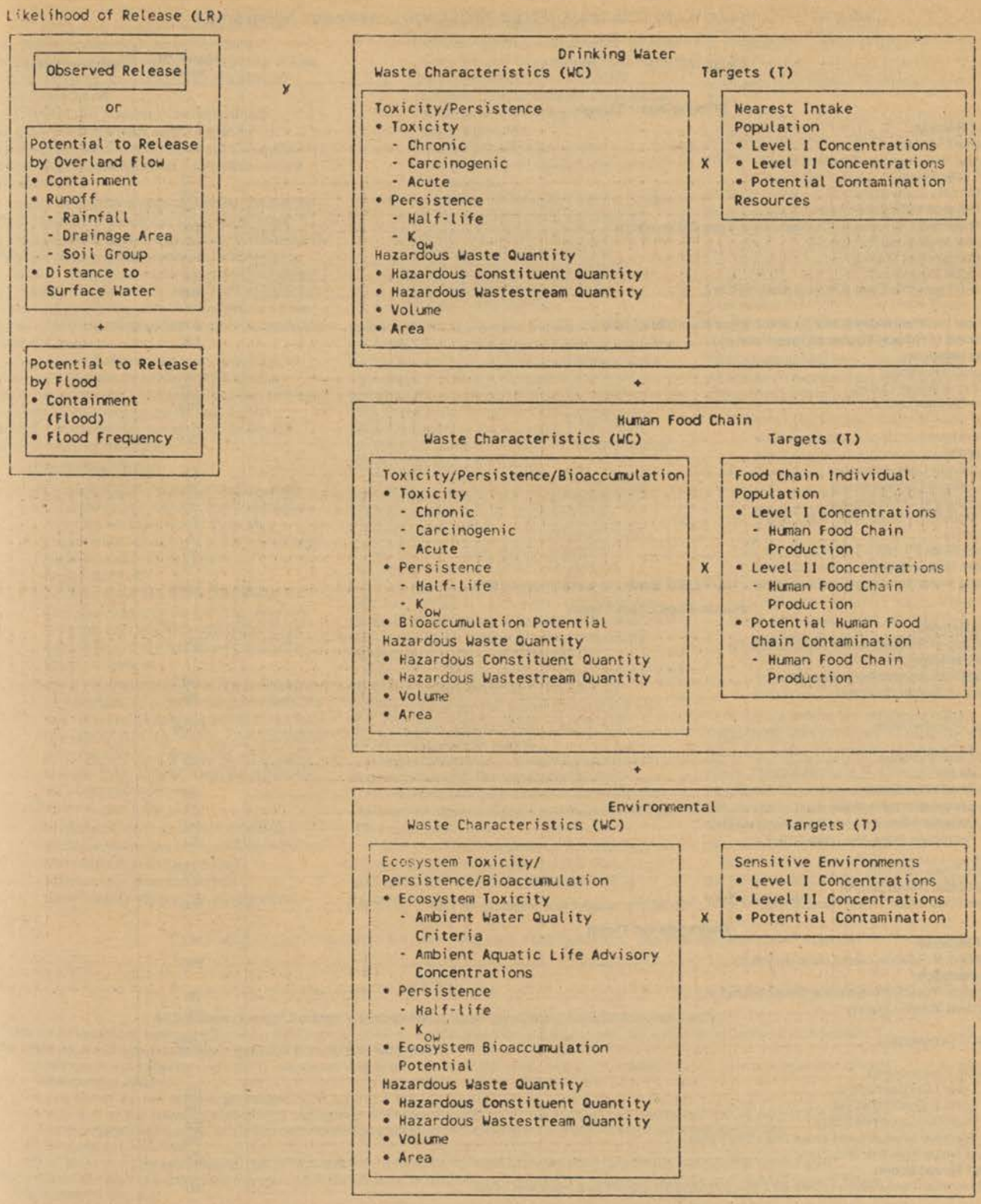

FIGURE 4-1
OVERVIEW OF SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT

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TABLE 4-1.—SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET

Factor categories and factors	Maximum value	Value assigned
Drinking Water Threat		
Likelihood of Release:		
1. Observed Release	550	
2. Potential to Release by Overland Flow:		
2a. Containment	10	
2b. Runoff	25	
2c. Distance to Surface Water	25	
2d. Potential to Release by Overland Flow (lines 2a[2b+2c])	500	
3. Potential to Release by Flood:		
3a. Containment (Flood)	10	
3b. Flood Frequency	50	
3c. Potential to Release by Flood (lines 3a×3b)	500	
4. Potential to Release (lines 2d+3c, subject to a maximum of 500)	500	
5. Likelihood of Release (higher of lines 1 and 4)	550	
Waste Characteristics:		
6. Toxicity/Persistence	(a)	
7. Hazardous Waste Quantity	(a)	
8. Waste Characteristics	100	
Targets:		
9. Nearest Intake	50	
10. Population		
10a. Level I Concentrations	(b)	
10b. Level II Concentrations	(b)	
10c. Potential Contamination	(b)	
10d. Population (lines 10a+10b+10c)	(b)	
11. Resources	5	
12. Targets (lines 9+10d+11)	(b)	
Drinking Water Threat Score:		
13. Drinking Water Threat Score ([lines 5×8×12]/82,500, subject to a maximum of 100)	100	
Human Food Chain Threat		
Likelihood of Release:		
14. Likelihood of Release (same value as line 5)	550	
Waste Characteristics:		
15. Toxicity/Persistence/Bioaccumulation	(a)	
16. Hazardous Waste Quantity	(a)	
17. Waste Characteristics	1,000	
Targets:		
18. Food Chain Individual	50	
19. Population		
19a. Level I Concentrations	(b)	
19b. Level II Concentrations	(b)	
19c. Potential Human Food Chain Contamination	(b)	
19d. Population (lines 19a+19b+19c)	(b)	
20. Targets (lines 18+19d)	(b)	
Human Food Chain Threat Score:		
21. Human Food Chain Threat Score ([lines 14×17×20]/82,500, subject to a maximum of 100)	100	
Environmental Threat		
Likelihood of Release:		
22. Likelihood of Release (same value as line 5)	550	
Waste Characteristics:		
23. Ecosystem Toxicity/Persistence/Bioaccumulation	(a)	
24. Hazardous Waste Quantity	(a)	
25. Waste Characteristics	1,000	
Targets:		
26. Sensitive Environments		
26a. Level I Concentrations	(b)	
26b. Level II Concentrations	(b)	
26c. Potential Contamination	(b)	
26d. Sensitive Environments (lines 26a+26b+26c)	(b)	
27. Targets (value from line 26d)	(b)	
Environmental Threat Score:		
28. Environmental Threat Score ([lines 22×25×27]/82,500, subject to a maximum of 60)	60	
Surface Water Overland/Flood Migration Component Score for a Watershed		
29. Watershed Score [c] (lines 13+21+28, subject to a maximum of 100)	100	
Surface Water Overland/Flood Migration Component Score		
30. Component Score (S_{of}) [c] (highest score from line 29 for all watersheds evaluated, subject to a maximum of 100)	100	

[a] Maximum value applies to waste characteristics category.
[b] Maximum value not applicable.
[c] Do not round to nearest integer.

If the site is in more than one watershed:

• Calculate a separate overland/flood migration component score for each watershed, using likelihood of release, waste characteristics, and targets applicable to each watershed.

• Select the highest overland/flood migration component score from the watersheds evaluated and assign it as the overland/flood migration component score for the site.

4.1.2 *Drinking water threat.* Evaluate the drinking water threat for each watershed based on three factor categories: likelihood of release, waste characteristics, and targets.

4.1.2.1 *Drinking water threat—likelihood of release.* Evaluate the likelihood of release factor category for each watershed in terms of an observed release factor or a potential to release factor.

4.1.2.1.1 *Observed release.* Establish an observed release to surface water for a watershed by demonstrating that the site has released a hazardous substance to the surface water in the watershed. Base this demonstration on either:

• Direct observation:

–A material that contains one or more hazardous substances has been seen entering surface water through migration or is known to have entered surface water through direct deposition, or

–A source area has been flooded at a time that hazardous substances were present, and one or more hazardous substances were in contact with the flood waters, or

–When evidence supports the inference of a release of a material that contains one or more hazardous substances by the site to surface water, demonstrated adverse effects associated with that release may also be used to establish an observed release.

• Chemical analysis:

–Analysis of surface water, benthic, or sediment samples indicates that the concentration of hazardous substance(s) has increased significantly above the background concentration for the site for that type of sample (see section 2.3).

– –Limit comparisons to similar types of samples and background concentrations—for example, compare surface water samples to surface water background concentrations.

– –For benthic samples, limit comparisons to essentially sessile organisms.

–Some portion of the significant increase must be attributable to the site to establish the observed release, except: when the site itself consists of contaminated sediments with no identified source, no separate attribution is required.

If an observed release can be established for a watershed, assign an observed release factor value of 550 to that watershed, enter this value in Table 4–1, and proceed to section 4.1.2.1.3. If no observed release can be established for the watershed, assign an observed release factor value of 0 to that watershed, enter this value in Table 4–1, and proceed to section 4.1.2.1.2.

4.1.2.1.2 *Potential to release.* Evaluate potential to release only if an observed release cannot be established for the watershed. Evaluate potential to release based on two components: potential to release by overland flow (see section 4.1.2.1.2.1) and potential to release by flood (see section 4.1.2.1.2.2). Sum the values for these two components to obtain the potential to release factor value for the watershed, subject to a maximum value of 500.

4.1.2.1.2.1 *Potential to release by overland flow.* Evaluate potential to release by overland flow for the watershed based on three factors: containment, runoff, and distance to surface water.

Assign potential to release by overland flow a value of 0 for the watershed if:

• No overland segment of the hazardous substance migration path can be defined for the watershed, or

• The overland segment of the hazardous substance migration path for the watershed exceeds 2 miles before surface water is encountered.

If either condition applies, enter a value of 0 in Table 4–1 and proceed to section 4.1.2.1.2.2 to evaluate potential to release by flood. If neither applies, proceed to section 4.1.2.1.2.1.1 to evaluate potential to release by overland flow.

4.1.2.1.2.1.1 *Containment.* Determine the containment factor value for the watershed as follows:

• If one or more sources is located in surface water in the watershed (for example, intact sealed drums in surface water), assign the containment factor a value of 10 for the watershed. Enter this value in Table 4–1.

• If none of the sources is located in surface water in the watershed, assign a containment factor value from Table 4–2 to each source at the site that can potentially release hazardous substances to the hazardous substance migration path for this watershed. Assign the containment factor value for the watershed as follows:

–Select the highest containment factor value assigned to those sources that meet the minimum size requirement described below. Assign this highest value as the containment factor value for the watershed. Enter this value in Table 4–1.

–If, for this watershed, no source at the site meets the minimum size requirement, then select the highest containment factor value assigned to the sources at the site eligible to be evaluated for this watershed and assign it as the containment factor value for the watershed. Enter this value in Table 4–1.

A source meets the minimum size requirement if its source hazardous waste quantity value (see section 2.4.2.1.5) is 0.5 or more. Do not include the minimum size requirement in evaluating any other factor of this surface water migration component, except potential to release by flood as specified in section 4.1.2.1.2.2.3.

4.1.2.1.2.1.2 *Runoff.* Evaluate runoff based on three components: rainfall, drainage area, and soil group.

TABLE 4–2.—CONTAINMENT FACTOR VALUES FOR SURFACE WATER MIGRATION PATHWAY

Source	Assigned value
All Sources (Except Surface Impoundments, Land Treatment, Containers, and Tanks)	
Evidence of hazardous substance migration from source area (i.e., source area includes source and any associated containment structures)	10
No evidence of hazardous substance migration from source area *and:*	
(a) Neither of the following present: (1) maintained engineered cover, or (2) functioning and maintained run-on control system and runoff management system.	10
(b) Any one of the two items in (a) present	9
(c) Any two of the following present: (1) maintained engineered cover, or (2) functioning and maintained run-on control system and runoff management system, or (3) liner with functioning leachate collection and removal system immediately above liner.	7
(d) All items in (c) present	5
(e) All items in (c) present, plus no bulk or non-containerized liquids nor materials containing free liquids deposited in source area	3
No evidence of hazardous substance migration from source area, double liner with functioning leachate collection and removal system above and between liners, *and:*	
(f) Only one of the following deficiencies present in containment: (1) bulk or noncontainerized liquids or materials containing free liquids deposited in source area, or (2) no or nonfunctioning or nonmaintained run-on control system and runoff management system, or (3) no or nonmaintained engineered cover.	3
(g) None of the deficiencies in (f) present	0
Source area inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate is generated, liquids or materials containing free liquids not deposited in source area, and functioning and maintained run-on control present.	

TABLE 4-2.—CONTAINMENT FACTOR VALUES FOR SURFACE WATER MIGRATION PATHWAY—Concluded

Source	Assigned value
Surface Impoundment	
Evidence of hazardous substance migration from surface impoundment	10
Free liquids present with either no diking, unsound diking, or diking that is not regularly inspected and maintained	10
No evidence of hazardous substance migration from surface impoundment, free liquids present, sound diking that is regularly inspected and maintained, adequate freeboard, *and:*	
(a) No liner	9
(b) Liner	7
(c) Liner with functioning leachate collection and removal system below liner	5
(d) Double liner with functioning leachate collection and removal system between liners	3
No evidence of hazardous substance migration from surface impoundment and all free liquids eliminated at closure (either by removal of liquids or solidification of remaining wastes and waste residues).	Evaluate using **All Sources** criteria (with no bulk or free liquids deposited).
Land Treatment	
Evidence of hazardous substance migration from land treatment zone	10
No functioning and maintained run-on control and runoff management system	10
No evidence of hazardous substance migration from land treatment zone *and:*	
(a) Functioning and maintained run-on control and runoff management system	7
(b) Functioning and maintained run-on control and runoff management system, and vegetative cover established over entire land treatment area.	5
(c) Land treatment area maintained in compliance with 40 CFR 264.280	0
Containers	
All containers buried	Evaluate using **All Sources** criteria.
Evidence of hazardous substance migration from container area (i.e., container area includes containers and any associated containment structures).	10
No diking (or no similar structure) surrounding container area	10
Diking surrounding container area unsound or not regularly inspected and maintained	10
No evidence of hazardous substance migration from container area and container area surrounded by sound diking that is regularly inspected and maintained.	9
No evidence of hazardous substance migration from container area, container area surrounded by sound diking that is regularly inspected and maintained, *and:*	9
(a) Essentially impervious base under container area with liquids collection and removal system	7
(b) Containment system includes essentially impervious base, liquids collection system, sufficient capacity to contain 10 percent of volume of all containers, and functioning and maintained run-on control; and spilled or leaked hazardous substances and accumulated precipitation removed in timely manner to prevent overflow of collection system, at least weekly inspection of containers, hazardous substances in leaking or deteriorating containers transferred to containers in good condition, and containers sealed except when waste is added or removed.	5
(c) Free liquids present, containment system has sufficient capacity to hold total volume of all containers and to provide adequate freeboard, and single liner under container area with functioning leachate collection and removal system below liner.	5
(d) Same as (c) except: double liner under container area with functioning leachate collection and removal system between liners	3
Containers inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate would be generated from any unsealed or ruptured containers, liquids or materials containing free liquids not deposited in any container, and functioning and maintained run-on control present.	0
No evidence of hazardous substance migration from container area, containers leaking, and all free liquids eliminated at closure (either by removal of liquids or solidification of remaining wastes and waste residues).	Evaluate using All Sources criteria (with no bulk or free liquids deposited).
Tank	
Below-ground tank	Evaluate using All Sources criteria
Evidence of hazardous substance migration from tank area (i.e., tank area includes tank, ancillary equipment such as piping, and any associated containment structures).	10
No diking (or no similar structure) surrounding tank and ancillary equipment	10
Diking surrounding tank and ancillary equipment unsound or not regularly inspected and maintained	10
No evidence of hazardous substance migration from tank area and tank and ancillary equipment surrounded by sound diking that is regularly inspected and maintained.	9
No evidence of hazardous substance migration from tank area, tank and ancillary equipment surrounded by sound diking that is regularly inspected and maintained, *and:*	
(a) Tank and ancillary equipment provided with secondary containment (e.g., liner under tank area, vault system, double-wall) with leak detection and collection system.	7
(b) Tank and ancillary equipment provided with secondary containment system that detects and collects spilled or leaked hazardous substances and accumulated precipitation and has sufficient capacity to contain 110 percent of volume of largest tank within containment area, spilled or leaked hazardous substances and accumulated precipitation removed in a timely manner, at least weekly inspection of tank and secondary containment system, and all leaking or unfit-for-use tank systems promptly responded to.	5
(c) Containment system has sufficient capacity to hold total volume of all tanks within the tank containment area and to provide adequate freeboard, and single liner under tank containment area with functioning leachate collection and removal system below liner.	5
(d) Same as (c) except: double liner under tank containment area with functioning leachate collection and removal system between liners.	3
Tank is above ground, and inside or under maintained intact structure that provides protection from precipitation so that neither runoff nor leachate would be generated from any material released from tank, liquids or materials containing free liquids not deposited in any tank, and functioning and maintained run-on control present.	0

Rainfall. Determine the 2-year, 24-hour rainfall for the site. Use site-specific, 2-year, 24-hour rainfall data if records are available for at least 20 years. If such site-specific data are not available, estimate the 2-year, 24-hour rainfall for the site from a rainfall-frequency map. Do not round the rainfall value to the nearest integer.

Drainage area. Determine the drainage area for the sources at the site. Include in this drainage area both the source areas and the area upgradient of the sources, but exclude any portion of this drainage area for which runoff is diverted from entering the sources by storm sewers or run-on control and/or runoff management systems. Assign a drainage area value for the watershed from Table 4–3.

Soil group. Based on the predominant soil group within the drainage area described above, assign a soil group designation for the watershed from Table 4–4 as follows:

• Select the predominant soil group as that type which comprises the largest total area within the applicable drainage area.

• If a predominant soil group cannot be delineated, select that soil group in the drainage area that yields the highest value for the runoff factor.

Calculation of runoff factor value. Assign a combined rainfall/runoff value for the watershed from Table 4–5, based on the 2-year, 24-hour rainfall and the soil group designation. Determine the runoff factor value for the watershed from Table 4–6, based on the rainfall/runoff and drainage area values. Enter the runoff factor value in Table 4–1.

TABLE 4–3.—DRAINAGE AREA VALUES

Drainage area (acres)	Assigned value
Less than 50	1
50 to 250	2
Greater than 250 to 1,000	3
Greater than 1,000	4

TABLE 4–4.—SOIL GROUP DESIGNATIONS

Surface soil description	Soil group designation
Coarse-textured soils with high infiltration rates (for example, sands, loamy sands).	A
Medium-textured soils with moderate infiltration rates (for example, sandy loams, loams).	B
Moderately fine-textured soils with low infiltration rates (for example, silty loams, silts, sandy clay loams).	C
Fine-textured soils with very low infiltration rates (for example, clays, sandy clays, silty clay loams, clay loams, silty clays); or impermeable surfaces (for example, pavement).	D

TABLE 4–5.—RAINFALL/RUNOFF VALUES

2-Year, 24-hour rainfall (inches)	Soil group designation			
	A	B	C	D
Less than 1.0	0	0	2	3
1.0 to less than 1.5	0	1	2	3
1.5 to less than 2.0	0	2	3	4
2.0 to less than 2.5	1	2	3	4
2.5 to less than 3.0	2	3	4	4
3.0 to less than 3.5	2	3	4	5
3.5 or greater	3	4	5	6

TABLE 4–6.—RUNOFF FACTOR VALUES

Drainage area value	Rainfall/runoff value						
	0	1	2	3	4	5	6
1	0	0	0	1	1	1	1
2	0	0	1	1	2	3	4
3	0	0	1	3	7	11	15
4	0	1	2	7	17	25	25

4.1.2.1.2.1.3 *Distance to surface water.* Evaluate the distance to surface water as the shortest distance, along the overland segment, from any source with a surface water containment factor value greater than 0 to either the mean high water level for tidal waters or the mean water level for other surface waters. Based on this distance, assign a value from Table 4–7 to the distance to surface water factor for the watershed. Enter this value in Table 4–1.

4.1.2.1.2.1.4 *Calculation of factor value for potential to release by overland flow.* Sum the factor values for runoff and distance to surface water for the watershed and multiply this sum by the factor value for containment. Assign the resulting product as the factor value for potential to release by overland flow for the watershed. Enter this value in Table 4–1.

4.1.2.1.2.2 *Potential to release by flood.* Evaluate potential to release by flood for each watershed as the product of two factors: containment (flood) and flood frequency. Evaluate potential to release by flood separately for each source that is within the watershed. Furthermore, for each source, evaluate potential to release by flood separately for each category of floodplain in which the source lies. (See section 4.1.2.1.2.2.2 for the applicable floodplain categories.) Calculate the value for the potential to release by flood factor as specified in 4.1.2.1.2.2.3.

4.1.2.1.2.2.1 *Containment (flood).* For each source within the watershed, separately evaluate the containment (flood) factor for each category of floodplain in which the source is partially or wholly located. Assign a containment (flood) factor value from Table 4–8 to each floodplain category applicable to that source. Assign a containment (flood) factor value of 0 to each floodplain category in which the source does not lie.

4.1.2.1.2.2.2 *Flood frequency.* For each source within the watershed, separately evaluate the flood frequency factor for each category of floodplain in which the source is partially or wholly located. Assign a flood frequency factor value from Table 4–9 to each floodplain category in which the source is located.

4.1.2.1.2.2.3 *Calculation of factor value for potential to release by flood.* For each source within the watershed and for each category of floodplain in which the source is partially or wholly located, calculate a separate potential to release by flood factor value. Calculate this value as the product of the containment (flood) value and the flood frequency value applicable to the source for the floodplain category. Select the highest value calculated for those sources that meet the minimum size requirement specified in section 4.1.2.1.2.1.1 and assign it as the value for the potential to release by flood factor for the watershed. However, if, for this watershed, no source at the site meets the minimum size requirement, select the highest value calculated for the sources at the site eligible to be evaluated for this watershed and assign it as the value for this factor.

TABLE 4–7.—DISTANCE TO SURFACE WATER FACTOR VALUES

Distance	Assigned value
Less than 100 feet	25
100 feet to 500 feet	20
Greater than 500 feet to 1,000 feet	16
Greater than 1,000 feet to 2,500 feet	9
Greater than 2,500 feet to 1.5 miles	6
Greater than 1.5 miles to 2 miles	3

TABLE 4–8.—CONTAINMENT (FLOOD) FACTOR VALUES

Containment criteria	Assigned value
Documentation that containment at the source is designed, constructed, operated, and maintained to prevent a washout of hazardous substances by the flood being evaluated.	0
Other	10

TABLE 4–9.—FLOOD FREQUENCY FACTOR VALUES

Floodplain category	Assigned value
Source floods annually	50
Source in 10-year floodplain	50
Source in 100-year floodplain	25
Source in 500-year floodplain	7
None of above	0

Enter this highest potential to release by flood factor value for the watershed in Table 4–1, as well as the values for containment (flood) and flood frequency that yield this highest value.

4.1.2.1.2.3 *Calculation of potential to release factor value.* Sum the factor values assigned to the watershed for potential to release by overland flow and potential to release by flood. Assign this sum as the potential to release factor value for the watershed, subject to a maximum value of 500. Enter this value in Table 4–1.

4.1.2.1.3 *Calculation of drinking water threat-likelihood of release factor category value.* If an observed release is established for the watershed, assign the observed release factor value of 550 as the likelihood of release factor category value for that watershed. Otherwise, assign the potential to release factor value for that watershed as the likelihood of release factor category value for that watershed. Enter the value assigned in Table 4–1.

4.1.2.2 *Drinking water threat-waste characteristics.* Evaluate the waste characteristics factor category for each

watershed based on two factors: toxicity/persistence and hazardous waste quantity. Evaluate only those hazardous substances that are available to migrate from the sources at the site to surface water in the watershed via the overland/flood hazardous substance migration path for the watershed (see section 4.1.1.1). Such hazardous substances include:

• Hazardous substances that meet the criteria for an observed release to surface water in the watershed.

• All hazardous substances associated with a source that has a surface water containment factor value greater than 0 for the watershed (see sections 2.2.2, 2.2.3, 4.1.2.1.2.1.1, and 4.1.2.1.2.2.1).

4.1.2.2.1 *Toxicity/persistence.* For each hazardous substance, assign a toxicity factor value, a persistence factor value, and a combined toxicity/persistence factor value as specified in sections 4.1.2.2.1.1 through 4.1.2.2.1.3. Select the toxicity/persistence factor value for the watershed as specified in section 4.1.2.2.1.3.

4.1.2.2.1.1 *Toxicity.* Assign a toxicity factor value to each hazardous substance as specified in section 2.4.1.1.

4.1.2.2.1.2 *Persistence.* Assign a persistence factor value to each hazardous substance. In assigning this value, evaluate persistence based primarily on the half-life of the hazardous substance in surface water and secondarily on the sorption of the hazardous substance to sediments. The half-life in surface water is defined for HRS purposes as the time required to reduce the initial concentration in surface water by one-half as a result of the combined decay processes of biodegradation, hydrolysis, photolysis, and volatilization. Sorption to sediments is evaluated for the HRS based on the logarithm of the n-octanol-water partition coefficient (log K_{ow}) of the hazardous substance.

Estimate the half-life ($t_{1/2}$) of a hazardous substance as follows:

$$t_{1/2} = \frac{1}{\frac{1}{h} + \frac{1}{b} + \frac{1}{p} + \frac{1}{v}}$$

where:

h = Hydrolysis half-life.
b = Biodegradation half-life.
p = Photolysis half-life.
v = Volatilization half-life.

If one or more of these four component half-lives cannot be estimated for the hazardous substance from available data, delete that component half-life from the above equation. If none of these four component half-lives can be estimated for the hazardous substance from available data, use the default procedure indicated below. Estimate a half-life for the hazardous substance for lakes or for rivers, oceans, coastal tidal waters, and Great Lakes, as appropriate.

If a half-life can be estimated for a hazardous substance:

• Assign that hazardous substance a persistence factor value from the appropriate portion of Table 4–10 (that is lakes; or rivers, oceans, coastal tidal waters, and Great Lakes).

• Select the appropriate portion of Table 4–10 as follows:

–If there is one or more drinking water intakes along the hazardous substance migration path for the watershed, select the nearest drinking water intake as measured from the probable point of entry. If the in-water segment between the probable point of entry and this selected intake includes both lakes and other water bodies, use the lakes portion of Table 4–10 only if more than half the distance to this selected intake lies in lake(s). Otherwise, use the rivers, oceans, coastal tidal waters, and Great Lakes portion of Table 4–10. For contaminated sediments with no identified source, use the point where measurement begins (see section 4.1.1.2) rather than the probable point of entry.

–If there are no drinking water intakes but there are intakes or points of use for any of the resource types listed in section 4.1.2.3.3, select the nearest such intake or point of use. Select the portion of Table 4–10 based on this intake or point of use in the manner specified for drinking water intakes.

–If there are no drinking water intakes and no specified resource intakes and points of use, but there is another type of resource listed in section 4.1.2.3.3 (for example, the water is usable for drinking water purposes even though not used), select the portion of Table 4–10 based on the nearest point of this resource in the manner specified for drinking water intakes.

TABLE 4–10.—PERSISTENCE FACTOR VALUES—HALF-LIFE

Surface water category	Substance half-life (days)	Assigned value *
Rivers, oceans, coastal tidal waters, and Great Lakes	Less than or equal to 0.2	0.0007
	Greater than 0.2 to 0.5	0.07
	Greater than 0.5 to 1.5	0.4
	Greater than 1.5	1
Lakes	Less than or equal to 0.02	0.0007
	Greater than 0.02 to 2	0.07
	Greater than 2 to 20	0.4
	Greater than 20	1

* Do not round to nearest integer.

If a half-life cannot be estimated for a hazardous substance from available data, use the following default procedure to assign a persistence factor value to that hazardous substance:

• For those hazardous substances that are metals (or metalloids), assign a persistence factor value of 1 as a default for all surface water bodies.

• For other hazardous substances (both organic and inorganic), assign a persistence factor value of 0.4 as a default for rivers, oceans, coastal tidal waters, and Great Lakes, and a persistence factor value of 0.07 as a default for lakes. Select the appropriate value in the same manner specified for using Table 4–10.

Use the persistence factor value assigned based on half-life or the default procedure unless the hazardous substance can be assigned a higher factor value from Table 4–11, based on its Log K_{ow}. If a higher value can be assigned from Table 4–11, assign this higher value as the persistence factor value for the hazardous substance.

TABLE 4–11.—PERSISTENCE FACTOR VALUES—LOG K_{ow}

Log K_{ow}	Assigned value *
Less than 3.5	0.0007
3.5 to less than 4.0	0.07
4.0 to 4.5	0.4
Greater than 4.5	1

* Use for lakes, rivers, oceans, coastal tidal waters, and Great Lakes. Do not round to nearest integer.

4.1.2.2.1.3 *Calculation of toxicity/persistence factor value.* Assign each hazardous substance a toxicity/persistence factor value from Table 4–12, based on the values assigned to the hazardous substance for the toxicity and persistence factors. Use

the hazardous substance with the highest toxicity/persistence factor value for the watershed to assign the toxicity/persistence factor value for the drinking water threat for the watershed. Enter this value in Table 4–1.

4.1.2.2.2 *Hazardous waste quantity.* Assign a hazardous waste quantity factor value for the watershed as specified in section 2.4.2. Enter this value in Table 4–1.

4.1.2.2.3 *Calculation of drinking water threat-waste characteristics factor category value.* Multiply the toxicity/persistence and hazardous waste quantity factor values for the watershed, subject to a maximum product of 1×10^8. Based on this product, assign a value from Table 2–7 (section 2.4.3.1) to the drinking water threat-waste characteristics factor category for the watershed. Enter this value in Table 4–1.

TABLE 4–12.—TOXICITY/PERSISTENCE FACTOR VALUES [a]

Persistence factor value	Toxicity factor value					
	10,000	1,000	100	10	1	0
1.0	10,000	1,000	100	10	1	0
0.4	4,000	400	40	4	0.4	0
0.07	700	70	7	0.7	0.07	0
0.0007	7	0.7	0.07	0.007	0.0007	0

[a] Do not round to nearest integer.

4.1.2.3 *Drinking water threat-targets.* Evaluate the targets factor category for each watershed based on three factors: nearest intake, population, and resources.

To evaluate the nearest intake and population factors, determine whether the target surface water intakes are subject to actual or potential contamination as specified in section 4.1.1.2. Use either an observed release based on direct observation at the intake or the exposure concentrations from samples (or comparable samples) taken at or beyond the intake to make this determination (see section 4.1.2.1.1). The exposure concentrations for a sample (that is, surface water, benthic, or sediment sample) consist of the concentrations of those hazardous substances present that are significantly above background levels and attributable at least in part to the site (that is, those hazardous substance concentrations that meet the criteria for an observed release).

When an intake is subject to actual contamination, evaluate it using Level I concentrations or Level II concentrations. If the actual contamination is based on an observed release by direct observation, use Level II concentrations for that intake. However, if the actual contamination is based on an observed release from samples, determine which level applies for the intake by comparing the exposure concentrations from samples (or comparable samples) to health-based benchmarks as specified in sections 2.5.1 and 2.5.2. Use the health-based benchmarks from Table 3–10 (section 3.3.1) in determining the level of contamination from samples. For contaminated sediments with no identified source, evaluate the actual contamination using Level II concentrations (see section 4.1.1.2).

4.1.2.3.1 *Nearest intake.* Evaluate the nearest intake factor based on the drinking water intakes along the overland/flood hazardous substance migration path for the watershed. Include standby intakes in evaluating this factor only if they are used for supply at least once a year.

Assign the nearest intake factor a value as follows and enter the value in Table 4–1:

- If one or more of these drinking water intakes is subject to Level I concentrations as specified in section 4.1.2.3, assign a factor value of 50.
- If not, but if one or more of these drinking water intakes is subject to Level II concentrations, assign a factor value of 45.
- If none of these drinking water intakes is subject to Level I or Level II concentrations, determine the nearest of these drinking water intakes, as measured from the probable point of entry (or from the point where measurement begins for contaminated sediments with no identified source). Assign a dilution weight from Table 4–13 to this intake, based on the type of surface water body in which it is located. Multiply this dilution weight by 20, round the product to the nearest integer, and assign it as the factor value.

Assign the dilution weight from Table 4–13 as follows:

TABLE 4–13.—SURFACE WATER DILUTION WEIGHTS

Type of surface water body [a]		Assigned dilution weight [b]
Descriptor	Flow characteristics	
Minimal stream	Less than 10 cfs [c]	1
Small to moderate stream	10 to 100 cfs	0.1
Moderate to large stream	Greater than 100 to 1,000 cfs	0.01
Large stream to river	Greater than 1,000 to 10,000 cfs	0.001
Large river	Greater than 10,000 to 100,000 cfs	0.0001
Very large river	Greater than 100,000 cfs	0.00001
Coastal tidal waters [d]	Flow not applicable, depth not applicable	0.0001
Shallow ocean zone [e] or Great Lake	Flow not applicable, depth less than 20 feet	0.0001
Moderate depth ocean zone [e] or Great Lake	Flow not applicable, depth 20 to 200 feet	0.00001
Deep ocean zone [e] or Great Lake	Flow not applicable, depth greater than 200 feet	0.000005
3-mile mixing zone in quiet flowing river	10 cfs or greater	0.5

[a] Treat each lake as a separate type of water body and assign a dilution weight as specified in text.
[b] Do not round to nearest integer.
[c] cfs = cubic feet per second.
[d] Embayments, harbors, sounds, estuaries, back bays, lagoons, wetlands, etc., seaward from mouths of rivers and landward from baseline of Territorial Sea.
[e] Seaward from baseline of Territorial Sea. This baseline represents the generalized U.S. coastline. It is parallel to the seaward limit of the Territorial Sea and other maritime limits such as the inner boundary of the Federal fisheries jurisdiction and the limit of States jurisdiction under the Submerged Lands Act, as amended.

- For a river (that is, surface water body types specified in Table 4–13 as minimal stream through very large river), assign a dilution weight based on the average annual flow in the river at the intake. If available, use the average annual discharge as defined in the U.S. Geological Survey Water Resources Data Annual Report. Otherwise, estimate the average annual flow.
- For a lake, assign a dilution weight as follows:
  - –For a lake that has surface water flow entering the lake, assign a dilution weight based on the sum of the

average annual flows for the surface water bodies entering the lake up to the point of the intake.

–For a lake that has no surface water flow entering, but that does have surface water flow leaving, assign a dilution weight based on the sum of the average annual flows for the surface water bodies leaving the lake.

–For a closed lake (that is, a lake without surface water flow entering or leaving), assign a dilution weight based on the average annual ground water flow into the lake, if available, using the dilution weight for the corresponding river flow rate in Table 4–13. If not available, assign a default dilution weight of 1.

• For the ocean and the Great Lakes, assign a dilution weight based on depth.

• For coastal tidal waters, assign a dilution weight of 0.0001; do not consider depth or flow.

• For a quiet-flowing river that has average annual flow of 10 cubic feet per second (cfs) or greater and that contains the probable point of entry to surface water, apply a zone of mixing in assigning the dilution weight:

–Start the zone of mixing at the probable point of entry and extend it for 3 miles from the probable point of entry, except: if the surface water characteristics change to turbulent within this 3-mile distance, extend the zone of mixing only to the point at which the change occurs.

–Assign a dilution weight of 0.5 to any intake that lies within this zone of mixing.

–Beyond this zone of mixing, assign a dilution weight the same as for any other river (that is, assign the dilution weight based on average annual flow).

–Treat a quiet-flowing river with an average annual flow of less than 10 cfs the same as any other river (that is, assign it a dilution weight of 1).

In those cases where water flows from a surface water body with a lower assigned dilution weight (from Table 4–13) to a surface water body with a higher assigned dilution weight (that is, water flows from a surface water body with more dilution to one with less dilution), use the lower assigned dilution weight as the dilution weight for the latter surface water body.

4.1.2.3.2 *Population.* In evaluating the population factor, include only persons served by drinking water drawn from intakes that are along the overland/flood hazardous substance migration path for the watershed and that are within the target distance limit specified in section 4.1.1.2. Include residents, students, and workers who regularly use the water. Exclude transient populations such as customers and travelers passing through the area. When a standby intake is maintained on a regular basis so that water can be withdrawn, include it in evaluating the population factor.

In estimating residential population, when the estimate is based on the number of residences, multiply each residence by the average number of persons per residence for the county in which the residence is located.

In estimating the population served by an intake, if the water from the intake is blended with other water (for example, water from other surface water intakes or ground water wells), apportion the total population regularly served by the blended system to the intake based on the intake's relative contribution to the total blended system. In estimating the intake's relative contribution, assume each well or intake contributes equally and apportion the population accordingly, except: if the relative contribution of any one intake or well exceeds 40 percent based on average annual pumpage or capacity, estimate the relative contribution of the wells and intakes considering the following data, if available:

• Average annual pumpage from the ground water wells and surface water intakes in the blended system.

• Capacities of the wells and intakes in the blended system.

For systems with standby surface water intakes or standby ground water wells, apportion the total population regularly served by the blended system as described above, except:

• Exclude standby ground water wells in apportioning the population.

• When using pumpage data for a standby surface water intake, use average pumpage for the period during which the standby intake is used rather than average annual pumpage.

• For that portion of the total population that could be apportioned to a standby surface water intake, assign that portion of the population either to that standby intake or to the other surface water intake(s) and ground water well(s) that serve that population; do not assign that portion of the population both to the standby intake and to the other intake(s) and well(s) in the blended system. Use the apportioning that results in the highest population factor value. (Either include all standby intake(s) or exclude some or all of the standby intake(s) as appropriate to obtain this highest value.) Note that the specific standby intake(s) included or excluded and, thus, the specific apportioning may vary in evaluating different watersheds and in evaluating the ground water pathway.

4.1.2.3.2.1 *Level of contamination.* Evaluate the population factor based on three factors: Level I concentrations, Level II concentrations, and potential contamination. Determine which factor applies for an intake as specified in section 4.1.2.3. Evaluate intakes subject to Level I concentration as specified in section 4.1.2.3.2.2, intakes subject to Level II concentration as specified in section 4.1.2.3.2.3, and intakes subject to potential contamination as specified in section 4.1.2.3.2.4.

For the potential contamination factor, use population ranges in evaluating the factor as specified in section 4.1.2.3.2.4. For the Level I and Level II concentrations factors, use the population estimate, not population ranges, in evaluating both factors.

4.1.2.3.2.2 *Level I concentrations.* Sum the number of people served by drinking water from intakes subject to Level I concentrations. Multiply this sum by 10. Assign this product as the value for this factor. Enter this value in Table 4–1.

4.1.2.3.2.3 *Level II concentrations.* Sum the number of people served by drinking water from intakes subject to Level II concentrations. Do not include people already counted under the Level I concentrations factor. Assign this sum as the value for this factor. Enter this value in Table 4–1.

4.1.2.3.2.4 *Potential contamination.* For each applicable type of surface water body in Table 4–14, first determine the number of people served by drinking water from intakes subject to potential contamination in that type of surface water body. Do not include those people already counted under the Level I and Level II concentrations factors.

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TABLE 4-14
DILUTION-WEIGHTED POPULATION VALUES FOR POTENTIAL CONTAMINATION FACTOR FOR SURFACE WATER MIGRATION PATHWAY[a]

Type of Surface Water Body[b]	Number of People								
	0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000
Minimal stream (< 10 cfs)	0	4	17	53	164	522	1,633	5,214	16,325
Small to moderate stream (10 to 100 cfs)	0	0.4	2	5	16	52	163	521	1,633
Moderate to large stream (> 100 to 1,000 cfs)	0	0.04	0.2	0.5	2	5	16	52	163
Large stream to river (> 1,000 to 10,000 cfs)	0	0.004	0.02	0.05	0.2	0.5	2	5	16
Large river (> 10,000 to 100,000 cfs)	0	0	0.002	0.005	0.02	0.05	0.2	0.5	2
Very large river (> 100,000 cfs)	0	0	0	0.001	0.002	0.005	0.02	0.05	0.2
Shallow ocean zone or Great Lake (depth < 20 feet)	0	0	0.002	0.005	0.02	0.05	0.2	0.5	2
Moderate ocean zone or Great Lake (depth 20 to 200 feet)	0	0	0	0.001	0.002	0.005	0.02	0.05	0.2
Deep ocean zone or Great Lakes (depth > 200 feet)	0	0	0	0	0.001	0.003	0.008	0.03	0.08
3-mile mixing zone in quiet flowing river (≥ 10 cfs)	0	2	9	26	82	261	817	2,607	8,163

TABLE 4-14 (Concluded)

Type of Surface Water Body[b]	Number of People				
	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000	3,000,001 to 10,000,000
Minimal stream (< 10 cfs)	52,137	163,246	521,360	1,632,455	5,213,590
Small to moderate stream (10 to 100 cfs)	5,214	16,325	52,136	163,245	521,359
Moderate to large stream (> 100 to 1,000 cfs)	521	1,633	5,214	16,325	52,136
Large stream to river (> 1,000 to 10,000 cfs)	52	163	521	1,632	5,214
Large river (> 10,000 to 100,000 cfs)	5	16	52	163	521
Very large river (> 100,000 cfs)	0.5	2	5	16	52
Shallow ocean zone or Great Lake (depth < 20 feet)	5	16	52	163	521
Moderate ocean zone or Great Lake (depth 20 to 200 feet)	0.5	2	5	16	52
Deep zone or Great Lake (depth > 200 feet)	0.3	1	3	8	26
3-mile mixing zone in quiet flowing river (≥ 10 cfs)	26,068	81,623	260,680	816,227	2,606,795

[a]Round the number of people to nearest integer. Do not round the assigned dilution-weighted population value to nearest integer.

[b]Treat each lake as a separate type of water body and assign it a dilution-weighted population value using the surface water body type with the same dilution weight from Table 4-13 as the lake. If drinking water is withdrawn from coastal tidal water or the ocean, assign a dilution-weighted population value to it using the surface water body type with the same dilution weight from Table 4-13 as the coastal tidal water or the ocean zone.

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For each type of surface water body, assign a dilution-weighted population value from Table 4–14, based on the number of people included for that type of surface water body. (Note that the dilution-weighted population values in Table 4–14 incorporate the dilution weights from Table 4–13. Do not multiply the values from Table 4–14 by these dilution weights.)

Calculate the value for the potential contamination factor (PC) for the watershed as follows:

$$PC = \frac{1}{10} \sum_{i=1}^{n} W_i$$

where:

W_i = Dilution-weighted population from Table 4–14 for surface water body type i.

n = Number of different surface water body types in the watershed.

If PC is less than 1, do not round it to the nearest integer; if PC is 1 or more, round to the nearest integer. Enter this value for the potential contamination factor in Table 4–1.

4.1.2.3.2.5 *Calculation of population factor value.* Sum the factor values for Level I concentrations, Level II concentrations, and potential contamination. Do not round this sum to the nearest integer. Assign this sum as the population factor value for the watershed. Enter this value in Table 4–1.

4.1.2.3.3 *Resources.* To evaluate the resources factor for the watershed, select the highest value below that applies to the watershed. Assign this value as the resources factor value for the watershed. Enter this value in Table 4–1.

Assign a value of 5 if, within the in-water segment of the hazardous substance migration path for the watershed, the surface water is used for one or more of the following purposes:

- Irrigation (5 acre minimum) of commercial food crops or commercial forage crops.
- Watering of commercial livestock.
- Ingredient in commercial food preparation.
- Major or designated water recreation area, excluding drinking water use.

Assign a value of 5 if, within the in-water segment of the hazardous substance migration path for the watershed, the surface water is not used for drinking water, but either of the following applies:

- Any portion of the surface water is designated by a State for drinking water use under section 305(a) of the Clean Water Act, as amended.
- Any portion of the surface water is usable for drinking water purposes.

Assign a value of 0 if none of the above applies.

4.1.2.3.4 *Calculation of drinking water threat-targets factor category value.* Sum the nearest intake, population, and resources factor values for the watershed. Do not round this sum to the nearest integer. Assign this sum as the drinking water threat-targets factor category value for the watershed. Enter this value in Table 4–1.

4.1.2.4 *Calculation of the drinking water threat score for a watershed.* Multiply the drinking water threat factor category values for likelihood of release, waste characteristics, and targets for the watershed, and round the product to the nearest integer. Then divide by 82,500. Assign the resulting value, subject to a maximum of 100, as the drinking water threat score for the watershed. Enter this value in Table 4–1.

4.1.3 *Human food chain threat.* Evaluate the human food chain threat for each watershed based on three factor categories: likelihood of release, waste characteristics, and targets.

4.1.3.1 *Human food chain threat-likelihood of release.* Assign the same likelihood of release factor category value for the human food chain threat for the watershed as would be assigned in section 4.1.2.1.3 for the drinking water threat. Enter this value in Table 4–1.

4.1.3.2 *Human food chain threat-waste characteristics.* Evaluate the waste characteristics factor category for each watershed based on two factors: toxicity/persistence/bioaccumulation and hazardous waste quantity.

4.1.3.2.1 *Toxicity/persistence/bioaccumulation.* Evaluate all those hazardous substances eligible to be evaluated for toxicity/persistence in the drinking water threat for the watershed (see section 4.1.2.2).

4.1.3.2.1.1 *Toxicity.* Assign a toxicity factor value to each hazardous substance as specified in section 2.4.1.1.

4.1.3.2.1.2 *Persistence.* Assign a persistence factor value to each hazardous substance as specified for the drinking water threat (see section 4.1.2.2.1.2), except: use the predominant water category (that is, lakes; or rivers, oceans, coastal tidal waters, or Great Lakes) between the probable point of entry and the nearest fishery (not the nearest drinking water or resources intake) along the hazardous substance migration path for the watershed to determine which portion of Table 4–10 to use. Determine the predominant water category based on distance as specified in section 4.1.2.2.1.2. For contaminated sediments with no identified source, use the point where measurement begins rather than the probable point of entry.

4.1.3.2.1.3 *Bioaccumulation potential.* Use the following data hierarchy to assign a bioaccumulation potential factor value to each hazardous substance:

- Bioconcentration factor (BCF) data.
- Logarithm of the n-octanol-water partition coefficient (log K_{ow}) data.
- Water solubility data.

Assign a bioaccumulation potential factor value to each hazardous substance from Table 4–15.

If BCF data are available for any aquatic human food chain organism for the substance being evaluated, assign the bioaccumulation potential factor value to the hazardous substance as follows:

- If BCF data are available for both fresh water and salt water for the hazardous substance, use the BCF data that correspond to the type of water body (that is, fresh water or salt water) in which the fisheries are located to assign the bioaccumulation potential factor value to the hazardous substance.
- If, however, some of the fisheries being evaluated are in fresh water and some are in salt water, or if any are in brackish water, use the BCF data that yield the higher factor value to assign the bioaccumulation potential factor value to the hazardous substance.
- If BCF data are available for either fresh water or salt water, but not for both, use the available BCF data to assign the bioaccumulation potential factor value to the hazardous substance.

If BCF data are not available for the hazardous substance, use log K_{ow} data to assign a bioaccumulation potential factor value to organic substances, but not to inorganic substances. If BCF data are not available, and if either log K_{ow} data are not available, the log K_{ow} is available but exceeds 6.0, or the substance is an inorganic substance, use water solubility data to assign a bioaccumulation potential factor value.

TABLE 4–15.—BIOACCUMULATION POTENTIAL FACTOR VALUES [a]

If bioconcentration factor (BCF) data are available for any aquatic human food chain organism, assign a value as follows: [b]

BCF	Assigned value
Greater than or equal to 10,000	50,000
1,000 to less than 10,000	5,000
100 to less than 1,000	500
10 to less than 100	50
1 to less than 10	5
Less than 1	0.5

If BCF data are not available, and log K_{ow} data are available and do not exceed 6.0, assign a value to an organic hazardous substance as follows (for inorganic hazardous substances, skip this step and proceed to the next):

Log K_{ow}	Assigned value
5.5 to 6.0	50,000
4.5 to less than 5.5	5,000
3.2 to less than 4.5	500
2.0 to less than 3.2	50
0.8 to less than 2.0	5
Less than 0.8	0.5

If BCF data are not available, and if either Log K_{ow} data are not available, a log K_{ow} is available but exceeds 6.0, or the substance is an inorganic substance, assign a value as follows:

TABLE 4-15.—BIOACCUMULATION POTENTIAL FACTOR VALUES [a]—Concluded

Water solubility (mg/l)	Assigned value
Less than 25	50,000
25 to 500	5,000
Greater than 500 to 1,500	500
Greater than 1,500	0.5

If none of these data are available, assign a value of 0.5.

[a] Do not round to nearest integer.
[b] See text for use of freshwater and saltwater BCF data.

Do not distinguish between fresh water and salt water in assigning the bioaccumulation potential factor value based on log K_{ow} or water solubility data.

If none of these data are available, assign the hazardous substance a bioaccumulation potential factor value of 0.5.

4.1.3.2.1.4 *Calculation of toxicity/persistence/bioaccumulation factor value.* Assign each hazardous substance a toxicity/persistence factor value from Table 4-12, based on the values assigned to the hazardous substance for the toxicity and persistence factors. Then assign each hazardous substance a toxicity/persistence/bioaccumulation factor value from Table 4-16, based on the values assigned for the toxicity/persistence and bioaccumulation potential factors. Use the hazardous substance with the highest toxicity/persistence/bioaccumulation factor value for the watershed to assign the value to this factor. Enter this value in Table 4-1.

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TABLE 4-16
TOXICITY/PERSISTENCE/BIOACCUMULATION FACTOR VALUES[a]

Toxicity/ Persistence Factor Value	Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
10,000	5×10^8	5×10^7	5×10^6	5×10^5	5×10^4	5,000
4,000	2×10^8	2×10^7	2×10^6	2×10^5	2×10^4	2,000
1,000	5×10^7	5×10^6	5×10^5	5×10^4	5,000	500
700	3.5×10^7	3.5×10^6	3.5×10^5	3.5×10^4	3,500	350
400	2×10^7	2×10^6	2×10^5	2×10^4	2,000	200
100	5×10^6	5×10^5	5×10^4	5,000	500	50
70	3.5×10^6	3.5×10^5	3.5×10^4	3,500	350	35
40	2×10^6	2×10^5	2×10^4	2,000	200	20
10	5×10^5	5×10^4	5,000	500	50	5
7	3.5×10^5	3.5×10^4	3,500	350	35	3.5
4	2×10^5	2×10^4	2,000	200	20	2
1	5×10^4	5,000	500	50	5	0.5
0.7	3.5×10^4	3,500	350	35	3.5	0.35
0.4	2×10^4	2,000	200	20	2	0.2
0.07	3,500	350	35	3.5	0.35	0.035
0.007	350	35	3.5	0.35	0.035	0.0035
0.0007	35	3.5	0.35	0.035	0.0035	0.00035
0	0	0	0	0	0	0

[a]Do not round to nearest integer.

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4.1.3.2.2 *Hazardous waste quantity.* Assign the same factor value for hazardous waste quantity for the watershed as would be assigned in section 4.1.2.2.2 for the drinking water threat. Enter this value in Table 4–1.

4.1.3.2.3 *Calculation of human food chain threat-waste characteristics factor category value.* For the hazardous substance selected for the watershed in section 4.1.3.2.1.4, use its toxicity/persistence factor value and bioaccumulation potential factor value as follows to assign a value to the waste characteristics factor category. First, multiply the toxicity/persistence factor value and the hazardous waste quantity factor value for the watershed, subject to a maximum product of 1×10^{8}. Then multiply this product by the bioaccumulation potential factor value for this hazardous substance, subject to a maximum product of 1×10^{12}. Based on this second product, assign a value from Table 2–7 (section 2.4.3.1) to the human food chain threat-waste characteristics factor category for the watershed. Enter this value in Table 4–1.

4.1.3.3 *Human food chain threat-targets.* Evaluate two target factors for each watershed: food chain individual and population. For both factors, determine whether the target fisheries are subject to actual or potential human food chain contamination.

Consider a fishery (or portion of a fishery) within the target distance limit of the watershed to be subject to actual human food chain contamination if any of the following apply:

- A hazardous substance having a bioaccumulation potential factor value of 500 or greater is present either in an observed release by direct observation to the watershed or in a surface water or sediment sample from the watershed at a level that meets the criteria for an observed release to the watershed from the site, and at least a portion of the fishery is within the boundaries of the observed release (that is, it is located either at the point of direct observation or at or between the probable point of entry and the most distant sampling point establishing the observed release).
- The fishery is closed, and a hazardous substance for which the fishery has been closed has been documented in an observed release to the watershed from the site, and at least a portion of the fishery is within the boundaries of the observed release.
- A hazardous substance is present in a tissue sample from an essentially sessile, benthic, human food chain organism from the watershed at a level that meets the criteria for an observed release to the watershed from the site, and at least a portion of the fishery is within the boundaries of the observed release.

For a fishery that meets any of these three criteria, but that is not wholly within the boundaries of the observed release, consider only the portion of the fishery that is within the boundaries of the observed release to be subject to actual human food chain contamination. Consider the remainder of the fishery within the target distance limit to be subject to potential food chain contamination.

In addition, consider all other fisheries that are partially or wholly within the target distance limit for the watershed, including fisheries partially or wholly within the boundaries of an observed release for the watershed that do not meet any of the three criteria listed above, to be subject to potential human food chain contamination. If only a portion of the fishery is within the target distance limit for the watershed, include only that portion in evaluating the targets factor category.

When a fishery (or portion of a fishery) is subject to actual food chain contamination, determine the part of the fishery subject to Level I concentrations and the part subject to Level II concentrations. If the actual food chain contamination is based on direct observation, evaluate it using Level II concentrations. However, if the actual food chain contamination is based on samples from the watershed, use these samples and, if available, additional tissue samples from aquatic human food chain organisms as specified below, to determine the part subject to Level I concentrations and the part subject to Level II concentrations:

- Determine the level of actual contamination from samples (including tissue samples from essentially sessile, benthic organisms) that meet the criteria for actual food chain contamination by comparing the exposure concentrations (see section 4.1.2.3) from these samples (or comparable samples) to the health-based benchmarks from Table 4–17, as described in section 2.5.1 and 2.5.2. Use only the exposure concentrations for those hazardous substances in the sample (or comparable samples) that meet the criteria for actual contamination of the fishery.
- In addition, determine the level of actual contamination from other tissue samples by comparing the concentrations of hazardous substances in the tissue samples (or comparable tissue samples) to the health-based benchmarks from Table 4–17, as described in sections 2.5.1 and 2.5.2. Use only those additional tissue samples and only those hazardous substances in the tissue samples that meet all the following criteria:
  - –The tissue sample is from a location that is within the boundaries of the actual food chain contamination for the site (that is, either at the point of direct observation or at or between the probable point of entry and the most distant sample point meeting the criteria for actual food chain contamination).
  - –The tissue sample is from a species of aquatic human food chain organism that spends extended periods of time within the boundaries of the actual food chain contamination for the site and that is not an essentially sessile, benthic organism.
  - –The hazardous substance is a substance that is also present in a surface water, benthic, or sediment sample from within the target distance limit for the watershed and, for such a sample, meets the criteria for actual food chain contamination.

TABLE 4–17.—HEALTH-BASED BENCHMARKS FOR HAZARDOUS SUBSTANCES IN HUMAN FOOD CHAIN

- Concentration corresponding to Food and Drug Administration Action Level (FDAAL) for fish or shellfish.
- Screening concentration for cancer corresponding to that concentration that corresponds to the 10^{-6} individual cancer risk for oral exposures.
- Screening concentration for noncancer toxicological responses corresponding to the Reference Dose (RfD) for oral exposures.

4.1.3.3.1 *Food chain individual.* Evaluate the food chain individual factor based on the fisheries (or portions of fisheries) within the target distance limit for the watershed. Assign this factor a value as follows:

- If any fishery (or portion of a fishery) is subject to Level I concentrations, assign a value of 50.
- If not, but if any fishery (or portion of a fishery) is subject to Level II concentrations, assign a value of 45.
- If not, but if there is an observed release of a hazardous substance having a bioaccumulation potential factor value of 500 or greater to surface water in the watershed and there is a fishery (or portion of a fishery) present anywhere within the target distance limit, assign a value of 20.
- If there is no observed release to surface water in the watershed or there is no observed release of a hazardous substance having a bioaccumulation potential factor value of 500 or greater, but there is a fishery (or portion of a fishery) present anywhere within the target distance limit, assign a value as follows:
  - –Using Table 4–13, determine the highest dilution weight (that is, lowest amount of dilution) applicable to the fisheries (or portions of fisheries) within the target distance limit. Multiply this dilution weight by 20 and round to the nearest integer.
  - –Assign this calculated value as the factor value.
- If there are no fisheries (or portions of fisheries) within the target distance limit of the watershed, assign a value of 0.

Enter the value assigned in Table 4–1.

4.1.3.3.2 *Population.* Evaluate the population factor for the watershed based on three factors: Level I concentrations, Level II concentrations, and potential human food chain contamination. Determine which factor applies for a fishery (or portion of a fishery) as specified in section 4.1.3.3.

4.1.3.3.2.1 *Level I concentrations.* Determine those fisheries (or portions of fisheries) within the watershed that are subject to Level I concentrations.

Estimate the human food chain population value for each fishery (or portion of a fishery) as follows:

- Estimate human food chain production for the fishery based on the estimated annual

production (in pounds) of human food chain organisms (for example, fish, shellfish) for that fishery, except: if the fishery is closed and a hazardous substance for which the fishery has been closed has been documented in an observed release to the fishery from a source at the site, use the estimated annual production for the period prior to closure of the fishery or use the estimated annual production from comparable fisheries that are not closed.

• Assign the fishery a value for human food chain population from Table 4–18, based on the estimated human food production for the fishery.

• Set boundaries between fisheries at those points where human food chain production changes or where the surface water dilution weight changes.

Sum the human food chain population value for each fishery (and portion of a fishery). Multiply this sum by 10. If the product is less than 1, do not round it to the nearest integer; if 1 or more, round to the nearest integer. Assign the resulting value as the Level I concentrations factor value. Enter this value in Table 4–1.

4.1.3.3.2.2 *Level II concentrations.* Determine those fisheries (or portions of fisheries) within the watershed that are subject to Level II concentrations. Do not include any fisheries (or portions of fisheries) already counted under the Level I concentrations factor.

Assign each fishery (or portion of a fishery) a value for human food chain population from Table 4–18, based on the estimated human food production for the fishery. Estimate the human food chain production for the fishery as specified in section 4.1.3.3.2.1.

Sum the human food chain population value for each fishery (and portion of a fishery). If this sum is less than 1, do not round it to the nearest integer; if 1 or more, round to the nearest integer. Assign the resulting value as the Level II concentrations factor value. Enter this value in Table 4–1.

TABLE 4–18.—HUMAN FOOD CHAIN POPULATION VALUES [a]

Human food chain production (pounds per year)	Assigned human food chain population value
0	0
Greater than 0 to 100	0.03
Greater than 100 to 1,000	0.3
Greater than 1,000 to 10,000	3
Greater than 10,000 to 100,000	31
Greater than 100,000 to 1,000,000	310
Greater than 10^6 to 10^7	3,100
Greater than 10^7 to 10^8	31,000
Greater than 10^8 to 10^9	310,000
Greater than 10^9	3,100,000

[a] Do not round to nearest integer.

4.1.3.3.2.3 *Potential human food chain contamination.* Determine those fisheries (or portions of fisheries) within the watershed that are subject to potential human food chain contamination. Do not include those fisheries (or portion of fisheries) already counted under the Level I or Level II concentrations factors.

Calculate the value for the potential human food chain contamination factor (PF) for the watershed as follows:

$$PF = \frac{1}{10} \sum_{i=1}^{n} P_i D_i$$

where:

P_i = Human food chain population value for fishery i.

D_i = Dilution weight from Table 4–13 for fishery i.

n = Number of fisheries subject to potential human food chain contamination.

In calculating PF:

• Estimate the human food chain population value (P_i) for a fishery (or portion of a fishery) as specified in section 4.1.3.3.2.1.

• Assign the fishery (or portion of a fishery) a dilution weight as indicated in Table 4–13 (section 4.1.2.3.1), except: do not assign a dilution weight of 0.5 for a "3-mile mixing zone in quiet flowing river"; instead assign a dilution weight based on the average annual flow.

If PF is less than 1, do not round it to the nearest integer; if PF is 1 or more, round to the nearest integer. Enter the value assigned in Table 4–1.

4.1.3.3.2.4 *Calculation of population factor value.* Sum the values for the Level I concentrations, Level II concentrations, and potential human food chain contamination factors for the watershed. Do not round this sum to the nearest integer. Assign it as the population factor value for the watershed. Enter this value in Table 4–1.

4.1.3.3.3 *Calculation of human food chain threat-targets factor category value.* Sum the food chain individual and population factor values for the watershed. Do not round this sum to the nearest integer. Assign it as the human food chain threat-targets factor category value for the watershed. Enter this value in Table 4–1.

4.1.3.4 *Calculation of human food chain threat score for a watershed.* Multiply the human food chain threat factor category values for likelihood of release, waste characteristics, and targets for the watershed, and round the product to the nearest integer. Then divide by 82,500. Assign the resulting value, subject to a maximum of 100, as the human food chain threat score for the watershed. Enter this score in Table 4–1.

4.1.4 *Environmental threat.* Evaluate the environmental threat for the watershed based on three factor categories: likelihood of release, waste characteristics, and targets.

4.1.4.1 *Environmental threat-likelihood of release.* Assign the same likelihood of release factor category value for the environmental threat for the watershed as would be assigned in section 4.1.2.1.3 for the drinking water threat. Enter this value in Table 4–1.

4.1.4.2 *Environmental threat-waste characteristics.* Evaluate the waste characteristics factor category for each watershed based on two factors: ecosystem toxicity/persistence/bioaccumulation and hazardous waste quantity.

4.1.4.2.1 *Ecosystem toxicity/persistence/bioaccumulation.* Evaluate all those hazardous substances eligible to be evaluated for toxicity/persistence in the drinking water threat for the watershed (see section 4.1.2.2).

4.1.4.2.1.1 *Ecosystem toxicity.* Assign an ecosystem toxicity factor value from Table 4–19 to each hazardous substance on the basis of the following data hierarchy:

• EPA chronic Ambient Water Quality Criterion (AWQC) for the substance.

• EPA chronic Ambient Aquatic Life Advisory Concentrations (AALAC) for the substance.

• EPA acute AWQC for the substance.

• EPA acute AALAC for the substance.

• Lowest LC_{50} value for the substance.

In assigning the ecosystem toxicity factor value to the hazardous substance:

• If either an EPA chronic AWQC or AALAC is available for the hazardous substance, use it to assign the ecosystem toxicity factor value. Use the chronic AWQC in preference to the chronic AALAC when both are available.

• If neither is available, use the EPA acute AWQC or AALAC to assign the ecosystem toxicity factor value. Use the acute AWQC in preference to the acute AALAC.

• If none of the chronic and acute AWQCs and AALACs is available, use the lowest LC_{50} value to assign the ecosystem toxicity factor value.

• If an LC_{50} value is also not available, assign an ecosystem toxicity factor value of 0 to the hazardous substance and use other hazardous substances for which data are available in evaluating the pathway.

If an ecosystem toxicity factor value of 0 is assigned to all hazardous substances eligible to be evaluated for the watershed (that is, insufficient data are available for evaluating all the substances), use a default value of 100 as the ecosystem toxicity factor value for all these hazardous substances.

With regard to the AWQC, AALAC, or LC_{50} selected for assigning the ecosystem toxicity factor value to the hazardous substance:

• If values for the selected AWQC, AALAC, or LC_{50} are available for both fresh water and marine water for the hazardous substance, use the value that corresponds to the type of water body (that is, fresh water or salt water) in which the sensitive environments are located to assign the ecosystem toxicity factor value to the hazardous substance.

• If, however, some of the sensitive environments being evaluated are in fresh water and some are in salt water, or if any are in brackish water, use the value (fresh water or marine) that yields the higher factor value to assign the ecosystem toxicity factor value to the hazardous substance.

• If a value for the selected AWQC, AALAC, or LC_{50} is available for either fresh water or marine water, but not for both, use the available one to assign an ecosystem toxicity factor value to the hazardous substance.

TABLE 4-19.—ECOSYSTEM TOXICITY FACTOR VALUES

If an EPA chronic AWQC[a] or AALAC[b] is available, assign a value as follows:[c]

EPA chronic AWQC or AALAC	Assigned value
Less than 1 μg/l	10,000
1 to 10 μg/l	1,000
Greater than 10 to 100 μg/l	100
Greater than 100 to 1,000 μg/l	10
Greater than 1,000 μg/l	1

If neither an EPA chronic AWQC nor EPA chronic AALAC is available, assign a value based on the EPA acute AWQC or AALAC as follows:[c]

EPA acute AWQC or AALAC	Assigned value
Less than 100 μg/l	10,000
100 to 1,000 μg/l	1,000
Greater than 1,000 to 10,000 μg/l	100
Greater than 10,000 to 100,000 μg/l	10
Greater than 100,000 μg/l	1

TABLE 4-19. ECOSYSTEM TOXICITY FACTOR VALUES—Concluded

If neither an EPA chronic or acute AWQC nor EPA chronic or acute AALAC is available, assign a value from the LC_{50} as follows:

EPA acute AWQC or AALAC

LC_{50}	Assigned value
Less than 100 μg/l	10,000
100 to 1,000 μg/l	1,000
Greater than 1,000 to 10,000 μg/l	100
Greater than 10,000 to 100,000 μg/l	10
Greater than 100,000 μg/l	1

If none of the AWQCs and AALACs nor the LC_{50} is available, assign a value of 0.

[a] AWQC—Ambient Water Quality Criteria.
[b] AALAC—Ambient Aquatic Life Advisory Concentrations.
[c] Use the AWQC value in preference to the AALAC when both are available. See text for use of freshwater and marine values.

4.1.4.2.1.2 *Persistence.* Assign a persistence factor value to each hazardous substance as specified in section 4.1.2.2.1.2, except: use the predominant water category (that is lakes; or rivers, oceans, coastal tidal waters, or Great Lakes) between the probable point of entry and the nearest sensitive environment (not the nearest drinking water or resources intake) along the hazardous substance migration path for the watershed to determine which portion of Table 4-10 to use. Determine the predominant water category based on distance as specified in section 4.1.2.2.1.2. For contaminated sediments with no identified source, use the point where measurement begins rather than the probable point of entry.

4.1.4.2.1.3 *Ecosystem bioaccumulation potential.* Assign an ecosystem bioaccumulation potential factor value to each hazardous substance in the same manner specified for the bioaccumulation potential factor in section 4.1.3.2.1.3, except:

- Use BCF data for all aquatic organisms, not just for aquatic human food chain organisms.
- Use the BCF data that corresponds to the type of water body (that is, fresh water or salt water) in which the sensitive environments (not fisheries) are located.

4.1.4.2.1.4 *Calculation of ecosystem toxicity/persistence/bioaccumulation factor value.* Assign each hazardous substance an ecosystem toxicity/persistence factor value from Table 4-20, based on the values assigned to the hazardous substance for the ecosystem toxicity and persistence factors. Then assign each hazardous substance an ecosystem toxicity/persistence/bioaccumulation factor value from Table 4-21, based on the values assigned for the ecosystem toxicity/persistence and ecosystem bioaccumulation potential factors Select the hazardous substance with the highest ecosystem toxicity/persistence/bioaccumulation factor value for the watershed and use it to assign the value to this factor. Enter this value in Table 4-1.

TABLE 4-20.—ECOSYSTEM TOXICITY/PERSISTENCE FACTOR VALUES[a]

Persistence factor value	Ecosystem toxicity factor value					
	10,000	1,000	100	10	1	0
1.0	10,000	1,000	100	10	1	0
0.4	4,000	400	40	4	0.4	0
0.07	700	70	7	0.7	0.07	0
0.0007	7	0.7	0.07	0.007	0.0007	0

[a] Do not round to nearest integer.

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TABLE 4-21
ECOSYSTEM TOXICITY/PERSISTENCE/BIOACCUMULATION FACTOR VALUES[a]

Ecosystem Toxicity/ Persistence Factor Value	Ecosystem Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
10,000	5×10^8	5×10^7	5×10^6	5×10^5	5×10^4	5,000
4,000	2×10^8	2×10^7	2×10^6	2×10^5	2×10^4	2,000
1,000	5×10^7	5×10^6	5×10^5	5×10^4	5,000	500
700	3.5×10^7	3.5×10^6	3.5×10^5	3.5×10^4	3,500	350
400	2×10^7	2×10^6	2×10^5	2×10^4	2,000	200
100	5×10^6	5×10^5	5×10^4	5,000	500	50
70	3.5×10^6	3.5×10^5	3.5×10^4	3,500	350	35
40	2×10^6	2×10^5	2×10^4	2,000	200	20
10	5×10^5	5×10^4	5,000	500	50	5
7	3.5×10^5	3.5×10^4	3,500	350	35	3.5
4	2×10^5	2×10^4	2,000	200	20	2
1	5×10^4	5,000	500	50	5	0.5
0.7	3.5×10^4	3,500	350	35	3.5	0.35
0.4	2×10^4	2,000	200	20	2	0.2
0.07	3,500	350	35	3.5	0.35	0.035
0.007	350	35	3.5	0.35	0.035	0.0035
0.0007	35	3.5	0.35	0.035	0.0035	0.00035
0	0	0	0	0	0	0

[a]Do not round to nearest integer.

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4.1.4.2.2 *Hazardous waste quantity.* Assign the same factor value for hazardous waste quantity for the watershed as would be assigned in section 4.1.2.2.2 for the drinking water threat. Enter this value in Table 4–1.

4.1.4.2.3 *Calculation of environmental threat-waste characteristics factor category value.* For the hazardous substance selected for the watershed in section 4.1.4.2.1.4, use its ecosystem toxicity/persistence factor value and ecosystem bioaccumulation potential factor value as follows to assign a value to the waste characteristics factor category. First, multiply the ecosystem toxicity/persistence factor value and the hazardous waste quantity factor value for the watershed, subject to a maximum product of 1×10^8. Then multiply this product by the ecosystem bioaccumulation potential factor value for this hazardous substance, subject to a maximum product of 1×10^{12}. Based on this second product, assign a value from Table 2–7 (section 2.4.3.1) to the environmental threat-waste characteristics factor category for the watershed. Enter this value in Table 4–1.

TABLE 4–22.—ECOLOGICAL-BASED BENCHMARKS FOR HAZARDOUS SUBSTANCES IN SURFACE WATER

- Concentration corresponding to EPA Ambient Water Quality Criteria (AWQC) for protection of aquatic life (fresh water or marine).
- Concentration corresponding to EPA Ambient Aquatic Life Advisory Concentrations (AALAC).
- Select the appropriate AWQC and AALAC as follows:
  - –Use chronic value, if available; otherwise use acute value.
  - –If the sensitive environment being evaluated is in fresh water, use fresh water value, except: if no fresh water value is available, use marine value if available.
  - –If the sensitive environment being evaluated is in salt water, use marine value, except: if no marine value is available, use fresh water value if available.
  - –If the sensitive environment being evaluated is in both fresh water and salt water, or is in brackish water, use lower of fresh water or marine values.

TABLE 4–23.—SENSITIVE ENVIRONMENTS RATING VALUES

Sensitive environment	Assigned value
Critical habitat [a] for Federal designated endangered or threatened species Marine Sanctuary National Park Designated Federal Wilderness Area Areas identified under Coastal Zone Management Act [b] Sensitive areas identified under National Estuary Program [c] or Near Coastal Waters Program [d] Critical areas identified under the Clean Lakes Program [e] National Monument [f] National Seashore Recreational Area National Lakeshore Recreational Area	100
Habitat known to be used by Federal designated or proposed endangered or threatened species National Preserve National or State Wildlife Refuge Unit of Coastal Barrier Resources System Coastal Barrier (undeveloped) Federal land designated for protection of natural ecosystems Administratively Proposed Federal Wilderness Area Spawning areas critical [g] for the maintenance of fish/shellfish species within river, lake, or coastal tidal waters Migratory pathways and feeding areas critical for maintenance of anadromous fish species within river reaches or areas in lakes or coastal tidal waters in which the fish spend extended periods of time Terrestrial areas utilized for breeding by large or dense aggregations of animals [h] National river reach designated as Recreational	75
Habitat known to be used by State designated endangered or threatened species Habitat known to be used by species under review as to its Federal endangered or threatened status Coastal Barrier (partially developed) Federal designated Scenic or Wild River	50
State land designated for wildlife or game management State designated Scenic or Wild River State designated Natural Areas Particular areas, relatively small in size, important to maintenance of unique biotic communities	25
State designated areas for protection or maintenance of aquatic life [i]	5

[a] Critical habitat as defined in 50 CFR 424.02.
[b] Areas identified in State Coastal Zone Management plans as requiring protection because of ecological value.
[c] National Estuary Program study areas (subareas within estuaries) identified in Comprehensive Conservation and Management Plans as requiring protection because they support critical life stages of key estuarine species (Section 320 of Clean Water Act, as amended).
[d] Near Coastal Waters as defined in Sections 104(b)(3), 304(1), 319, and 320 of Clean Water Act, as amended.
[e] Clean Lakes Program critical areas (subareas within lakes, or in some cases entire small lakes) identified by State Clean Lake Plans as critical habitat (Section 314 of Clean Water Act, as amended).
[f] Use only for air migration pathway.
[g] Limit to areas described as being used for intense or concentrated spawning by a given species.
[h] For the air migration pathway, limit to terrestrial vertebrate species. For the surface water migration pathway, limit to terrestrial vertebrate species with aquatic or semiaquatic foraging habits.
[i] Areas designated under Section 305(a) of Clean Water Act, as amended.

TABLE 4-24.—WETLANDS RATING VALUES FOR SURFACE WATER MIGRATION PATHWAY

Total length of wetlands * (miles)	Assigned value
Less than 0.1	0
0.1 to 1	25
Greater than 1 to 2	50
Greater than 2 to 3	75
Greater than 3 to 4	100
Greater than 4 to 8	150
Greater than 8 to 12	250
Greater than 12 to 16	350
Greater than 16 to 20	450
Greater than 20	500

* Wetlands as defined in 40 CFR Section 230.3.

4.1.4.3 *Environmental threat-targets.* Evaluate the environmental threat-targets factor category for a watershed using one factor: sensitive environments.

4.1.4.3.1 *Sensitive environments.* Evaluate sensitive environments along the hazardous substance migration path for the watershed based on three factors: Level I concentrations, Level II concentrations, and potential contamination.

Determine which factor applies to each sensitive environment as specified in section 4.1.2.3, except: use ecological-based benchmarks (Table 4-22) rather than health-based benchmarks (Table 3-10) in determining the level of contamination from samples. In determining the level of actual contamination, use a point of direct observation anywhere within the sensitive environment or samples (that is, surface water, benthic, or sediment samples) taken anywhere within or beyond the sensitive environment (or anywhere adjacent to or beyond the sensitive environment if it is contiguous to the migration path).

4.1.4.3.1.1 *Level I concentrations.* Assign value(s) from Table 4-23 to each sensitive environment subject to Level I concentrations.

For those sensitive environments that are wetlands, assign an additional value from Table 4-24. In assigning a value from Table 4-24, include only those portions of wetlands located along the hazardous substance migration path in the area of Level I concentrations. If a wetland is located partially along the area of Level I concentrations and partially along the area of Level II concentrations and/or potential contamination, then solely for purposes of Table 4-24, count the portion(s) along the areas of Level II concentrations or potential contamination under the Level II concentrations factor (section 4.1.4.3.1.2) or potential contamination factor (section 4.1.4.3.1.3), as appropriate.

Estimate the total length of wetlands along the hazardous substance migration path (that is, wetland frontage) in the area of Level I concentrations and assign a value from Table 4-24 based on this total length. Estimate this length as follows:

- For an isolated wetland or for a wetland where the probable point of entry to surface water is in the wetland, use the perimeter of that portion of the wetland subject to Level I concentrations as the length.
- For rivers, use the length of the wetlands contiguous to the in-water segment of the hazardous substance migration path (that is, wetland frontage).
- For lakes, oceans, coastal tidal waters, and Great Lakes, use the length of the wetlands along the shoreline within the target distance limit (that is, wetland frontage along the shoreline).

Calculate the Level I concentrations factor value (SH) for the watershed as follows:

$$SH = 10(WH + \sum_{i=1}^{n} S_i)$$

where:

WH = Value assigned from Table 4-24 to wetlands along the area of Level I concentrations.

S_i = Value(s) assigned from Table 4-23 to sensitive environment i.

n = Number of sensitive environments from Table 4-23 subject to Level I concentrations.

Enter the value assigned in Table 4-1.

4.1.4.3.1.2 *Level II concentrations.* Assign value(s) from Table 4-23 to each sensitive environment subject to Level II concentrations. Do not include sensitive environments already counted for Table 4-23 under the Level I concentrations factor for this watershed.

For those sensitive environments that are wetlands, assign an additional value from Table 4-24. In assigning a value from Table 4-24, include only those portions of wetlands located along the hazardous substance migration path in the area of Level II concentrations, as specified in section 4.1.4.3.1.1.

Estimate the total length of wetlands along the hazardous substance migration path (that is, wetland frontage) in the area of Level II concentrations and assign a value from Table 4-24 based on this total length. Estimate this length as specified in section 4.1.4.3.1.1, except: for an isolated wetland or for a wetland where the probable point of entry to surface water is in the wetland, use the perimeter of that portion of the wetland subject to Level II (not Level I) concentrations as the length.

Calculate the Level II concentrations value (SL) for the watershed as follows:

$$SL = WL + \sum_{i=1}^{n} S_i$$

where:

WL = Value assigned from Table 4-24 to wetlands along the area of Level II concentrations.

S_i = Value(s) assigned from Table 4-23 to sensitive environment i.

n = Number of sensitive environments from Table 4-23 subject to Level II concentrations.

Enter the value assigned in Table 4-1.

4.1.4.3.1.3 *Potential contamination.* Assign value(s) from Table 4-23 to each sensitive environment subject to potential contamination. Do not include sensitive environments already counted for Table 4-23 under the Level I or Level II concentrations factors.

For each type of surface water body in Table 4-13 (section 4.1.2.3.1), sum the value(s) assigned from Table 4-23 to the sensitive environments along that type of surface water body, except: do not use the surface water body type "3-mile mixing zone in quiet flowing river." If a sensitive environment is along two or more types of surface water bodies (for example, Wildlife Refuge contiguous to both a moderate stream and a large river), assign the sensitive environment only to that surface water body type having the highest dilution weight value from Table 4-13.

For those sensitive environments that are wetlands, assign an additional value from Table 4-24. In assigning a value from Table 4-24, include only those portions of wetlands located along the hazardous substance migration path in the area of potential contamination, as specified in section 4.1.4.3.1.1. Aggregate these wetlands by type of surface water body, except: do not use the surface water body type "3-mile mixing zone in quiet flowing river." Treat the wetlands aggregated within each type of surface water body as separate sensitive environments solely for purposes of applying Table 4-24. Estimate the total length of the wetlands within each surface water body type as specified in section 4.1.4.3.1.1, except: for an isolated wetland or for a wetland where the probable point of entry to surface water is in the wetland, use the perimeter of that portion of the wetland subject to potential contamination (or the portion of that perimeter that is within the target distance limit) as the length. Assign a separate value from Table 4-24 for each type of surface water body in the watershed.

Calculate the potential contamination factor value (SP) for the watershed as follows:

$$SP = \frac{1}{10} \sum_{j=1}^{m} ([W_j + S_j]D_j)$$

where:

$$S_j = \sum_{i=1}^{n} S_{ij}$$

S_{ij} = Value(s) assigned from Table 4-23 to sensitive environment i in surface water body type j.

n = Number of sensitive environments from Table 4-23 subject to potential contamination.

W_j = Value assigned from Table 4-24 for wetlands along the area of potential contamination in surface water body type j.

D_j = Dilution weight from Table 4-13 for surface water body type j.

m = Number of different surface water body types from Table 4-13 in the watershed.

If SP is less than 1, do not round it to the nearest integer; if SP is 1 or more, round to the nearest integer. Enter this value for the potential contamination factor in Table 4-1.

4.1.4.3.1.4 *Calculation of environmental threat-targets factor category value.* Sum the values for the Level I concentrations, Level II concentrations, and potential contamination factors for the watershed. Do not round this sum to the nearest integer. Assign this sum as the environmental threat-targets factor category value for the watershed. Enter this value in Table 4–1.

4.1.4.4 *Calculation of environmental threat score for a watershed.* Multiply the environmental threat factor category values for likelihood of release, waste characteristics, and targets for the watershed, and round the product to the nearest integer. Then divide by 82,500. Assign the resulting value, subject to a maximum of 60, as the environmental threat score for the watershed. Enter this score in Table 4–1.

4.1.5 *Calculation of overland/flood migration component score for a watershed.* Sum the scores for the three threats for the watershed (that is, drinking water, human food chain, and environmental threats). Assign the resulting score, subject to a maximum value of 100, as the surface water overland/flood migration component score for the watershed. Enter this score in Table 4–1.

4.1.6 *Calculation of overland/flood migration component score.* Select the highest surface water overland/flood migration component score from the watersheds evaluated. Assign this score as the surface water overland/flood migration component score for the site, subject to a maximum score of 100. Enter this score in Table 4–1.

4.2 *Ground water to surface water migration component.* Use the ground water to surface water migration component to evaluate surface water threats that result from migration of hazardous substances from a source at the site to surface water via ground water. Evaluate three types of threats for this component: drinking water threat, human food chain threat, and environmental threat.

4.2.1 *General considerations.*

4.2.1.1 *Eligible surface waters.* Calculate ground water to surface water migration component scores only for surface waters (see section 4.0.2) for which all the following conditions are met:

- A portion of the surface water is within 1 mile of one or more sources at the site having a containment factor value greater than 0 (see section 4.2.2.1.2).
- No aquifer discontinuity is established between the source and the portion of the surface water within 1 mile of the source (see section 3.0.1.2.2). However, if hazardous substances have migrated across an apparent discontinuity within this 1 mile distance, do not consider a discontinuity present in scoring the site.
- The top of the uppermost aquifer is at or above the bottom of the surface water.

Do not evaluate this component for sites consisting solely of contaminated sediments with no identified source.

4.2.1.2 *Definition of hazardous substance migration path for ground water to surface water migration component.* The hazardous substance migration path includes both the ground water segment and the surface water in-water segment that hazardous substances would take as they migrate away from sources at the site:

- Restrict the ground water segment to migration via the uppermost aquifer between a source and the surface water.
- Begin the surface water in-water segment at the probable point of entry from the uppermost aquifer to the surface water. Identify the probable point of entry as that point of the surface water that yields the shortest straight-line distance, within the aquifer boundary (see section 3.0.1.2), from the sources at the site with a containment factor value greater than 0 to the surface water.
  - –For rivers, continue the in-water segment in the direction of flow (including any tidal flows) for the distance established by the target distance limit (see section 4.2.1.4).
  - –For lakes, oceans, coastal tidal waters, or Great Lakes, do not consider flow direction. Instead apply the target distance limit as an arc.
  - –If the in-water segment includes both rivers and lakes (or oceans, coastal tidal waters, or Great Lakes), apply the target distance limit to their combined in-water segments.

Consider a site to be in two or more watersheds for this component if two or more hazardous substance migration paths from the sources at the site do not reach a common point within the target distance limit. If the site is in more than one watershed, define a separate hazardous substance migration path for each watershed. Evaluate the ground water to surface water migration component for each watershed separately as specified in section 4.2.1.5.

4.2.1.3 *Observed release of a specific hazardous substance to surface water in-water segment.* Section 4.2.2.1.1 specifies the criteria for assigning values to the observed release factor for the ground water to surface water migration component. With regard to an individual hazardous substance, consider an observed release of that hazardous substance to be established for the surface water in-water segment of the ground water to surface water migration component only when the hazardous substance meets the criteria both for an observed release both to ground water (see section 4.2.2.1.1) and for an observed release by chemical analysis to surface water (see section 4.1.2.1.1).

If the hazardous substance meets the section 4.1.2.1.1 criteria for an observed release by chemical analysis to surface water but does not also meet the criteria for an observed release to ground water, do not use any samples of that hazardous substance from the surface water in-water segment in evaluating the factors of this component (for example, do not use the hazardous substance in establishing targets subject to actual contamination or in determining the level of actual contamination for a target).

4.2.1.4 *Target distance limit.* Determine the target distance limit for each watershed as specified in section 4.1.1.2, except: do not extend the target distance limit to a sample location beyond 15 miles unless at least one hazardous substance in a sample from that location meets the criteria in section 4.2.1.3 for an observed release to the surface water in-water segment.

Determine the targets eligible to be evaluated for each watershed and establish whether these targets are subject to actual or potential contamination as specified in section 4.1.1.2, except: do not establish actual contamination based on a sample location unless at least one hazardous substance in a sample from that location meets the criteria in section 4.2.1.3 for an observed release to the surface water in-water segment.

4.2.1.5 *Evaluation of ground water to surface water migration component.* Evaluate the drinking water threat, human food chain threat, and environmental threat for each watershed for this component based on three factor categories: likelihood of release, waste characteristics, and targets. Figure 4–2 indicates the factors included within each factor category for each type of threat.

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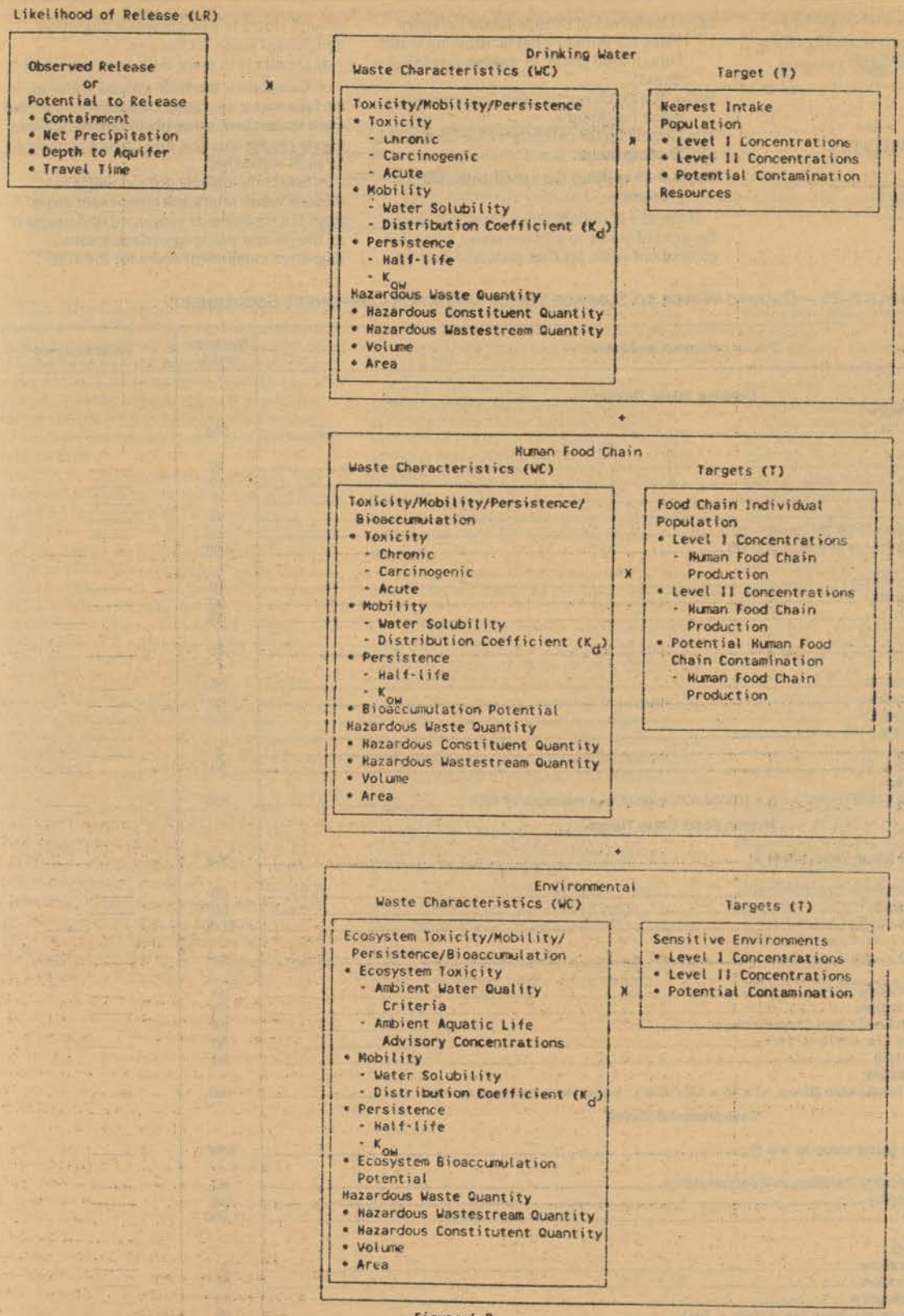

Figure 4-2
OVERVIEW OF GROUND WATER TO SURFACE WATER MIGRATION COMPONENT

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Determine the ground water to surface water migration component score (S_{gs}) for a watershed in terms of the factor category values as follows:

$$S_{gs} = \frac{\sum_{i=1}^{3} (LR_i)(WC_i)(T_i)}{SF}$$

where:

LR_i = Likelihood of release factor category value for threat i (that is, drinking water, human food chain, or environmental threat).

WC_i = Waste characteristics factor category value for threat i.

T_i = Targets factor category value for threat i.

SF = Scaling factor.

Table 4–25 outlines the specific calculation procedure.

If the site is in only one watershed, assign the ground water to surface water migration component score for that watershed as the ground water to surface water migration component score for the site.

If the site is in more than one watershed:

• Calculate a separate ground water to surface water migration component score for each watershed, using likelihood of release, waste characteristics, and targets applicable to each watershed.

• Select the highest ground water to surface water migration component score from the watersheds evaluated and assign it as the ground water to surface water migration component score for the site.

TABLE 4–25.—GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET

Factor categories and factors	Maximum value	Value assigned
Drinking Water Threat		
Likelihood of Release to Aquifer:		
1. Observed Release	550	____
2. Potential to Release:		
2a. Containment	10	____
2b. Net Precipitation	10	____
2c. Depth to Aquifer	5	____
2d. Travel Time	35	____
2e. Potential to Release (lines 2a[2b+2c+2d])	500	____
3. Likelihood of Release (higher of lines 1 and 2e)	550	____
Waste Characteristics:		
4. Toxicity/Mobility/Persistence	(a)	____
5. Hazardous Waste Quantity	(a)	____
6. Waste Characteristics	100	____
Targets:		
7. Nearest Intake	50	____
8. Population		
8a. Level I Concentrations	(b)	____
8b. Level II Concentrations	(b)	____
8c. Potential Contamination	(b)	____
8d. Population (lines 8a + 8b + 8c)		____
9. Resources	5	____
10. Targets (lines 7 + 8d + 9)	(b)	____
Drinking Water Threat Score:		
11. Drinking Water Threat Score ([lines 3 x 6 x 10]/82,500, subject to a maximum of 100)	100	____
Human Food Chain Threat		
Likelihood of Release:		
12. Likelihood of Release (same value as line 3)	550	____
Waste Characteristics:		
13. Toxicity/Mobility/Persistence/Bioaccumulation	(a)	____
14. Hazardous Waste Quantity	(a)	____
15. Waste Characteristics	1,000	____
Targets:		
16. Food Chain Individual	50	____
17. Population:		
17a. Level I Concentrations	(b)	____
17b. Level II Concentrations	(b)	____
17c. Potential Human Food Chain Contamination	(b)	____
17d. Population (lines 17a + 17b + 17c)	(b)	____
18. Targets (Lines 16 + 17d)	(b)	____
Human Food Chain Threat Score:		
19. Human Food Chain Threat Score ([lines 12 x 15 x 18]/82,500, subject to a maximum of 100)	100	____
Environmental Threat		
Likelihood of Release:		
20. Likelihood of Release (same value as line 3)	550	____
Waste Characteristics:		
21. Ecosystem Toxicity/Mobility/Persistence/Bioaccumulation	(a)	____
22. Hazardous Waste Quantity	(a)	____
23. Waste Characteristics	1,000	____
Targets:		
24. Sensitive Environments:		
24a. Level I Concentrations	(b)	____
24b. Level II Concentrations	(b)	____
24c. Potential Contamination	(b)	____
24d. Sensitive Environments (lines 24a + 24b + 24c)	(b)	____
25. Targets (value from line 24d)	(b)	____

TABLE 4-25.—GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET—Continued

Factor categories and factors	Maximum value	Value assigned
Environmental Threat Score:		
26. Environmental Threat Score ([lines 20 x 23 x 25]/82,500, subject to a maximum of 60)	60	———
Ground Water to Surface Water Migration Component Score for a Watershed		
27. Watershed Score [c] (lines 11 + 19 + 26, subject to a maximum of 100)	100	———
28. Component Score (S_{gs}) [c] (highest score from Line 27 for all watersheds evaluated, subject to a maximum of 100)	100	———

[a] Maximum value applies to waste characteristics category.
[b] Maximum value not applicable.
[c] Do not round to nearest integer.

4.2.2 *Drinking water threat.* Evaluate the drinking water threat for each watershed based on three factor categories: likelihood of release, waste characteristics, and targets.

4.2.2.1 *Drinking water threat-likelihood of release.* Evaluate the likelihood of release factor category for each watershed in terms of an observed release factor or a potential to release factor.

4.2.2.1.1 *Observed release.* Establish an observed release to the uppermost aquifer as specified in section 3.1.1. If an observed release can be established for the uppermost aquifer, assign an observed release factor value of 550 to that watershed, enter this value in Table 4–25, and proceed to section 4.2.2.1.3. If no observed release can be established, assign an observed release factor value of 0, enter this value in Table 4–25, and proceed to section 4.2.2.1.2.

4.2.2.1.2 *Potential to release.* Evaluate potential to release only if an observed release cannot be established for the uppermost aquifer. Calculate a potential to release value for the uppermost aquifer as specified in section 3.1.2 and sections 3.1.2.1 through 3.1.2.5. Assign the potential to release value for the uppermost aquifer as the potential to release factor value for the watershed. Enter this value in Table 4–25.

4.2.2.1.3 *Calculation of drinking water threat-likelihood of release factor category value.* If an observed release is established for the uppermost aquifer, assign the observed release factor value of 550 as the likelihood of release factor category value for the watershed. Otherwise, assign the potential to release factor value as the likelihood of release factor category value for the watershed. Enter the value assigned in Table 4–25.

4.2.2.2 *Drinking water threat-waste characteristics.* Evaluate the waste characteristics factor category for each watershed based on two factors: toxicity/mobility/persistence and hazardous waste quantity. Evaluate only those hazardous substances available to migrate from the sources at the site to the uppermost aquifer (see section 3.2). Such hazardous substances include:

- Hazardous substances that meet the criteria for an observed release to ground water.
- All hazardous substances associated with a source that has a ground water containment factor value greater than 0 (see sections 2.2.2, 2.2.3, and 3.1.2.1).

4.2.2.2.1 *Toxicity/mobility/persistence.* For each hazardous substance, assign a toxicity factor value, a mobility factor value, a persistence factor value, and a combined toxicity/mobility/persistence factor value as specified in sections 4.2.2.2.1.1 through 4.2.2.2.1.4.

4.2.2.2.1.1 *Toxicity.* Assign a toxicity factor value to each hazardous substance as specified in section 2.4.1.1.

4.2.2.2.1.2 *Mobility.* Assign a ground water mobility factor value to each hazardous substance as specified in section 3.2.1.2.

4.2.2.2.1.3 *Persistence.* Assign a surface water persistence factor value to each hazardous substance as specified in section 4.1.2.2.1.2.

4.2.2.2.1.4 *Calculation of toxicity/mobility/persistence factor value.* First, assign each hazardous substance a toxicity/mobility factor value from Table 3–9 (section 3.2.1.3), based on the values assigned to the hazardous substance for the toxicity and mobility factors. Then assign each hazardous substance a toxicity/mobility/persistence factor value from Table 4–26, based on the values assigned for the toxicity/mobility and persistence factors. Use the substance with the highest toxicity/mobility/ persistence factor value for the watershed to assign the value to this factor. Enter this value in Table 4–25.

4.2.2.2.2 *Hazardous waste quantity.* Assign the same factor value for hazardous waste quantity for the watershed as would be assigned for the uppermost aquifer in section 3.2.2. Enter this value in Table 4–25.

4.2.2.2.3 *Calculation of drinking water threat-waste characteristics factor category value.* Multiply the toxicity/mobility/persistence and hazardous waste quantity factor values for the watershed, subject to a maximum product of 1×10^8. Based on this product, assign a value from Table 2–7 (section 2.4.3.1) to the drinking water threat-waste characteristics factor category for the watershed. Enter this value in Table 4–25.

4.2.2.3 *Drinking water threat-targets.* Evaluate the targets factor category for each watershed based on three factors: nearest intake, population, and resources.

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TABLE 4-26
TOXICITY/MOBILITY/PERSISTENCE FACTOR VALUES[a]

Toxicity/Mobility Factor Value	Persistence Factor Value			
	1.0	0.4	0.07	0.0007
10,000	10,000	4,000	700	7
2,000	2,000	800	140	1.4
1,000	1,000	400	70	0.7
200	200	80	14	0.14
100	100	40	7	0.07
20	20	8	1.4	0.014
10	10	4	0.7	0.007
2	2	0.8	0.14	0.0014
1	1	0.4	0.07	7×10^{-4}
0.2	0.2	0.08	0.014	1.4×10^{-4}
0.1	0.1	0.04	0.007	7×10^{-5}
0.02	0.02	0.008	0.0014	1.4×10^{-5}
0.01	0.01	0.004	7×10^{-4}	7×10^{-6}
0.002	0.002	8×10^{-4}	1.4×10^{-4}	1.4×10^{-6}
0.001	0.001	4×10^{-4}	7×10^{-5}	7×10^{-7}
2×10^{-4}	2×10^{-4}	8×10^{-5}	1.4×10^{-5}	1.4×10^{-7}
1×10^{-4}	1×10^{-4}	4×10^{-5}	7×10^{-6}	7×10^{-8}
2×10^{-5}	2×10^{-5}	8×10^{-6}	1.4×10^{-6}	1.4×10^{-8}
2×10^{-6}	2×10^{-6}	8×10^{-7}	1.4×10^{-7}	1.4×10^{-9}
2×10^{-7}	2×10^{-7}	8×10^{-8}	1.4×10^{-8}	1.4×10^{-10}
2×10^{-8}	2×10^{-8}	8×10^{-9}	1.4×10^{-9}	1.4×10^{-11}
2×10^{-9}	2×10^{-9}	8×10^{-10}	1.4×10^{-10}	1.4×10^{-12}
0	0	0	0	0

[a]Do not round to nearest integer.

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For the nearest intake and population factors, determine whether the target surface water intakes are subject to actual or potential contamination as specified in section 4.1.1.2, subject to the restrictions specified in sections 4.2.1.3 and 4.2.1.4.

When the intake is subject to actual contamination, evaluate it using Level I concentrations or Level II concentrations. Determine which level applies for the intake by comparing the exposure concentrations from a sample (or comparable samples) to health-based benchmarks as specified in section 4.1.2.3, except use only those samples from the surface water in-water segment and only those hazardous substances in such samples that meet the conditions in sections 4.2.1.3 and 4.2.1.4.

4.2.2.3.1 *Nearest intake.* Assign a value to the nearest intake factor as specified in section 4.1.2.3.1 with the following modification. For the intake being evaluated, multiply its dilution weight from Table 4–13 (section 4.1.2.3.1) by a value selected from Table 4–27. Use the resulting product, not the value from Table 4–13, as the dilution weight for the intake for the ground water to surface water component. Do not round this product to the nearest integer.

Select the value from Table 4–27 based on the angle Θ, the angle defined by the sources at the site and either the two points at the intersection of the surface water body and the 1-mile distance ring of any two other points of the surface water body within the 1-mile distance ring, whichever results in the largest angle. (See Figure 4–3 for an example of how to determine Θ.) If the surface water body does not extend to the 1-mile ring at one or both ends, define Θ using the surface water endpoint(s) within the 1-mile ring or any two other points of the surface water body within the 1-mile distance ring, whichever results in the largest angle.

TABLE 4–27.—DILUTION WEIGHT ADJUSTMENTS

Angle Θ (degrees)	Assigned value *
0	0
Greater than 0 to 18	0.05
Greater than 18 to 54	0.1
Greater than 54 to 90	0.2
Greater than 90 to 126	0.3
Greater than 126 to 162	0.4
Greater than 162 to 198	0.5
Greater than 198 to 234	0.6
Greater than 234 to 270	0.7
Greater than 270 to 306	0.8
Greater than 306 to 342	0.9
Greater than 342 to 360	1.0

* Do not round to nearest integer.

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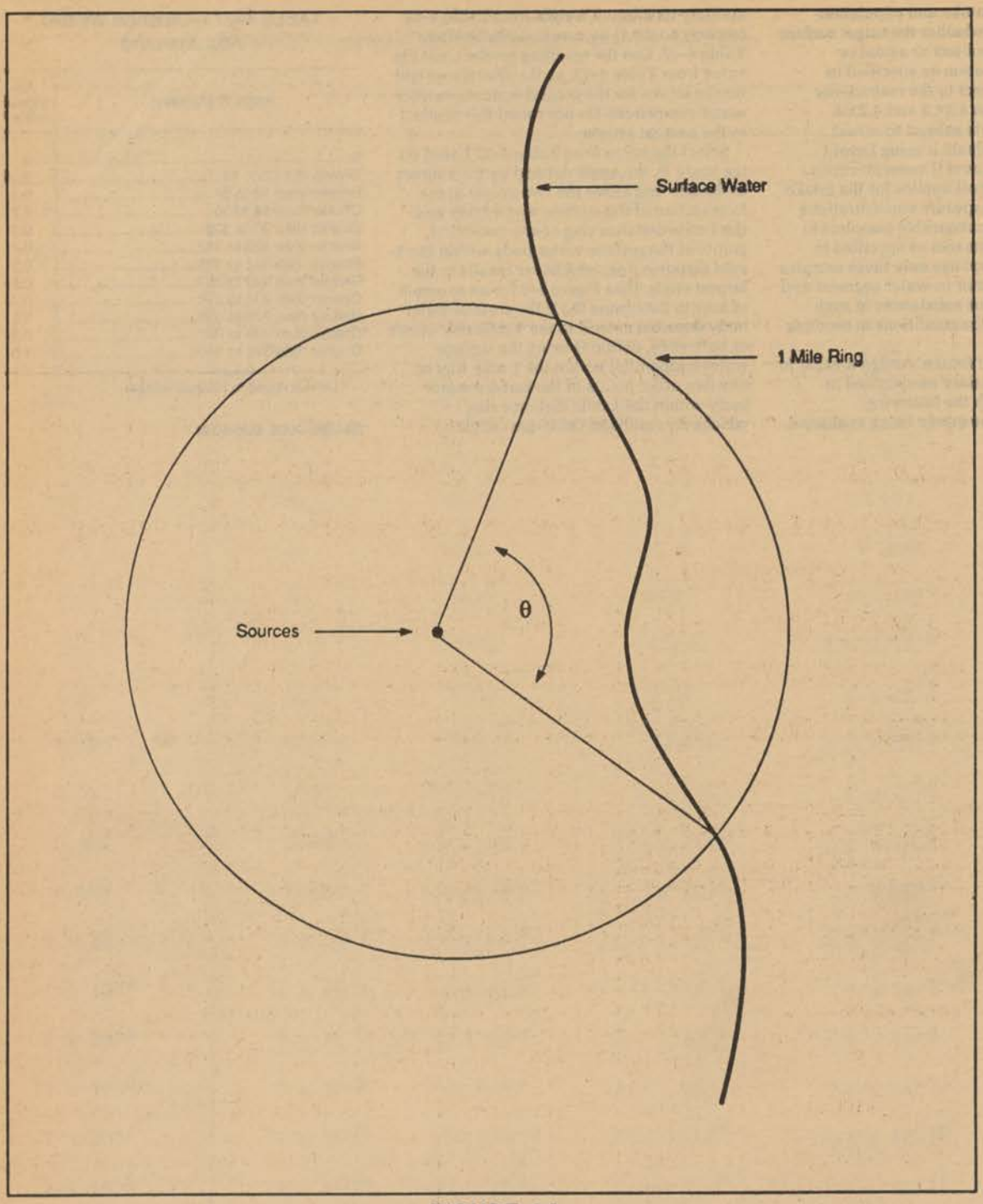

FIGURE 4-3
SAMPLE DETERMINATION OF GROUND WATER TO SURFACE WATER ANGLE

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TABLE 4-28
TOXICITY/MOBILITY/PERSISTENCE/BIOACCUMULATION FACTOR VALUES[a]

Toxicity/ Mobility/ Persistence Factor Value	Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
10,000	5×10^8	5×10^7	5×10^6	5×10^5	5×10^4	5,000
4,000	2×10^8	2×10^7	2×10^6	2×10^5	2×10^4	2,000
2,000	1×10^8	1×10^7	1×10^6	1×10^5	1×10^4	1,000
1,000	5×10^7	5×10^6	5×10^5	5×10^4	5,000	500
800	4×10^7	4×10^6	4×10^5	4×10^4	4,000	400
700	3.5×10^7	3.5×10^6	3.5×10^5	3.5×10^4	3,500	350
400	2×10^7	2×10^6	2×10^5	2×10^4	2,000	200
200	1×10^7	1×10^6	1×10^5	1×10^4	1,000	100
140	7×10^6	7×10^5	7×10^4	7,000	700	70
100	5×10^6	5×10^5	5×10^4	5,000	500	50
80	4×10^6	4×10^5	4×10^4	4,000	400	40
70	3.5×10^6	3.5×10^5	3.5×10^4	3,500	350	35
40	2×10^6	2×10^5	2×10^4	2,000	200	20
20	1×10^6	1×10^5	1×10^4	1,000	100	10
14	7×10^5	7×10^4	7,000	700	70	7
10	5×10^5	5×10^4	5,000	500	50	5
8	4×10^5	4×10^4	4,000	400	40	4
7	3.5×10^5	3.5×10^4	3,500	350	35	3.5
4	2×10^5	2×10^4	2,000	200	20	2
2	1×10^5	1×10^4	1,000	100	10	1
1.4	7×10^4	7,000	700	70	7	0.7

TABLE 4-28 (Continued)

Toxicity/ Mobility/ Persistence Factor Value	Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
1.0	5×10^4	5,000	500	50	5	0.5
0.8	4×10^4	4,000	400	40	4	0.4
0.7	3.5×10^4	3,500	350	35	3.5	0.35
0.4	2×10^4	2,000	200	20	2	0.2
0.2	1×10^4	1,000	100	10	1	0.1
0.14	7,000	700	70	7	0.7	0.07
0.1	5,000	500	50	5	0.5	0.05
0.08	4,000	400	40	4	0.4	0.04
0.07	3,500	350	35	3.5	0.35	0.035
0.04	2,000	200	20	2	0.2	0.02
0.02	1,000	100	10	1	0.1	0.01
0.014	700	70	7	0.7	0.07	0.007
0.01	500	50	5	0.5	0.05	0.005
0.008	400	40	4	0.4	0.04	0.004
0.007	350	35	3.5	0.35	0.035	0.0035
0.004	200	20	2	0.2	0.02	0.002
0.002	100	10	1	0.1	0.01	0.001
0.0014	70	7	0.7	0.07	0.007	7×10^{-4}
0.001	50	5	0.5	0.05	0.005	5×10^{-4}
8×10^{-4}	40	4	0.4	0.04	0.004	4×10^{-4}
7×10^{-4}	35	3.5	0.35	0.035	0.0035	3.5×10^{-4}
4×10^{-4}	20	2	0.2	0.02	0.002	2×10^{-4}

TABLE 4-28 (Continued)

Toxicity/ Mobility/ Persistence Factor Value	Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
2×10^{-4}	10	1	0.1	0.01	0.001	1×10^{-4}
1.4×10^{-4}	7	0.7	0.07	0.007	7×10^{-4}	7×10^{-5}
1×10^{-4}	5	0.5	0.05	0.005	5×10^{-4}	5×10^{-5}
8×10^{-5}	4	0.4	0.04	0.004	4×10^{-4}	4×10^{-5}
7×10^{-5}	3.5	0.35	0.035	0.0035	3.5×10^{-4}	3.5×10^{-5}
4×10^{-5}	2	0.2	0.02	0.002	2×10^{-4}	2×10^{-5}
2×10^{-5}	1	0.1	0.01	0.001	1×10^{-4}	1×10^{-5}
1.4×10^{-5}	0.7	0.07	0.007	7×10^{-4}	7×10^{-5}	7×10^{-6}
8×10^{-6}	0.4	0.04	0.004	4×10^{-4}	4×10^{-5}	4×10^{-6}
7×10^{-6}	0.35	0.035	0.0035	3.5×10^{-4}	3.5×10^{-5}	3.5×10^{-6}
2×10^{-6}	0.1	0.01	0.001	1×10^{-4}	1×10^{-5}	1×10^{-6}
1.4×10^{-6}	0.07	0.007	7×10^{-4}	7×10^{-5}	7×10^{-6}	7×10^{-7}
8×10^{-7}	0.04	0.004	4×10^{-4}	4×10^{-5}	4×10^{-6}	4×10^{-7}
7×10^{-7}	0.035	0.0035	3.5×10^{-4}	3.5×10^{-5}	3.5×10^{-6}	3.5×10^{-7}
2×10^{-7}	0.01	0.001	1×10^{-4}	1×10^{-5}	1×10^{-6}	1×10^{-7}
1.4×10^{-7}	0.007	7×10^{-4}	7×10^{-5}	7×10^{-6}	7×10^{-7}	7×10^{-8}
8×10^{-8}	0.004	4×10^{-4}	4×10^{-5}	4×10^{-6}	4×10^{-7}	4×10^{-8}
7×10^{-8}	0.0035	3.5×10^{-4}	3.5×10^{-5}	3.5×10^{-6}	3.5×10^{-7}	3.5×10^{-8}
2×10^{-8}	0.001	1×10^{-4}	1×10^{-5}	1×10^{-6}	1×10^{-7}	1×10^{-8}
1.4×10^{-8}	7×10^{-4}	7×10^{-5}	7×10^{-6}	7×10^{-7}	7×10^{-8}	7×10^{-9}

TABLE 4-28 (Concluded)

Toxicity/ Mobility/ Persistence Factor Value	Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
8×10^{-9}	4×10^{-4}	4×10^{-5}	4×10^{-6}	4×10^{-7}	4×10^{-8}	4×10^{-9}
2×10^{-9}	1×10^{-4}	1×10^{-5}	1×10^{-6}	1×10^{-7}	1×10^{-8}	1×10^{-9}
1.4×10^{-9}	7×10^{-5}	7×10^{-6}	7×10^{-7}	7×10^{-8}	7×10^{-9}	7×10^{-10}
8×10^{-10}	4×10^{-5}	4×10^{-6}	4×10^{-7}	4×10^{-8}	4×10^{-9}	4×10^{-10}
1.4×10^{-10}	7×10^{-6}	7×10^{-7}	7×10^{-8}	7×10^{-9}	7×10^{-10}	4×10^{-11}
1.4×10^{-11}	7×10^{-7}	7×10^{-8}	7×10^{-9}	7×10^{-10}	7×10^{-11}	7×10^{-12}
1.4×10^{-12}	7×10^{-8}	7×10^{-9}	7×10^{-10}	7×10^{-11}	7×10^{-12}	7×10^{-13}
0	0	0	0	0	0	0

[a]Do not round to nearest integer.

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4.2.2.3.2 *Population.* Evaluate the population factor for the watershed based on three factors: Level I concentrations, Level II concentrations, and potential contamination. Determine which factor applies to an intake as specified in section 4.2.2.3. Determine the population to be counted for that intake as specified in section 4.1.2.3.2, using the target distance limits in section 4.2.1.4 and the hazardous substance migration path in section 4.2.1.2.

4.2.2.3.2.1 *Level I concentrations.* Assign a value to this factor as specified in section 4.1.2.3.2.2.

4.2.2.3.2.2 *Level II concentrations.* Assign a value to this factor as specified in section 4.1.2.3.2.3.

4.2.2.3.2.3 *Potential contamination.* For each applicable type of surface water body in Table 4–14, determine the dilution-weighted population value as specified in section 4.1.2.3.2.4. Select the appropriate dilution weight adjustment value from Table 4–27 as specified in section 4.2.2.3.1.

Calculate the value for the potential contamination factor (PC) for the watershed as follows:

$$PC = \frac{A}{10} \sum_{i=1}^{n} W_i$$

where:

A = Dilution weight adjustment value from Table 4–27.

W_i = Dilution-weighted population from Table 4–14 for surface water body type i.

n = Number of different surface water body types in the watershed.

If PC is less than 1, do not round it to the nearest integer; if PC is 1 or more, round to the nearest integer. Enter the value in Table 4–25.

4.2.2.3.2.4 *Calculation of population factor value.* Sum the factor values for Level I concentrations, Level II concentrations, and potential contamination. Do not round this sum to the nearest integer. Assign this sum as the population factor value for the watershed. Enter this value in Table 4–25.

4.2.2.3.3 *Resources.* Assign a value to the resources factor as specified in section 4.1.2.3.3.

4.2.2.3.4 *Calculation of drinking water threat-targets factor category value.* Sum the nearest intake, population, and resources factor values for the watershed. Do not round this sum to the nearest integer. Assign this sum as the drinking water threat-targets factor category value for the watershed. Enter this value in Table 4–25.

4.2.2.4 *Calculation of drinking water threat score for a watershed.* Multiply the drinking water threat factor category values for likelihood of release, waste characteristics, and targets for the watershed, and round the product to the nearest integer. Then divide by 82,500. Assign the resulting value, subject to a maximum of 100, as the drinking water threat score for the watershed. Enter this score in Table 4–25.

4.2.3 *Human food chain threat.* Evaluate the human food chain threat for a watershed based on three factor categories: likelihood of release, waste characteristics, and targets.

4.2.3.1 *Human food chain threat-likelihood of release.* Assign the same likelihood of release factor category value for the human food chain threat for the watershed as would be assigned in section 4.2.2.1.3 for the drinking water threat. Enter this value in Table 4–25.

4.2.3.2 *Human food chain threat-waste characteristics.* Evaluate the waste characteristics factor category for each watershed based on two factors: toxicity/mobility/persistence/bioaccumulation and hazardous waste quantity.

4.2.3.2.1 *Toxicity/mobility/persistence/bioaccumulation.* Evaluate all those hazardous substances eligible to be evaluated for toxicity/mobility/persistence in the drinking water threat for the watershed (see section 4.2.2.2.1).

4.2.3.2.1.1 *Toxicity.* Assign a toxicity factor value to each hazardous substance as specified in section 2.4.1.1.

4.2.3.2.1.2 *Mobility.* Assign a ground water mobility factor value to each hazardous substance as specified for the drinking water threat (see section 4.2.2.2.1.2).

4.2.3.2.1.3 *Persistence.* Assign a surface water persistence factor value to each hazardous substance as specified for the drinking water threat (see section 4.2.2.2.1.3), except: use the predominant water category (that is, lakes; or rivers, oceans, coastal tidal waters, or Great Lakes) between the probable point of entry and the nearest fishery (not the nearest drinking water or resources intake) along the hazardous substance migration path for the watershed to determine which portion of Table 4–10 to use. Determine the predominant water category based on distance as specified in section 4.1.2.2.1.2.

4.2.3.2.1.4 *Bioaccumulation potential.* Assign a bioaccumulation potential factor value to each hazardous substance as specified in section 4.1.3.2.1.3.

4.2.3.2.1.5 *Calculation of toxicity/mobility/persistence/ bioaccumulation factor value.* Assign each hazardous substance a toxicity/mobility factor value from Table 3–9 (section 3.2.1.3), based on the values assigned to the hazardous substance for the toxicity and mobility factors. Then assign each hazardous substance a toxicity/mobility/persistence factor value from Table 4–26, based on the values assigned for the toxicity/mobility and persistence factors. Then assign each hazardous substance a toxicity/mobility/persistence/bioaccumulation factor value from Table 4–28. Use the substance with the highest toxicity/mobility/persistence/bioaccumulation factor value for the watershed to assign the value to this factor for the watershed. Enter this value in Table 4–25.

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4.2.3.2.2 *Hazardous waste quantity.* Assign the same factor value for hazardous waste quantity for the watershed as would be assigned in section 4.2.2.2.2 for the drinking water threat. Enter this value in Table 4–25.

4.2.3.2.3 *Calculation of human food chain threat-waste characteristics factor category value.* For the hazardous substance selected for the watershed in section 4.2.3.2.1.5, use its toxicity/mobility/ persistence factor value and bioaccumulation potential factor value as follows to assign a value to the waste characteristics factor category. First, multiply the toxicity/mobility/persistence factor value and the hazardous waste quantity factor value for the watershed, subject to a maximum product of 1×10^{8}. Then multiply this product by the bioaccumulation potential factor value for this hazardous substance, subject to a maximum product of 1×10^{12}. Based on this second product, assign a value from Table 2–7 (section 2.4.3.1) to the human food chain threat-waste characteristics factor category for the watershed. Enter this value in Table 4–25.

4.2.3.3 *Human food chain threat-targets.* Evaluate two target factors for the watershed: food chain individual and population.

For both factors, determine whether the target fisheries are subject to Level I concentrations, Level II concentrations, or potential human food chain contamination. Determine which applies to each fishery (or portion of a fishery) as specified in section 4.1.3.3, subject to the restrictions specified in sections 4.2.1.3 and 4.2.1.4.

4.2.3.3.1 *Food chain individual.* Assign a value to the food chain individual factor as specified in section 4.1.3.3.1 with the following modification. When a dilution weight is used, multiply the appropriate dilution weight from Table 4–13 by the adjustment value selected from Table 4–27, as specified in section 4.2.2.3.1. Use the resulting product, not the value from Table 4–13, as the dilution weight in assigning the factor value. Do not round this product to the nearest integer. Enter the value assigned in Table 4–25.

4.2.3.3.2 *Population.* Evaluate the population factor for the watershed based on three factors: Level I concentrations, Level II concentrations, and potential human food chain contamination. Determine which of these factors is to be applied to each fishery as specified in section 4.2.3.3.

4.2.3.3.2.1 *Level I concentrations.* Assign a value to this factor as specified in section 4.1.3.3.2.1. Enter this value in Table 4–25.

4.2.3.3.2.2 *Level II concentrations.* Assign a value to this factor as specified in section 4.1.3.3.2.2. Enter this value in Table 4–25.

4.2.3.3.2.3 *Potential human food chain contamination.* Assign a value to this factor as specified in section 4.1.3.3.2.3 with the following modification. For each fishery being evaluated, multiply the appropriate dilution weight for that fishery from Table 4–13 by the adjustment value selected from Table 4–27, as specified in section 4.2.2.3.1. Use the resulting product, not the value from Table 4–13, as the dilution weight for the fishery. Do not round this product to the nearest integer. Enter the value assigned in Table 4–25.

4.2.3.3.2.4 *Calculation of population factor value.* Sum the factor values for Level I concentrations, Level II concentrations, and potential human food chain contamination for the watershed. Do not round this sum to the nearest integer. Assign this sum as the population factor value for the watershed. Enter this value in Table 4–25.

4.2.3.3.3 *Calculation of human food chain threat-targets factor category value.* Sum the food chain individual and population factor values for the watershed. Do not round this sum to the nearest integer. Assign this sum as the human food chain threat-targets factor category value for the watershed. Enter this value in Table 4–25.

4.2.3.4 *Calculation of human food chain threat score for a watershed.* Multiply the human food chain threat factor category values for likelihood of release, waste characteristics, and targets for the watershed, and round the product to the nearest integer. Then divide by 82,500. Assign the resulting value, subject to a maximum of 100, as the human food chain threat score for the watershed. Enter this score in Table 4–25.

4.2.4 *Environmental threat.* Evaluate the environmental threat for the watershed based on three factor categories: likelihood of release, waste characteristics, and targets.

4.2.4.1 *Environmental threat-likelihood of release.* Assign the same likelihood of release factor category value for the environmental threat for the watershed as would be assigned in section 4.2.2.1.3 for the drinking water threat. Enter this value in Table 4–25.

4.2.4.2 *Environmental threat-waste characteristics.* Evaluate the waste characteristics factor category for each watershed based on two factors: ecosystem toxicity/mobility/persistence/ bioaccumulation and hazardous waste quantity.

4.2.4.2.1 *Ecosystem toxicity/mobility/ persistence/bioaccumulation.* Evaluate all those hazardous substances eligible to be evaluated for toxicity/mobility/persistence in the drinking water threat for the watershed (see section 4.2.2.2.1).

4.2.4.2.1.1 *Ecosystem toxicity.* Assign an ecosystem toxicity factor value to each hazardous substance as specified in section 4.1.4.2.1.1.

4.2.4.2.1.2 *Mobility.* Assign a ground water mobility factor value to each hazardous substance as specified in section 4.2.2.2.1.2 for the drinking water threat.

4.2.4.2.1.3 *Persistence.* Assign a surface water persistence factor value to each hazardous substance as specified in section 4.2.2.2.1.3 for the drinking water threat, except: use the predominant water category (that is, lakes; or rivers, oceans, coastal tidal waters, or Great Lakes) between the probable point of entry and the nearest sensitive environment (not the nearest drinking water or resources intake) along the hazardous substance migration path for the watershed to determine which portion of Table 4–10 to use. Determine the predominant water category based on distance as specified in section 4.1.2.2.1.2.

4.2.4.2.1.4 *Ecosystem bioaccumulation potential.* Assign an ecosystem bioaccumulation potential factor value to each hazardous substance as specified in section 4.1.4.2.1.3.

4.2.4.2.1.5 *Calculation of ecosystem toxicity/mobility/persistence/ bioaccumulation factor value.* Assign each hazardous substance an ecosystem toxicity/ mobility factor value from Table 3–9 (section 3.2.1.3), based on the values assigned to the hazardous substance for the ecosystem toxicity and mobility factors. Then assign each hazardous substance an ecosystem toxicity/mobility/persistence factor value from Table 4–29, based on the values assigned for the ecosystem toxicity/mobility and persistence factors. Then assign each hazardous substance an ecosystem toxicity/ mobility/persistence/bioaccumulation factor value from Table 4–30, based on the values assigned for the ecosystem toxicity/mobility/ persistence and ecosystem bioaccumulation potential factors. Select the substance with the highest ecosystem toxicity/mobility/ persistence/bioaccumulation factor value for the watershed and use it to assign the value to this factor for the watershed. Enter this value in Table 4–25.

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TABLE 4-29
ECOSYSTEM TOXICITY/MOBILITY/PERSISTENCE FACTOR VALUES[a]

Ecosystem Toxicity/Mobility Factor Value	Persistence Factor Value			
	1.0	0.4	0.07	0.0007
10,000	10,000	4,000	700	7
2,000	2,000	800	140	1.4
1,000	1,000	400	70	0.7
200	200	80	14	0.14
100	100	40	7	0.07
20	20	8	1.4	0.014
10	10	4	0.7	0.007
2	2	0.8	0.14	0.0014
1	1	0.4	0.07	7×10^{-4}
0.2	0.2	0.08	0.014	1.4×10^{-4}
0.1	0.1	0.04	0.007	7×10^{-5}
0.02	0.02	0.008	0.0014	1.4×10^{-5}
0.01	0.01	0.004	7×10^{-4}	7×10^{-6}
0.002	0.002	8×10^{-4}	1.4×10^{-4}	1.4×10^{-6}
0.001	0.001	4×10^{-4}	7×10^{-5}	7×10^{-7}
2×10^{-4}	2×10^{-4}	8×10^{-5}	1.4×10^{-5}	1.4×10^{-7}
1×10^{-4}	1×10^{-4}	4×10^{-5}	7×10^{-6}	7×10^{-8}
2×10^{-5}	2×10^{-5}	8×10^{-6}	1.4×10^{-6}	1.4×10^{-8}
2×10^{-6}	2×10^{-6}	8×10^{-7}	1.4×10^{-7}	1.4×10^{-9}
2×10^{-7}	2×10^{-7}	8×10^{-8}	1.4×10^{-8}	1.4×10^{-10}
2×10^{-8}	2×10^{-8}	8×10^{-9}	1.4×10^{-9}	1.4×10^{-11}
2×10^{-9}	2×10^{-9}	8×10^{-10}	1.4×10^{-10}	1.4×10^{-12}
0	0	0	0	0

[a]Do not round to nearest integer.

TABLE 4-30
ECOSYSTEM TOXICITY/MOBILITY/PERSISTENCE/BIOACCUMULATION FACTOR VALUES[a]

Ecosystem Toxicity/ Mobility/ Persistence Factor Value	Ecosystem Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
10,000	5×10^8	5×10^7	5×10^6	5×10^5	5×10^4	5,000
4,000	2×10^8	2×10^7	2×10^6	2×10^5	2×10^4	2,000
2,000	1×10^8	1×10^7	1×10^6	1×10^5	1×10^4	1,000
1,000	5×10^7	5×10^6	5×10^5	5×10^4	5,000	500
800	4×10^7	4×10^6	4×10^5	4×10^4	4,000	400
700	3.5×10^7	3.5×10^6	3.5×10^5	3.5×10^4	3,500	350
400	2×10^7	2×10^6	2×10^5	2×10^4	2,000	200
200	1×10^7	1×10^6	1×10^5	1×10^4	1,000	100
140	7×10^6	7×10^5	7×10^4	7,000	700	70
100	5×10^6	5×10^5	5×10^4	5,000	500	50
80	4×10^6	4×10^5	4×10^4	4,000	400	40
70	3.5×10^6	3.5×10^5	3.5×10^4	3,500	350	35
40	2×10^6	2×10^5	2×10^4	2,000	200	20
20	1×10^6	1×10^5	1×10^4	1,000	100	10
14	7×10^5	7×10^4	7,000	700	70	7
10	5×10^5	5×10^4	5,000	500	50	5
8	4×10^5	4×10^4	4,000	400	40	4
7	3.5×10^5	3.5×10^4	3,500	350	35	3.5
4	2×10^5	2×10^4	2,000	200	20	2
2	1×10^5	1×10^4	1,000	100	10	1
1.4	7×10^4	7,000	700	70	7	0.7

TABLE 4-30 (Continued)

Ecosystem Toxicity/ Mobility/ Persistence Factor Value	Esosystem Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
1.0	5×10^4	5,000	500	50	5	0.5
0.8	4×10^4	4,000	400	40	4	0.4
0.7	3.5×10^4	3,500	350	35	3.5	0.35
0.4	2×10^4	2,000	200	20	2	0.2
0.2	1×10^4	1,000	100	10	1	0.1
0.14	7,000	700	70	7	0.7	0.07
0.1	5,000	500	50	5	0.5	0.05
0.08	4,000	400	40	4	0.4	0.04
0.07	3,500	350	35	3.5	0.35	0.035
0.04	2,000	200	20	2	0.2	0.02
0.02	1,000	100	10	1	0.1	0.01
0.014	700	70	7	0.7	0.07	0.007
0.01	500	50	5	0.5	0.05	0.005
0.008	400	40	4	0.4	0.04	0.004
0.007	350	35	3.5	0.35	0.035	0.0035
0.004	200	20	2	0.2	0.02	0.002
0.002	100	10	1	0.1	0.01	0.001
0.0014	70	7	0.7	0.07	0.007	7×10^{-4}
0.001	50	5	0.5	0.05	0.005	5×10^{-4}
8×10^{-4}	40	4	0.4	0.04	0.004	4×10^{-4}
7×10^{-4}	35	3.5	0.35	0.035	0.0035	3.5×10^{-4}
4×10^{-4}	20	2	0.2	0.02	0.002	2×10^{-4}

TABLE 4-30 (Continued)

Ecosystem Toxicity/ Mobility/ Persistence Factor Value	Ecosystem Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
2×10^{-4}	10	1	0.1	0.01	0.001	1×10^{-4}
1.4×10^{-4}	7	0.7	0.07	0.007	7×10^{-4}	7×10^{-5}
1×10^{-4}	5	0.5	0.05	0.005	5×10^{-4}	5×10^{-5}
8×10^{-5}	4	0 4	0.04	0.004	4×10^{-4}	4×10^{-5}
7×10^{-5}	3.5	0.35	0.035	0.0035	3.5×10^{-4}	3.5×10^{-5}
4×10^{-5}	2	0.2	0.02	0.002	2×10^{-4}	2×10^{-5}
2×10^{-5}	1	0.1	0.01	0.001	1×10^{-4}	1×10^{-5}
1.4×10^{-5}	0.7	0.07	0.007	7×10^{-4}	7×10^{-5}	7×10^{-6}
8×10^{-6}	0.4	0.04	0.004	4×10^{-4}	4×10^{-5}	4×10^{-6}
7×10^{-6}	0.35	0.035	0.0035	3.5×10^{-4}	3.5×10^{-5}	3.5×10^{-6}
2×10^{-6}	0.1	0.01	0.001	1×10^{-4}	1×10^{-5}	1×10^{-6}
1.4×10^{-6}	0.07	0.007	7×10^{-4}	7×10^{-5}	7×10^{-6}	7×10^{-7}
8×10^{-7}	0.04	0.004	4×10^{-4}	4×10^{-5}	4×10^{-6}	4×10^{-7}
7×10^{-7}	0.035	0.0035	3.5×10^{-4}	3.5×10^{-5}	3.5×10^{-6}	3.5×10^{-7}
2×10^{-7}	0.01	0 001	1×10^{-4}	1×10^{-5}	1×10^{-6}	1×10^{-7}
$1 4 \times 10^{-7}$	0.007	7×10^{-4}	7×10^{-5}	7×10^{-6}	7×10^{-7}	7×10^{-8}
8×10^{-8}	0.004	4×10^{-4}	4×10^{-5}	4×10^{-6}	4×10^{-7}	4×10^{-8}
7×10^{-8}	0.0035	3.5×10^{-4}	3.5×10^{-5}	3.5×10^{-6}	3.5×10^{-7}	3.5×10^{-8}
2×10^{-8}	0.001	1×10^{-4}	1×10^{-5}	1×10^{-6}	1×10^{-7}	1×10^{-8}
1.4×10^{-8}	7×10^{-4}	7×10^{-5}	7×10^{-6}	7×10^{-7}	7×10^{-8}	7×10^{-9}

TABLE 4-30 (Concluded)

Ecosystem Toxicity/ Mobility/ Persistence Factor Value	Ecosystem Bioaccumulation Potential Factor Value					
	50,000	5,000	500	50	5	0.5
8×10^{-9}	4×10^{-4}	4×10^{-5}	4×10^{-6}	4×10^{-7}	4×10^{-8}	4×10^{-9}
2×10^{-9}	1×10^{-4}	1×10^{-5}	1×10^{-6}	1×10^{-7}	1×10^{-8}	1×10^{-9}
1.4×10^{-9}	7×10^{-5}	7×10^{-6}	7×10^{-7}	7×10^{-8}	7×10^{-9}	7×10^{-10}
8×10^{-10}	4×10^{-5}	4×10^{-6}	4×10^{-7}	4×10^{-8}	4×10^{-9}	4×10^{-10}
1.4×10^{-10}	7×10^{-6}	7×10^{-7}	7×10^{-8}	7×10^{-9}	7×10^{-10}	4×10^{-11}
1.4×10^{-11}	7×10^{-7}	7×10^{-8}	7×10^{-9}	7×10^{-10}	7×10^{-11}	7×10^{-12}
1.4×10^{-12}	7×10^{-8}	7×10^{-9}	7×10^{-10}	7×10^{-11}	7×10^{-12}	7×10^{-13}
0	0	0	0	0	0	0

[a]Do not round to nearest integer.

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4.2.4.2.2 *Hazardous waste quantity.* Assign the same factor value for hazardous waste quantity for the watershed as would be assigned in section 4.2.2.2.2 for the drinking water threat. Enter this value in Table 4–25.

4.2.4.2.3 *Calculation of environmental threat-waste characteristics factor category value.* For the hazardous substance selected for the watershed in section 4.2.4.2.1.5, use its ecosystem toxicity/mobility/persistence factor value and ecosystem bioaccumulation potential factor value as follows to assign a value to the waste characteristics factor category. First, multiply the ecosystem toxicity/mobility/persistence factor value and the hazardous waste quantity factor value for the watershed, subject to a maximum product of 1×10^{8}. Then multiply this product by the ecosystem bioaccumulation potential factor value for this hazardous substance, subject to a maximum product of 1×10^{12}. Based on this product, assign a value from Table 2–7 (section 2.4.3.1) to the environmental threat-waste characteristics category for the watershed. Enter the value in Table 4–25.

4.2.4.3 *Environmental threat-targets.* Evaluate the environmental threat-targets factor category for a watershed using one factor: sensitive environments.

4.2.4.3.1 *Sensitive environments.* Evaluate sensitive environments for the watershed based on three factors: Level I concentrations, Level II concentrations, and potential contamination. Determine which applies to each sensitive environment as specified in section 4.1.4.3.1, except: use only those samples from the surface water in-water segment and only those hazardous substances in such samples that meet the conditions in sections 4.2.1.3 and 4.2.1.4.

4.2.4.3.1.1 *Level I concentrations.* Assign a value to this factor as specified in section 4.1.4.3.1.1. Enter this value in Table 4–25.

4.2.4.3.1.2 *Level II concentrations.* Assign a value to this factor as specified in section 4.1.4.3.1.2. Enter this value in Table 4–25.

4.2.4.3.1.3 *Potential contamination.* Assign a value to this factor as specified in section 4.1.4.3.1.3 with the following modification. Multiply the appropriate dilution weight from Table 4–13 for the sensitive environments in each type of surface water body by the adjustment value selected from Table 4–27, as specified in section 4.2.2.3.1. Use the resulting product, not the value from Table 4–13, as the dilution weight for the sensitive environments in that type of surface water body. Do not round this product to the nearest integer. Enter the value assigned in Table 4–25.

4.2.4.3.1.4 *Calculation of environmental threat-targets factor category value.* Sum the values for Level I concentrations, Level II concentrations, and potential contamination for the watershed. Do not round this sum to the nearest integer. Assign this sum as the environmental threat targets factor category value for the watershed. Enter this value in Table 4–25.

4.2.4.4 *Calculation of environmental threat score for a watershed.* Multiply the environmental threat factor category values for likelihood of release, waste characteristics, and targets for the watershed, and round the product to the nearest integer. Then divide by 82,500. Assign the resulting value, subject to a maximum of 60, as the environmental threat score for the watershed. Enter this score in Table 4–25.

4.2.5 *Calculation of ground water to surface water migration component score for a watershed.* Sum the scores for the three threats for the watershed (that is, drinking water, human food chain, and environmental threats). Assign the resulting score, subject to a maximum value of 100, as the ground water to surface water migration component score for the watershed. Enter this score in Table 4–25.

4.2.6 *Calculation of ground water to surface water migration component score.* Select the highest ground water to surface water migration component score from the watersheds evaluated. Assign this score as the ground water to surface water migration component score for the site, subject to a maximum score of 100. Enter this score in Table 4–25.

4.3 *Calculation of surface water migration pathway score.* Determine the surface water migration pathway score as follows:

- If only one of the two surface water migration components (overland/flood or ground water to surface water) is scored, assign the score of that component as the surface water migration pathway score.
- If both components are scored, select the higher of the two component scores from sections 4.1.6 and 4.2.6. Assign that score as the surface water migration pathway score.

5.0 Soil Exposure Pathway

Evaluate the soil exposure pathway based on two threats: Resident population threat and nearby population threat. Evaluate both threats based on three factor categories: Likelihood of exposure, waste characteristics, and targets. Figure 5–1 indicates the factors included within each factor category for each type of threat.

Determine the soil exposure pathway score (S_s)in terms of the factor category values as follows:

$$S_s = \frac{\sum_{i=1}^{2} (LE_i)(WC_i)(T_i)}{SF}$$

where:

LE_i = Likelihood of exposure factor category value for threat i (that is, resident population threat or nearby population threat).

WC_i = Waste characteristics factor category value for threat i.

T_i = Targets factor category value for threat i.

SF = Scaling factor.

Table 5–1 outlines the specific calculation procedure.

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	Likelihood of Exposure (LE)		Waste Characteristics (WC)		Targets (T)
Resident Population	Observed Contamination Area with Resident Targets	X	Toxicity • Chronic • Carcinogenic • Acute Hazardous Waste Quantity • Hazardous Constituent Quantity • Hazardous Wastestream Quantity • Volume • Area	X	Resident Individual Resident Population • Level I Concentrations • Level II Concentrations Workers Resources Terrestrial Sensitive Environments

+

	Likelihood of Exposure (LE)		Waste Characteristics (WC)		Targets (T)
Nearby Population	Attractiveness/ Accessibility Area of Contamination	X	Toxicity • Chronic • Carcinogenic • Acute Hazardous Waste Quantity • Hazardous Constituent Quantity • Hazardous Wastestream Quantity • Volume • Area	X	Nearby Individual Population Within One Mile

Figure 5-1
OVERVIEW OF SOIL EXPOSURE PATHWAY

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TABLE 5–1.—SOIL EXPOSURE PATHWAY SCORESHEET

Factor categories and factors	Maximum value	Value assigned
Resident Population Threat		
Likelihood of Exposure		
1. Likelihood of Exposure	550	
Waste Characteristics		
2. Toxicity	(a)	
3. Hazardous Waste Quantity	(a)	
4. Waste Characteristics	100	
Targets		
5. Resident Individual	50	
6. Resident Population:		
6a. Level I Concentrations	(b)	
6b. Level II Concentrations	(b)	
6c. Resident Population (lines 6a + 6b)	(b)	
7. Workers	15	
8. Resources	5	
9. Terrestrial Sensitive Environments	(c)	
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)	
Resident Population Threat Score		
11. Resident Population Threat (lines 1 × 4 × 10)	(b)	
Nearby Population Threat		
Likelihood of Exposure		
12. Attractiveness/Accessibility	100	
13. Area of Contamination	100	
14. Likelihood of Exposure	500	
Waste Characteristics		
15. Toxicity	(a)	
16. Hazardous Waste Quantity	(a)	
17. Waste Characteristics	100	
Targets		
18. Nearby Individual	1	
19. Population Within 1 Mile	(b)	
20. Targets (lines 18 + 19)	(b)	
Nearby Population Threat Score		
21. Nearby Population Threat (lines 14 × 17 × 20)	(b)	
Soil Exposure Pathway Score		
22. Soil Exposure Pathway Score[d] (S_s), (lines [11 + 21] / 82,500, subject to a maximum of 100)	100	

[a] Maximum value applies to waste characteristics category.
[b] Maximum value not applicable.
[c] No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to maximum of 60.
[d] Do not round to nearest integer.

5.0.1 *General considerations.* Evaluate the soil exposure pathway based on areas of observed contamination:

• Consider observed contamination to be present at sampling locations where analytic evidence indicates that:

–A hazardous substance attributable to the site is present at a concentration significantly above background levels for the site (see Table 2–3 in section 2.3 for the criteria for determining analytical significance), *and*

–This hazardous substance, if not present at the surface, is covered by 2 feet or less of cover material (for example, soil).

• Establish areas of observed contamination based on sampling locations at which there is observed contamination as follows:

–For all sources except contaminated soil, if observed contamination from the site is present at any sampling location within the source, consider that entire source to be an area of observed contamination.

–For contaminated soil, consider both the sampling location(s) with observed contamination from the site and the area lying between such locations to be an area of observed contamination, unless available information indicates otherwise.

• If an area of observed contamination (or portion of such an area) is covered by a permanent, or otherwise maintained, essentially impenetrable material (for example, asphalt) that is not more than 2 feet thick, exclude that area (or portion of the area) in evaluating the soil exposure pathway.

• For an area of observed contamination, consider only those hazardous substances that meet the criteria for observed contamination for that area to be associated with that area in evaluating the soil exposure pathway (see section 2.2.2).

If there is observed contamination, assign scores for the resident population threat and the nearby population threat, as specified in sections 5.1 and 5.2. If there is no observed contamination, assign the soil exposure pathway a score of 0.

5.1 *Resident Population Threat.* Evaluate the resident population threat only if there is an area of observed contamination in one or more of the following locations:

• Within the property boundary of a residence, school, or day care center *and* within 200 feet of the respective residence, school, or day care center, or

• Within a workplace property boundary *and* within 200 feet of a workplace area, or

• Within the boundaries of a resource specified in section 5.1.3.4, or

• Within the boundaries of a terrestrial sensitive environment specified in section 5.1.3.5.

If not, assign the resident population threat a value of 0, enter this value in Table 5–1, and proceed to the nearby population threat (section 5.2).

5.1.1 *Likelihood of exposure.* Assign a value of 550 to the likelihood of exposure factor category for the resident population threat if there is an area of observed contamination in one or more locations listed in section 5.1. Enter this value in Table 5–1.

5.1.2 *Waste characteristics.* Evaluate waste characteristics based on two factors: toxicity and hazardous waste quantity. Evaluate only those hazardous substances that meet the criteria for observed contamination at the site (see section 5.0.1).

5.1.2.1 *Toxicity.* Assign a toxicity factor value to each hazardous substance as specified in section 2.4.1.1. Use the hazardous substance with the highest toxicity factor value to assign the value to the toxicity factor for the resident population threat. Enter this value in Table 5–1.

5.1.2.2 *Hazardous waste quantity.* Assign a hazardous waste quantity factor value as specified in section 2.4.2. In estimating the hazardous waste quantity, use Table 5–2 and:

• Consider only the first 2 feet of depth of an area of observed contamination, except as specified for the volume measure.

• Use the volume measure (see section 2.4.2.1.3) only for those types of areas of observed contamination listed in Tier C of Table 5–2. In evaluating the volume measure for these listed areas of observed contamination, use the full volume, not just the volume within the top 2 feet.

• Use the area measure (see section 2.4.2.1.4), not the volume measure, for all other types of areas of observed contamination, even if their volume is known.

Enter the value assigned in Table 5–1.

TABLE 5–2.—HAZARDOUS WASTE QUANTITY EVALUATION EQUATIONS FOR SOIL EXPOSURE PATHWAY

Tier	Measure	Units	Equation for assigning value [a]
A	**Hazardous Constituent Quantity (C)**	lb	C
B [b]	**Hazardous Wastestream Quantity (W)**	lb	W/5,000
C [b]	**Volume (V)**		
	Surface Impoundment [c]	yd^3	V/2.5
	Drums [d]	gallon	V/500
	Tanks and Containers Other Than Drums	yd^3	V/2.5
D [b]	**Area (A)**		
	Landfill	ft^2	A/34,000
	Surface Impoundment	ft^2	A/13
	Surface Impoundment (Buried/backfilled)	ft^2	A/13
	Land treatment	ft^2	A/270
	Pile [e]	ft^2	A/34
	Contaminated Soil	ft^2	A/34,000

[a] Do not round nearest integer.
[b] Convert volume to mass when necessary: 1 ton=2,000 pounds=1 cubic yard=4 drums=200 gallons.
[c] Use volume measure only for surface impoundments containing hazardous substances present as liquids. Use area measures in Tier D for dry surface impoundments and for buried/backfilled surface impoundments.
[d] If actual volume of drums is unavailable, assume 1 drum=50 gallons.
[e] Use land surface area under pile, not surface area of pile.

5.1.2.3 *Calculation of waste characteristics factor category value.* Multiply the toxicity and hazardous waste quantity factor values, subject to a maximum product of 1×10^8. Based on this product, assign a value from Table 2–7 (section 2.4.3.1) to the waste characteristics factor category. Enter this value in Table 5–1.

5.1.3 *Targets.* Evaluate the targets factor category for the resident population threat based on five factors: resident individual, resident population, workers, resources, and terrestrial sensitive environments.

In evaluating the targets factor category for the resident population threat, count only the following as targets:

• Resident individual—a person living or attending school or day care on a property with an area of observed contamination *and* whose residence, school, or day care center, respectively, is on or within 200 feet of the area of observed contamination.

• Worker—a person working on a property with an area of observed contamination *and* whose workplace area is on or within 200 feet of the area of observed contamination.

• Resources located on an area of observed contamination, as specified in section 5.1.

• Terrestrial sensitive environments located on an area of observed contamination, as specified in section 5.1.

5.1.3.1 *Resident individual.* Evaluate this factor based on whether there is a resident individual, as specified in section 5.1.3, who is subject to Level I or Level II concentrations.

First, determine those areas of observed contamination subject to Level I concentrations and those subject to Level II concentrations as specified in sections 2.5.1 and 2.5.2. Use the health-based benchmarks from Table 5–3 in determining the level of contamination. Then assign a value to the resident individual factor as follows:

• Assign a value of 50 if there is at least one resident individual for one or more areas subject to Level I concentrations.

• Assign a value of 45 if there is no such resident individuals, but there is at least one resident individual for one or more areas subject to Level II concentrations.

• Assign a value of 0 if there is no resident individual.

Enter the value assigned in Table 5–1.

5.1.3.2 *Resident population.* Evaluate resident population based on two factors: Level I concentrations and Level II concentrations. Determine which factor applies as specified in sections 2.5.1 and 2.5.2, using the health-based benchmarks from Table 5–3. Evaluate populations subject to Level I concentrations as specified in section 5.1.3.2.1 and populations subject to Level II concentrations as specified in section 5.1.3.2.2.

TABLE 5–3.—HEALTH-BASED BENCHMARKS FOR HAZARDOUS SUBSTANCES IN SOILS

• Screening concentration for cancer corresponding to that concentration that corresponds to the 10^{-6} individual cancer risk for oral exposures.

• Screening concentration for noncancer toxicological responses corresponding to the Reference Dose (RfD) for oral exposures.

Count only those persons meeting the criteria for resident individual as specified in section 5.1.3. In estimating the number of people living on property with an area of observed contamination, when the estimate in based on the number of residences, multiply each residence by the average number of persons per residence for the county in which the residence is located.

5.1.3.2.1 *Level I concentrations.* Sum the number of resident individuals subject to Level I concentrations and multiply this sum by 10. Assign the resulting product as the value for this factor. Enter this value in Table 5–1.

5.1.3.2.2 *Level II concentrations.* Sum the number of resident individuals subject to Level II concentrations. Do not include those people already counted under the Level I concentrations factor. Assign this sum as the value for this factor. Enter this value in Table 5–1.

5.1.3.2.3 *Calculation of resident population factor value.* Sum the factor values for Level I concentrations and Level II concentrations. Assign this sum as the resident population factor value. Enter this value in Table 5–1.

5.1.3.3 *Workers.* Evaluate this factor based on the number of workers that meet the section 5.1.3 criteria. Assign a value for these workers using Table 5–4. Enter this value in Table 5–1.

TABLE 5–4.—FACTOR VALUES FOR WORKERS

Number of workers	Assigned value
0	0
1 to 100	5
101 to 1,000	10
Greater than 1,000	15

5.1.3.4 *Resources.* Evaluate the resources factor as follows:

• Assign a value of 5 to the resources factor if one or more of the following is present on an area of observed contamination at the site:

–Commercial agriculture.
–Commercial silviculture.
–Commercial livestock production or commercial livestock grazing.

• Assign a value of 0 if none of the above are present.

Enter the value assigned in Table 5–1.

5.1.3.5 *Terrestrial sensitive environments.* Assign value(s) from Table 5–5 to each terrestrial sensitive environment that meets the eligibility criteria of section 5.1.3.

Calculate a value (ES) for terrestrial sensitive environments as follows:

$$ES = \sum_{i=1}^{n} S_i$$

where:

S_i = Value(s) assigned from Table 5–5 to terrestrial sensitive environment i.

n = Number of terrestrial sensitive environments meeting section 5.1.3 criteria.

Because the pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60, determine the value for the terrestrial sensitive environments factor as follows:

TABLE 5-5.—TERRESTRIAL SENSITIVE ENVIRONMENTS RATING VALUES

Terrestrial sensitive environments	Assigned value
Terrestrial critical habitat [a] for Federal designated endangered or threatened species	100
National Park	
Designated Federal Wilderness Area	
National Monument	
Terrestrial habitat known to be used by Federal designated or proposed threatened or endangered species	75
National Preserve (terrestrial)	
National or State Terrestrial Wildlife Refuge	
Federal land designated for protection of natural ecosystems	
Administratively proposed Federal Wilderness Area	
Terrestrial areas utilized for breeding by large or dense aggregations of animals [b]	
Terrestrial habitat known to be used by State designated endangered or threatened species	50
Terrestrial habitat known to be used by species under review as to its Federal designated endangered or threatened status	
State lands designated for wildlife or game management	25
State designated Natural Areas	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	

[a] Critical habitat as defined in 50 CFR 424.02.
[b] Limit to vertebrate species.

• Multiply the values assigned to the resident population threat for likelihood of exposure (LE), waste characteristics (WC), and ES. Divide the product by 82,500.

–If the result is 60 or less, assign the value ES as the terrestrial sensitive environments factor value.

–If the result exceeds 60, calculate a value EC as follows:

$$EC = \frac{(60)\ (82{,}500)}{(LE)\ (WC)}$$

Assign the value EC as the terrestrial sensitive environments factor value. Do not round this value to the nearest interger.

Enter the value assigned for the terrestrial sensitive environments factor in Table 5-1.

5.1.3.6 *Calculation of resident population targets factor category value.* Sum the values for the resident individual, resident population, workers, resources, and terrestrial sensitive environments factors. Do not round to the nearest integer. Assign this sum as the targets factor category value for the resident population threat. Enter this value in Table 5-1.

5.1.4 *Calculation of resident population threat score.* Multiply the values for likelihood of exposure, waste characteristics, and targets for the resident population threat, and round the product to the nearest integer. Assign this product as the resident population threat score. Enter this score in Table 5-1.

5.2 *Nearby population threat.* Include in the nearby population only those individuals who live or attend school within a 1-mile travel distance of an area of observed contamination at the site and who do not meet the criteria for resident individual as specified in section 5.1.3.

Do not consider areas of observed contamination that have an attractiveness/accessibility factor value of 0 (see section 5.2.1.1) in evaluating the nearby population threat.

5.2.1 *Likelihood of exposure.* Evaluate two factors for the likelihood of exposure factor category for the nearby population threat: attractiveness/accessibility and area of contamination.

5.2.1.1. *Attractiveness/accessibility.* Assign a value for attractiveness/accessibility from Table 5-6 to each area of observed contamination, excluding any land used for residences. Select the highest value assigned to the areas evaluated and use it as the value for the attractiveness/accessibility factor. Enter this value in Table 5-1.

5.2.1.2 *Area of contamination.* Evaluate area of contamination based on the total area of the areas of observed contamination at the site. Count only the area(s) that meet the criteria in section 5.0.1 and that receive an attractiveness/accessibility value greater than 0. Assign a value to this factor from Table 5-7. Enter this value in Table 5-1.

TABLE 5-6.—ATTRACTIVENESS/ACCESSIBILITY VALUES

Area of observed contamination	Assigned value
Designated recreational area	100
Regularly used for public recreation (for example, fishing, hiking, softball)	75
Accessible and unique recreational area (for example, vacant lots in urban area)	75
Moderately accessible (may have some access improvements—for example, gravel road), with some public recreation use	50
Slightly accessible (for example, extremely rural area with no road improvement), with some public recreation use	25
Accessible, with no public recreation use	10
Surrounded by maintained fence or combination of maintained fence and natural barriers	5
Physically inaccessible to public, with no evidence of public recreation use	0

TABLE 5-7.—AREA OF CONTAMINATION FACTOR VALUES

Total area of the areas of observed contamination (square feet)	Assigned value
Less than or equal to 5,000	5
Greater than 5,000 to 125,000	20
Greater than 125,000 to 250,000	40
Greater than 250,000 to 375,000	60
Greater than 375,000 to 500,000	80
Greater than 500,000	100

5.2.1.3 *Likelihood of exposure factor category value.* Assign a value from Table 5-8 to the likelihood of exposure factor category, based on the values assigned to the attractiveness/accessibility and area of contamination factors. Enter this value in Table 5-1.

TABLE 5-8.—NEARBY POPULATION LIKELIHOOD OF EXPOSURE FACTOR VALUES

Area of contamination factor value	Attractiveness/accessibility factor value						
	100	75	50	25	10	5	0
100	500	500	375	250	125	50	0
80	500	375	250	125	50	25	0
60	375	250	125	50	25	5	0
40	250	125	50	25	5	5	0
20	125	50	25	5	5	5	0
5	50	25	5	5	5	5	0

5.2.2 *Waste characteristics.* Evaluate waste characteristics based on two factors: toxicity and hazardous waste quantity. Evaluate only those hazardous substances that meet the criteria for observed contamination (see section 5.0.1) at areas that can be assigned an attractiveness/accessibility factor value greater than 0.

5.2.2.1 *Toxicity.* Assign a toxicity factor value as specified in section 2.4.1.1 to each hazardous substance meeting the criteria in section 5.2.2. Use the hazardous substance with the highest toxicity factor value to assign the value to the toxicity factor for the nearby population threat. Enter this value in Table 5-1.

5.2.2.2 *Hazardous waste quantity.* Assign a value to the hazardous waste quantity factor as specified in section 5.1.2.2, except: consider only those areas of observed contamination that can be assigned an attractiveness/accessibility factor value greater than 0. Enter the value assigned in Table 5-1.

5.2.2.3 *Calculation of waste characteristics factor category value.* Multiply the toxicity and hazardous waste quantity factor values, subject to a maximum product of 1×10^8. Based on this product, assign a value from Table 2-7 (section 2.4.3.1) to the waste characteristics factor category. Enter this value in Table 5-1.

5.2.3 *Targets.* Evaluate the targets factory category for the nearby population threat based on two factors: nearby individual and population within a 1-mile travel distance from the site.

5.2.3.1 *Nearby individual.* If one or more persons meet the section 5.1.3 criteria for a

resident individual, assign this factor a value of 0. Enter this value in Table 5–1.

If no person meets the criteria for a resident individual, determine the shortest travel distance from the site to any residence or school. In determining the travel distance, measure the shortest overland distance an individual would travel from a residence or school to the nearest area of observed contamination for the site with an attractiveness/accessibility factor value greater than 0. If there are no natural barriers to travel, measure the travel distance as the shortest straight-line distance from the residence or school to the area of observed contamination. If natural barriers exist (for example, a river), measure the travel distance as the shortest straight-line distance from the residence or school to the nearest crossing point and from there as the shortest straight-line distance to the area of observed contamination. Based on the shortest travel distance, assign a value from Table 5–9 to the nearest individual factor. Enter this value in Table 5–1.

TABLE 5–9.—NEARBY INDIVIDUAL FACTOR VALUES

Travel distance for nearby individual (miles)	Assigned value
Greater than 0 to ¼	1*
Greater than ¼ to 1	0

* Assign a value of 0 if one or more persons meet the section 5.1.3 criteria for resident individual.

5.2.3.2 *Population within 1 mile.* Determine the population within each travel distance category of Table 5–10. Count residents and students who attend school within this travel distance. Do not include those people already counted in the resident population threat. Determine travel distances as specified in section 5.2.3.1.

In estimating residential population, when the estimate is based on the number of residences, multiply each residence by the average number of persons per residence for the county in which the residence is located.

Based on the number of people included within a travel distance category, assign a distance-weighted population value for that travel distance from Table 5–10.

Calculate the value for the population within 1 mile factor (PN) as follows:

$$PN = \frac{1}{10} \sum_{i=1}^{3} W_i$$

where:

W_i = Distance-weighted population value from Table 5–10 for travel distance category i.

If PN is less than 1, do not round it to the nearest integer; if PN is 1 or more, round to the nearest integer. Enter this value in Table 5–1.

5.2.3.3 *Calculation of nearby population targets factor category value.* Sum the values for the nearby individual factor and the population within 1 mile factor. Do not round this sum to the nearest integer. Assign this sum as the targets factor category value for the nearby population threat. Enter this value in Table 5–1.

TABLE 5–10.—DISTANCE-WEIGHTED POPULATION VALUES FOR NEARBY POPULATION THREAT *

Travel distance category (miles)	Number of people within the travel distance category											
	0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100.001 to 300,000	300.001 to 1,000,000
Greater than 0 to ¼	0	0.1	0.4	1.0	4	13	41	130	408	1,303	4,081	13.034
Greater than ¼ to ½	0	0.05	0.2	0.7	2	7	20	65	204	652	2,041	6,517
Greater than ½ to 1	0	0.02	0.1	0.3	1	3	10	33	102	326	1,020	3,258

* Round the number of people present within a travel distance category to nearest integer. Do not round the assigned distance-weighted population value to nearest integer.

5.2.4 *Calculation of nearby population threat score.* Multiply the values for likelihood of exposure, waste characteristics, and targets for the nearby population threat, and round the product to the nearest integer. Assign this product as the nearby population threat score. Enter this score in Table 5–1.

5.3 *Calculation of soil exposure pathway score.* Sum the resident population threat score and the nearby population threat score, and divide the sum by 82,500. Assign the resulting value, subject to a maximum of 100, as the soil exposure pathway score (S_s). Enter this score in Table 5–1.

6.0 Air Migration Pathway

Evaluate the air migration pathway based on three factor categories: likelihood of release, waste characteristics, and targets. Figure 6–1 indicates the factors included within each factor category.

Determine the air migration pathway score (S_a) in terms of the factor category values as follows:

$$S_a = \frac{(LR)(WC)(T)}{SF}$$

where:

LR = Likelihood of release factor category value.

WC = Waste characteristics factor category value.

T = Targets factor category value.

SF = Scaling factor.

Table 6–1 outlines the specific calculation procedure.

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Likelihood of Release (LR)		Waste Characteristics (WC)		Targets (T)
Observed Release or Potential to Release • Gas Potential to Release - Gas Containment - Gas Source Type - Gas Migration Potential • Particulate Potential to Release - Particulate Containment - Particulate Source Type - Particulate Migration Potential	X	Toxicity/Mobility • Toxicity - Chronic - Carcinogenic - Acute • Mobility - Gaseous Mobility - Particulate Mobility Hazardous Waste Quantity • Hazardous Constituent Quantity • Hazardous Wastestream Quantity • Volume • Area	X	Nearest Individual Population • Level I Concentrations • Level II Concentrations • Potential Contamination Resources Sensitive Environments • Actual Contamination • Potential Contamination

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FIGURE 6-1
OVERVIEW OF AIR MIGRATION PATHWAY

TABLE 6-1.—AIR MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum value	Value assigned
Likelihood of Release		
1. Observed Release	550	
2. Potential to Release:		
2a. Gas Potential to Release	500	
2b. Particulate Potential to Release	500	
2c. Potential to Release (higher of lines 2a and 2b)	500	
3. Likelihood of Release (higher of lines 1 and 2c)	550	
Waste Characteristics		
4. Toxicity/Mobility	(a)	
5. Hazardous Waste Quantity	(a)	
6. Waste Characteristics	100	
Targets		
7. Nearest Individual	50	
8. Population:		
8a. Level I Concentrations	(b)	
8b. Level II Concentrations	(b)	
8c. Potential Contamination	(b)	
8d. Population (lines 8a+8b+8c)	(b)	
9. Resources	5	
10. Sensitive Environments		
10a. Actual Contamination	(c)	
10b. Potential Contamination	(c)	
10c. Sensitive Environments (lines 10a+10b)	(c)	
11. Targets (lines 7+8d+9+10c)	(b)	
Air Migration Pathway Score		
12. Pathway Score (S_a) [(lines 3×6×11)/82,500] [d]	100	

[a] Maximum value applies to waste characteristics category.
[b] Maximum value not applicable.
[c] No specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to maximum of 60.
[d] Do not round to nearest integer.

6.1 *Likelihood of Release.* Evaluate the likelihood of release factor category in terms of an observed release factor or a potential to release factor.

6.1.1 *Observed release.* Establish an observed release to the atmosphere by demonstrating that the site has released a hazardous substance to the atmosphere. Base this demonstration on either:

• Direct observation—a material (for example, particulate matter) that contains one or more hazardous substances has been seen entering the atmosphere directly. When evidence supports the inference of a release of a material that contains one or more hazardous substances by the site to the atmosphere, demonstrated adverse effects accumulated with that release may be used to establish an observed release.

• Chemical analysis—an analysis of air samples indicates that the concentration of ambient hazardous substance(s) has increased significantly above the background concentration for the site (see section 2.3). Some portion of the significant increase must be attributable to the site to establish the observed release.

If an observed release can be established, assign an observed release factor value of 550, enter this value in Table 6-1, and proceed to section 6.1.3. If an observed release cannot be established, assign an observed release factor value of 0, enter this value in Table 6-1, and proceed to section 6.1.2.

6.1.2 *Potential to release.* Evaluate potential to release only if an observed release cannot be established. Determine the potential to release factor value for the site by separately evaluating the gas potential to release and the particulate potential to release for each source at the site. Select the highest potential to release value (either gas or particulate) calculated for the sources evaluated and assign that value as the site potential to release factor value as specified below.

6.1.2.1 *Gas potential to release.* Evaluate gas potential to release for those sources that contain gaseous hazardous substances—that is, those hazardous substances with a vapor pressure greater than or equal to 10^{-9} torr.

Evaluate gas potential to release for each source based on three factors: gas containment, gas source type, and gas migration potential. Calculate the gas potential to release value as illustrated in Table 6-2. Combine sources with similar characteristics into a single source in evaluating the gas potential to release factors.

TABLE 6-2.—GAS POTENTIAL TO RELEASE EVALUATION

Source	Source type [a]	Gas containment factor value [b]	Gas source type factor value [c]	Gas migration potential factor value [d]	Sum	Gas source value
		A	B	C	(B+C)	A(B+C)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
Gas Potential to Release Factor (Select the Highest Gas Source Value)						

[a] Enter a Source Type listed in Table 6-4.
[b] Enter Gas Containment Factor Value from section 6.1.2.1.1.
[c] Enter Gas Source Type Factor Value from section 6.1.2.1.2.
[d] Enter Gas Migration Potential Factor Value from section 6.1.2.1.3.

6.1.2.1.1 *Gas containment.* Assign each source a value from Table 6–3 for gas containment. Use the lowest value from Table 6–3 that applies to the source, except: assign a value of 10 if there is evidence of biogas release or if there is an active fire within the source.

TABLE 6–3.—GAS CONTAINMENT FACTOR VALUES

Gas containment description	Assigned value
All situations except those specifically listed below	10
Evidence of biogas release	10 [a]
Active fire within source	10 [a]
Gas collection/treatment system functioning, regularly inspected, maintained, and completely covering source	0
Source substantially surrounded by engineering windbreak and no other containment specifically described in this table applies	7
Source covered with essentially impermeable, regularly inspected, maintained cover	0
Uncontaminated soil cover >3 feet:	
• Source substantially vegetated with little exposed soil	0
• Source lightly vegetated with much exposed soil	3
• Source substantially devoid of vegetation	7
Uncontaminated soil cover ≥1 foot and ≥3 feet:	
• Source heavily vegetated with essentially no exposed soil	
—Cover soil type resistant to gas migration [b]	3
—Cover soil type not resistant to gas migration [b] or unknown	7
• Source substantially vegetated with little exposed soil and cover soil type resistant to gas migration [b]	7
• Other	10
Uncontaminated soil cover <1 foot:	
• Source heavily vegetated with essentially no exposed soil and cover soil type resistant to gas migration [b]	7
• Other	10
Totally or partially enclosed within structurally intact building and no other containment specifically described in this table applies	7
Source consists solely of intact, sealed containers:	
• Totally protected from weather by regularly inspected, maintained cover	0
• Other	3

[a] This value must be used if applicable.
[b] Consider moist fine-grained and saturated coarse-grained soils resistant to gas migration. Consider all other soils nonresistant.

6.1.2.1.2 *Gas source type.* Assign a value for gas source type to each source as follows:

• Determine if the source meets the minimum size requirement based on the source hazardous waste quantity value (see section 2.4.2.1.5). If the source receives a source hazardous waste quantity value of 0.5 or more, consider the source to meet the minimum size requirement.

• If the source meets the minimum size requirement, assign it a value from Table 6–4 for gas source type.

• If the source does not meet the minimum size requirement, assign it a value of 0 for gas source type.

If no source at the site meets the minimum size requirement, assign each source at the site a value from Table 6–4 for gas source type.

TABLE 6–4.—SOURCE TYPE FACTOR VALUES

Source type	Assigned value	
	Gas	Particulate
Active fire area	14	30
Burn pit	19	22
Containers or tanks (buried/below-ground):		
• Evidence of biogas release	33	22
• No evidence of biogas release	11	22
Containers or tanks, not elsewhere specified	28	14
Contaminated soil (excluding land treatment)	19	22
Landfarm/land treatment	28	22

TABLE 6–4.—SOURCE TYPE FACTOR VALUES—Concluded

Source type	Assigned value	
	Gas	Particulate
Landfill:		
• Evidence of biogas release	33	22
• No evidence of biogas release	11	22
Pile:		
• Tailings pile	6	28
• Scrap metal or junk pile	6	17
• Trash pile	6	6
• Chemical waste pile	11	28
• Other waste piles	17	28
Surface impoundments (buried/backfilled):		
• Evidence of biogas release	33	22
• No evidence of biogas release	11	22
Surface impoundment (not buried/backfilled):		
• Dry	19	22
• Other	28	0
Other types of sources, not elsewhere specified	0	0

6.1.2.1.3 *Gas migration potential.* Evaluate this factor for each source as follows:

• Assign a value for gas migration potential to each of the gaseous hazardous substances associated with the source (see section 2.2.2) as follows:

–Assign values from Table 6–5 for vapor pressure and Henry's constant to each hazardous substance. If Henry's constant cannot be determined for a hazardous substance, assign that hazardous substance a value of 2 for the Henry's constant component.

–Sum the two values assigned to the hazardous substance.

–Based on this sum, assign the hazardous substance a value from Table 6–6 for gas migration potential.

• Assign a value for gas migration potential to each source as follows:

–Select three hazardous substances associated with the source:

– –If more than three gaseous hazardous substances can be associated with the source, select three that have the highest gas migration potential values.

– –If fewer than three gaseous hazardous substances can be associated with a source, select all of them.

–Average the gas migration potential values assigned to the selected hazardous substances.

–Based on this average value, assign the source a gas migration potential value from Table 6–7.

TABLE 6–5.—VALUES FOR VAPOR PRESSURE AND HENRY'S CONSTANT

Vapor pressure (Torr)	Assigned value
Greater than 10	3
Greater than 10^{-3} to 10	2
10^{-5} to 10^{-3}	1
Less than 10^{-5}	0

Henry's constant (atm-m³/mol)	Assigned value
Greater than 10^{-3}	3
Greater than 10^{-5} to 10^{-3}	2
10^{-7} to 10^{-5}	1
Less than 10^{-7}	0

TABLE 6-6.—GAS MIGRATION POTENTIAL VALUES FOR A HAZARDOUS SUBSTANCE

Sum of values for vapor pressure and Henry's constant	Assigned value
0	0
1 or 2	6
3 or 4	11
5 or 6	17

TABLE 6-7.—GAS MIGRATION POTENTIAL VALUES FOR THE SOURCE

Average of gas migration potential values for three hazardous substances [a]	Assigned value
0 to < 3	0
3 to < 8	6

TABLE 6-7.—GAS MIGRATION POTENTIAL VALUES FOR THE SOURCE—Concluded

Average of gas migration potential values for three hazardous substances [a]	Assigned value
8 to < 14	11
14 to 17	17

[a] If fewer than three hazardous substances can be associated with the source, compute the average based only on those hazardous substances that can be associated.

6.1.2.1.4 *Calculation of gas potential to release value.* Determine the gas potential to release value for each source as illustrated in Table 6-2. For each source, sum the gas source type factor value and gas migration potential factor value and multiply this sum by the gas containment factor value. Select the highest product calculated for the sources evaluated and assign it as the gas potential to release value for the site. Enter this value in Table 6-1.

6.1.2.2 *Particulate potential to release.* Evaluate particulate potential to release for those sources that contain particulate hazardous substances—that is, those hazardous substances with a vapor pressure less than or equal to 10^{-1} torr.

Evaluate particulate potential to release for each source based on three factors: particulate containment, particulate source type, and particulate migration potential. Calculate the particulate potential to release value as illustrated in Table 6-8. Combine sources with similar characteristics into a single source in evaluating the particulate potential to release factors.

6.1.2.2.1 *Particulate containment.* Assign each source a value from Table 6-9 for particulate containment. Use the lowest value from Table 6-9 that applies to the source.

6.1.2.2.2 *Particulate source type.* Assign a value for particulate source type to each source in the same manner as specified for gas sources in section 6.1.2.1.2.

6.1.2.2.3 *Particulate migration potential.* Based on the site location, assign a value from Figure 6-2 for particulate migration potential. Assign this same value to each source at the site.

TABLE 6-8.—PARTICULATE POTENTIAL TO RELEASE EVALUATION

Source	Source type [a]	Particulate containment factor value [b]	Particulate type factor value [c]	Particulate migration potential factor value [d]	Sum	Particulate source value
		A	B	C	(B+C)	A (B+C)
1						
2						
3						
4						
5						
6						
7						
8						
Particulate Potential to Release Factor Value (Select Highest Particulate Source Value)						_____

[a] Enter a Source Type listed in Table 6-4.
[b] Enter Particulate Containment Factor Value from section 6.1.2.2.1.
[c] Enter Particulate Source Type Factor Value from section 6.1.2.2.2.
[d] Enter Particulate Migration Potential Factor Value from section 6.1.2.2.3.

TABLE 6-9.—PARTICULATE CONTAINMENT FACTOR VALUES

Particulate containment description	Assigned value
All situations except those specifically listed below	10
Source contains only particulate hazardous substances totally covered by liquids	0
Source substantially surrounded by engineered windbreak and no other containment specifically described in this table applies	7
Source covered with essentially impermeable, regularly inspected, maintained cover	0
Uncontaminated soil cover > 3 feet:	
• Source substantially vegetated with little or no exposed soil	0
• Source lightly vegetated with much exposed soil	3
• Source substantially devoid of vegetation	7
Uncontaminated soil cover ≥ 1 foot and ≤ 3 feet:	
• Source heavily vegetated with essentially no exposed soil:	
—Cover soil type resistant to gas migration [a]	3
—Cover soil type not resistant to gas migration [a] or unknown	7
• Source substantially vegetated with little exposed soil and cover soil type resistant to gas migration [a]	7
• Other	10
Uncontaminated soil cover < 1 foot:	
• Source heavily vegetated with essentially no exposed soil and cover soil type resistant to gas migration [a]	7
• Other	10
Totally or partially enclosed within structurally intact building and no other containment specifically described in this table applies	7
Source consists solely of containers:	
• All containers contain only liquids	0
• All containers intact, sealed, and totally protected from weather by regularly inspected, maintained cover	0
• All containers intact and sealed	3
• Other	10

[a] Consider moist fine-grained and saturated coarse-grained soils resistant to gas migration. Consider all other soils nonresistant.

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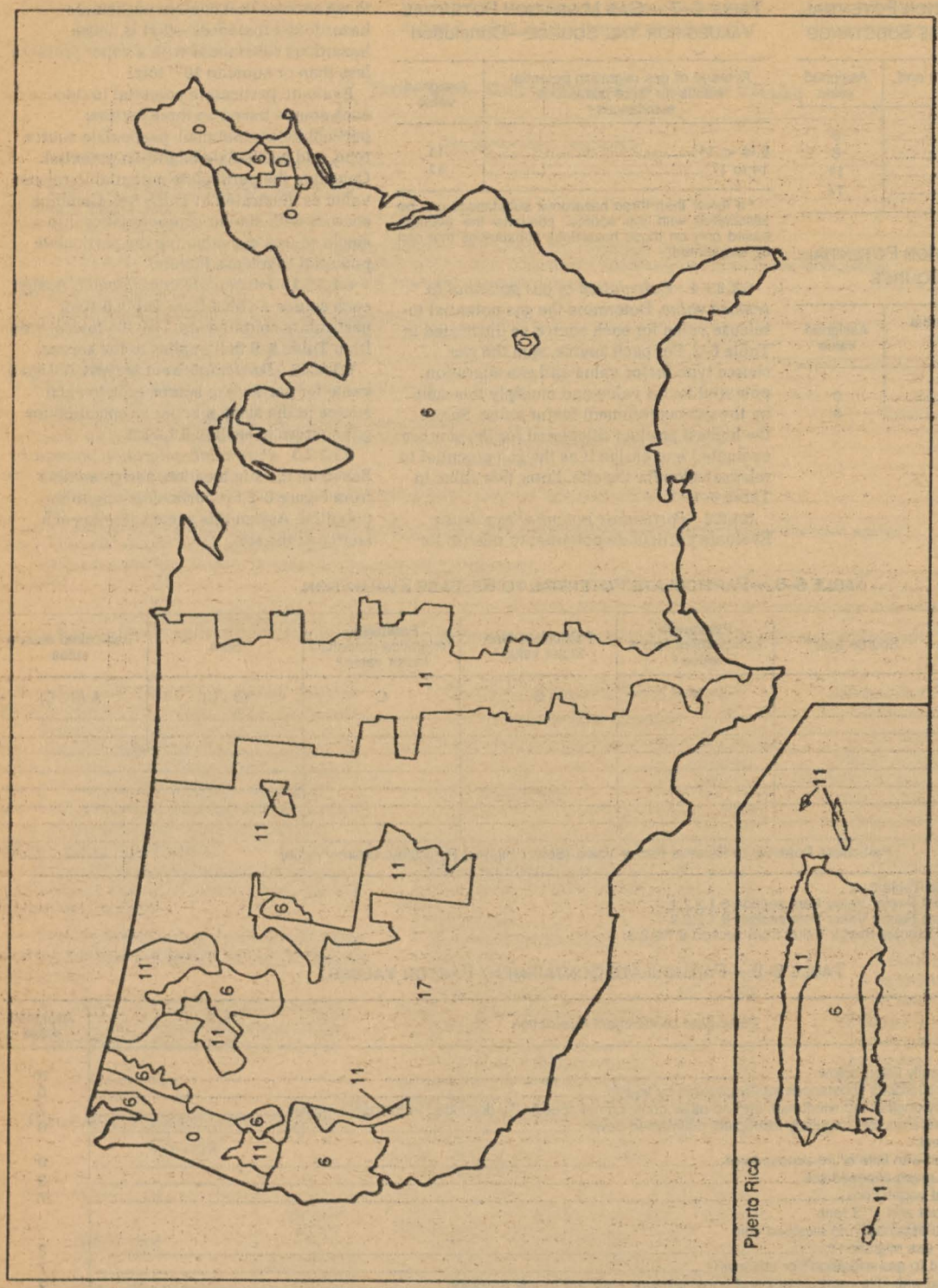

FIGURE 6-2
PARTICULATE MIGRATION POTENTIAL FACTOR VALUES

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FIGURE 6-2.—PARTICULATE MIGRATION POTENTIAL FACTOR VALUES—CONCLUDED

Location	Particulate migration potential assigned value
Hawaiian Islands	
Hilo, Hawaii	0
Honolulu, Oahu	17
Kahului, Maui	17
Lanai	17
Lihue, Kauai	11
Molokai	17
Pacific Islands	
Guam	6
Johnston Island	17
Koror Island	0
Kwajalein Island	6
Mujuro, Marshall Islands	0
Pago Pago, American Samoa	0
Ponape Island	0
Truk, Caroline Islands	0
Wake Island	17
Yap Island	0
Alaska	
Anchorage	17
Annette	0
Barrow	17
Barter Island	17
Bethel	17
Bettles	17
Big Delta	17
Cold Bay	6
Fairbanks	17
Gulkana	17
Homer	11
Juneau	0
King Salmon	11
Kodiak	0
Kutzebue	17
McGrath	17
Nome	11
St. Paul Island	11
Talkeetna	6
Unalakleet	17
Valdez	0
Yakutat	0
American Virgin Islands	
St. Croix	17
St. John	11
St. Thomas	11
Puerto Rico	
Arecibo	6
Coloso	6
Fajardo	11
Humacao	6
Isabela Station	11
Ponce	17
San Juan	11

For site locations not on Figure 6-2, and for site locations near the boundary points on Figure 6-2, assign a value as follows. First, calculate a Thornthwaite P-E index using the following equation:

$$PE = \sum_{i-1}^{12} 115\,[P_i/(T_i-10)]^{10/9}$$

where:

PE = Thornthwaite P-E index.

P_i = Mean monthly precipitation for month i, in inches.

T_i = Mean monthly temperature for month i, in degrees Fahrenheit; for any month having a mean monthly temperature less than 28.4 °F, use 28.4 °F.

Based on the calculated Thornthwaite P-E index, assign a source particulate migration potential value to the site from Table 6-10. Assign this same value to each source at the site.

TABLE 6-10.—PARTICULATE MIGRATION POTENTIAL VALUES

Thornthwaite P-E Index	Assigned value
Greater than 150	0
85 to 150	6
50 to less than 85	11
Less than 50	17

6.1.2.2.4 *Calculation of particulate potential to release value.* Determine the particulate potential to release value for each source as illustrated in Table 6-8. For each source, sum its particulate source type factor value and particulate migration potential factor value and multiply this sum by its particulate containment factor value. Select the highest product calculated for the sources evaluated and assign it as the particulate potential to release value for the site. Enter the value in Table 6-1.

6.1.2.3 *Calculation of potential to release factor value for the site.* Select the higher of the gas potential to release value assigned in section 6.1.2.1.4 and the particulate potential to release value assigned in section 6.1.2.2.4. Assign the value selected as the site potential to release factor value. Enter this value in Table 6-1.

6.1.3 *Calculation of likelihood of release factor category value.* If an observed release is established, assign the observed release factor value of 550 as the likelihood of release factor category value. Otherwise, assign the site potential to release factor value as the likelihood of release factor category value. Enter the value in Table 6-1.

6.2 *Waste characteristics.* Evaluate the waste characteristics factor category based on two factors: toxicity/mobility and hazardous waste quantity. Evaluate only those hazardous substances available to migrate from the sources at the site to the atmosphere. Such hazardous substances include:

- Hazardous substances that meet the criteria for an observed release to the atmosphere.
- All gaseous hazardous substances associated with a source that has a gas containment factor value greater than 0 (see section 2.2.2, 2.2.3, and 6.1.2.1.1).
- All particulate hazardous substances associated with a source that has a particulate containment factor value greater than 0 (see section 2.2.2, 2.2.3, and 6.1.2.2.1).

6.2.1 *Toxicity/mobility.* For each hazardous substance, assign a toxicity factor value, a mobility factor value, and a combined toxicity/mobility factor value as specified below. Select the toxicity/mobility factor value for the air migration pathway as specified in section 6.2.1.3.

6.2.1.1 *Toxicity.* Assign a toxicity factor value to each hazardous substance as specified in section 2.4.1.1.

6.2.1.2 *Mobility.* Assign a mobility factor value to each hazardous substance as follows:

- Gaseous hazardous substance.
  - –Assign a mobility factor value of 1 to each gaseous hazardous substance that meets the criteria for an observed release to the atmosphere.
  - –Assign a mobility factor value from Table 6-11, based on vapor pressure, to each gaseous hazardous substance that does not meet the criteria for an observed release.
- Particulate hazardous substance.
  - –Assign a mobility factor value of 0.02 to each particulate hazardous substance that meets the criteria for an observed release to the atmosphere.
  - –Assign a mobility factor value from Figure 6-3, based on the site's location, to each particulate hazardous substance that does not meet the criteria for an observed release. (Assign all such particulate hazardous substances this same value.)
  - –For site locations not on Figure 6-3 and for site locations near the boundary points on Figure 6-3, assign a mobility factor value to each particulate hazardous substance that does not meet the criteria for an observed release as follows:
  - –Calculate a value M:

    $M = 0.0182\,[U^3/[PE]^2]$

    where:

    U = Mean average annual wind speed (meters per second).

    PE = Thornthwaite P-E index from section 6.1.2.2.3.
  - –Based on the value M, assign a mobility factor value from Table 6-12 to each particulate hazardous substance.
- Gaseous and particulate hazardous substances.
  - –For a hazardous substance potentially present in both gaseous and particulate forms, select the higher of the factor values for gas mobility and particulate mobility for that substance and assign that value as the mobility factor value for the hazardous substance.

6.2.1.3 *Calculation of toxicity/mobility factor value.* Assign each hazardous substance a toxicity/mobility factor value from Table 6-13, based on the values assigned to the hazardous substance for the toxicity and mobility factors. Use the hazardous substance with the highest toxicity/mobility factor value to assign the value to the toxicity/mobility factor for the air migration pathway. Enter this value in Table 6-1.

TABLE 6-11.—GAS MOBILITY FACTOR VALUES

Vapor pressure (Torr)	Assigned value *
Greater than 10^{-1}	1.0
Greater than 10^{-3} to 10^{-1}	0.2
Greater than 10^{-5} to 10^{-3}	0.02

TABLE 6-11.—GAS MOBILITY FACTOR VALUES—Concluded

Vapor pressure (Torr)	Assigned value *
Greater than 10^{-7} to 10^{-5}	0.002
Less than or equal to 10^{-7}	0.0002

* Do not round to nearest integer.

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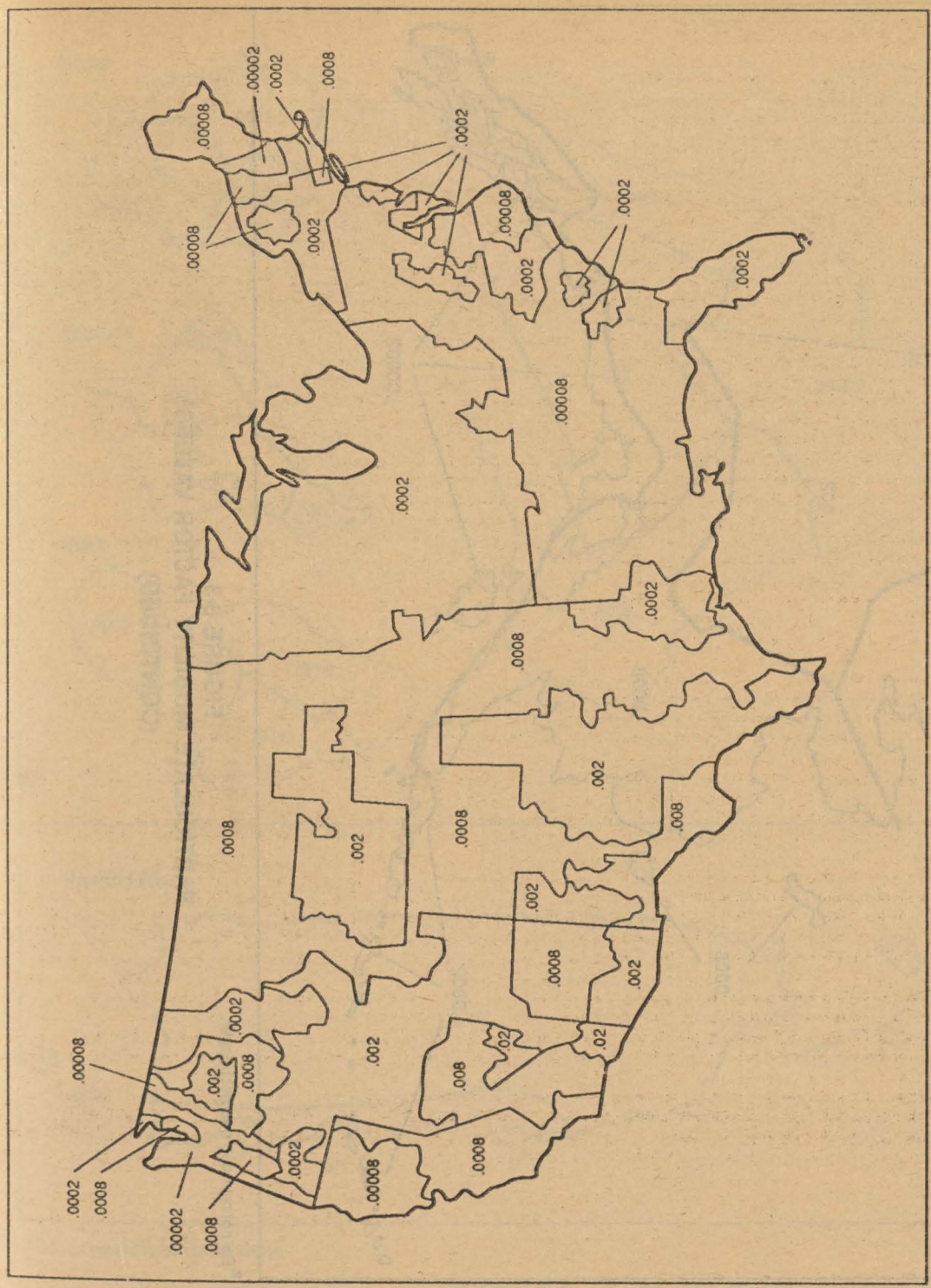


FIGURE 6-3
PARTICULATE MOBILITY FACTOR VALUES[a]

[a] Do not round to nearest integer.

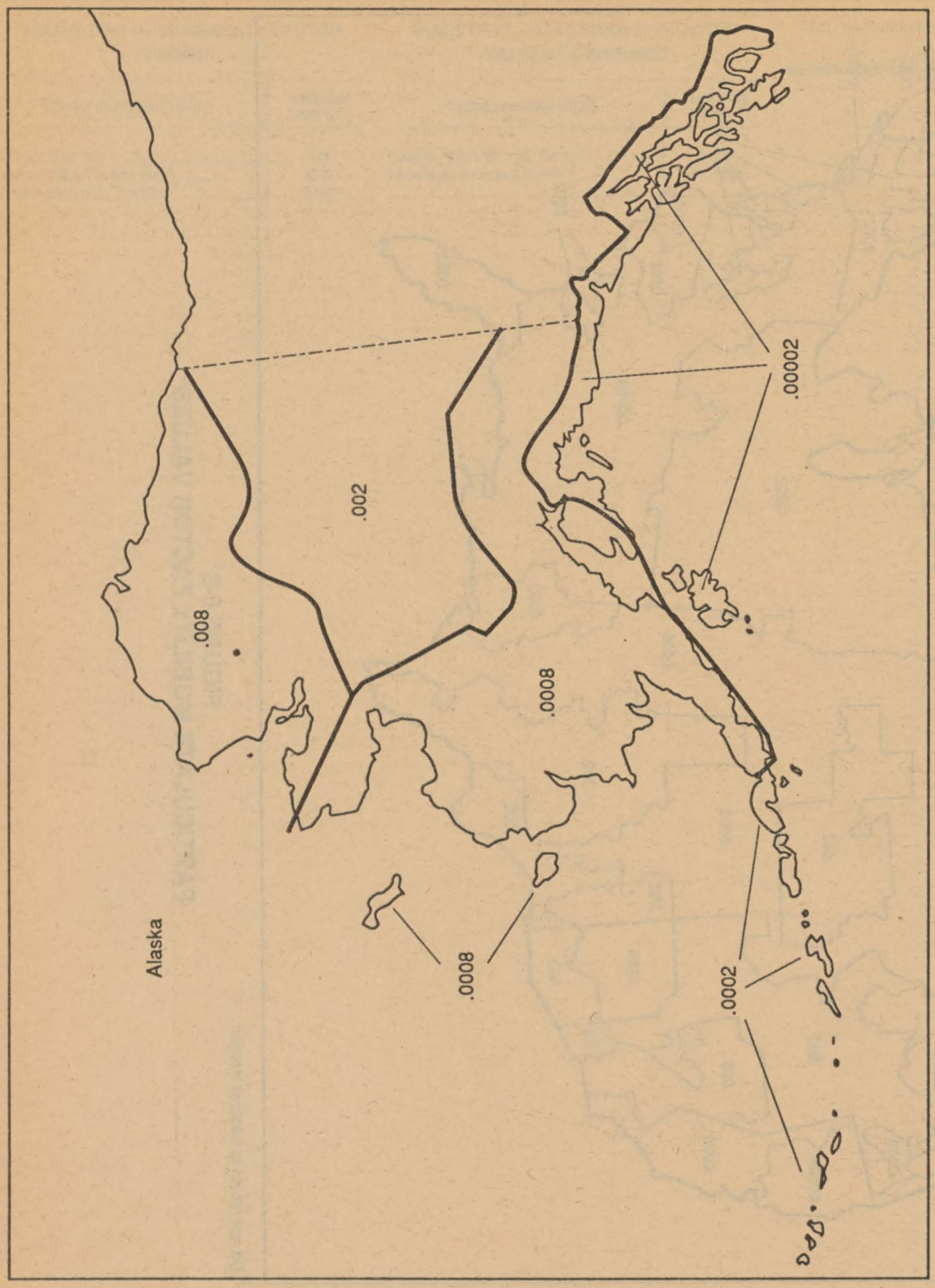
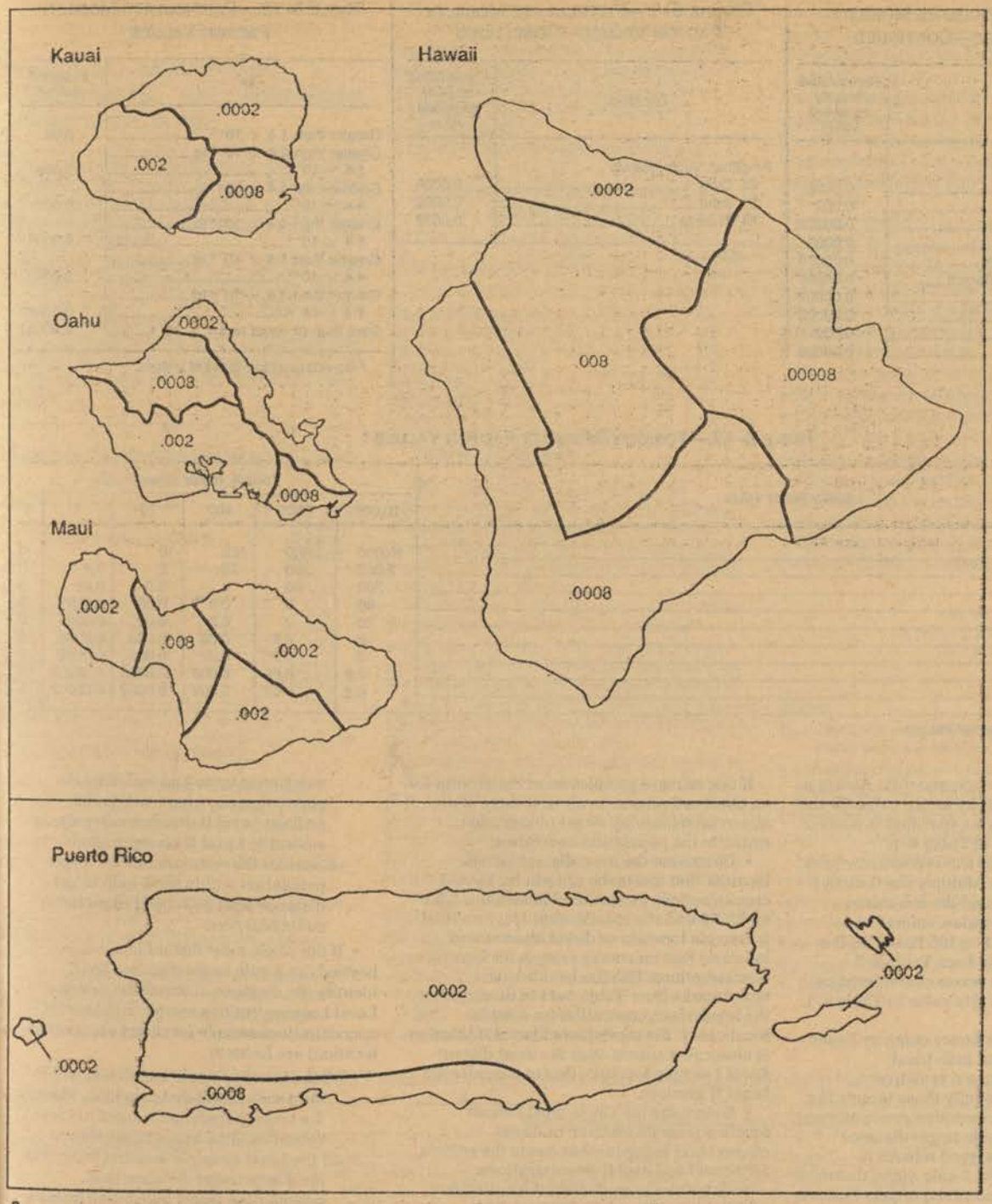


FIGURE 6-3
PARTICULATE MOBILITY FACTOR VALUES[a]
(CONTINUED)

[a] Do not round to nearest integer.



[a] Do not round to nearest integer.

FIGURE 6-3
PARTICULATE MOBILITY FACTOR VALUES[a]
(CONTINUED)

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FIGURE 6-3.PARTICULATE MOBILITY FACTOR VALUES—CONTINUED

Location	Particulated mobility assigned value
Pacific Islands	
Guam	0.0002
Johnston Island	0.002
Koror Island	0.00008
Kwajalein Island	0.0002
Mujuro, Marshall Islands	0.00008
Pago Pago, American Samoa	0.00008
Ponape Island	0.00002
Truk, Caroline Islands	0.00008
Wake Island	0.002
Yap Island	0.00008

FIGURE 6-3.—PARTICULATE MOBILITY FACTOR VALUES—CONCLUDED

Location	Particulated mobility assigned value
American Virgin Islands	
St. Croix	0.0008
St. John	0.0002
St. Thomas	0.0002

TABLE 6-12.—PARTICULATE MOBILITY FACTOR VALUES

M	Assigned value *
Greater than 1.4×10^{-2}	0.02
Greater than 4.4×10^{-3} to 1.4×10^{-2}	0.008
Greater than 1.4×10^{-3} to 4.4×10^{-3}	0.002
Greater than 4.4×10^{-4} to 1.4×10^{-3}	0.0008
Greater than 1.4×10^{-4} to 4.4×10^{-4}	0.0002
Greater than 4.4×10^{-5} to 1.4×10^{-4}	0.00008
Less than or equal to 4.4×10^{-5}	0.00002

* Do not round to nearest integer.

TABLE 6-13.—TOXICITY/MOBILITY FACTOR VALUES *

Mobility factor value	Toxicity factor value					
	10,000	1,000	100	10	1	0
1.0	10,000	1,000	100	10	1	0
0.2	2,000	200	20	2	0.2	0
0.02	200	20	2	0.2	0.02	0
0.008	80	8	0.8	0.08	0.008	0
0.002	20	2	0.2	0.02	0.002	0
0.0008	8	0.8	0.08	0.008	0.0008	0
0.0002	2	0.2	0.02	0.002	0.0002	0
0.00008	0.8	0.08	0.008	0.0008	0.00008	0
0.00002	0.2	0.02	0.002	0.0002	0.00002	0

* Do not round to nearest integer.

6.2.2 *Hazardous waste quantity.* Assign a hazardous waste quantity factor value for the air migration pathway as specified in section 2.4.2. Enter this value in Table 6-1.

6.2.3 *Calculation of waste characteristics factor category value.* Multiply the toxicity/mobility factor value and the hazardous waste quantity factor value, subject to a maximum product of 1×10^8. Based on this product, assign a value from Table 2-7 (section 2.4.3.1) to the waste characteristics factor category. Enter this value in Table 6-1.

6.3 *Targets.*

Evaluate the targets factor category based on four factors: nearest individual, population, resources, and sensitive environments. Include only those targets (for example, individuals, sensitive environments) located within the 4-mile target distance limit, except: if an observed release is established beyond the 4-mile target distance limit, include those additional targets that are specified below in this section and in section 6.3.4.

Evaluate the nearest individual and population factors based on whether the target populations are subject to Level I concentrations, Level II concentrations, or potential contamination. Determine which applies to a target population as follows.

If no samples meet the criteria for an observed release to air and if there is no observed release by direct observation, consider the entire population within the 4-mile target distance limit to be subject to potential contamination.

If one or more samples meet the criteria for an observed release to air or if there is an observed release by direct observation, evaluate the population as follows:

• Determine the most distant sample location that meets the criteria for Level I concentrations as specified in sections 2.5.1 and 2.5.2 and the most distant location (that is, sample location or direct observation location) that meets the criteria for Level II concentrations. Use the health-based benchmarks from Table 6-14 in determining the level of contamination for sample locations. If the most distant Level II location is closer to a source than the most distant Level I sample location, do not consider the Level II location.

• Determine the single most distant location (sample location or direct observation location) that meets the criteria for Level I or Level II concentrations.

• If this single most distant location is within the 4-mile target distance limit, identify the distance categories from Table 6-15 in which the selected Level I concentrations sample and Level II concentrations sample (or direct observation location) are located:

–Consider the target population anywhere within this furthest Level I distance category, or anywhere within a distance category closer to a source at the site, as subject to Level I concentrations.

–Consider the target population located beyond any Level I distance categories, up to and including the population anywhere within the furthest Level II distance category, as subject to Level II concentrations.

–Consider the remainder of the target population within the 4-mile target distance limit as subject to potential contamination.

• If the single most distant location is beyond the 4-mile target distance limit, identify the distance at which the selected Level I concentrations sample and Level II concentrations sample (or direct observation location) are located:

–If the Level I sample location is within the 4-mile target distance limit, identify the target population subject to Level I concentrations as specified above.

–If the Level I sample location is beyond the 4-mile target distance limit, consider the target population located anywhere within a distance from the sources at the site equal to the distance to this sample location to be subject to Level I concentrations and include them in the evaluation.

–Consider the target population located beyond the Level I target population, but located anywhere within a distance from the sources at the site equal to the distance to the selected Level II location, to be subject to Level II concentrations and include them in the evaluation.

–Do not include any target population as subject to potential contamination.

TABLE 6–14.—HEALTH-BASED BENCHMARKS FOR HAZARDOUS SUBSTANCES IN AIR

- Concentration corresponding to National Ambient Air Quality Standard (NAAQS).
- Concentration corresponding to National Emission Standards for Hazardous Air Pollutants (NESHAPs).
- Screening concentration for cancer corresponding to that concentration that corresponds to the 10^{-6} individual cancer risk for inhalation exposures.
- Screening concentration for noncancer toxicological responses corresponding to the Reference Dose (RfD) for inhalation exposures.

TABLE 6–15.—AIR MIGRATION PATHWAY DISTANCE WEIGHTS

Distance category (miles)	Assigned distance weight *
0	1.0
Greater than 0 to ¼	0.25
Greater than ¼ to ½	0.054
Greater than ½ to 1	0.016
Greater than 1 to 2	0.0051
Greater than 2 to 3	0.0023
Greater than 3 to 4	0.0014
Greater than 4	0

* Do not round to nearest integer.

6.3.1 *Nearest individual.* Assign the nearest individual factor a value as follows:

- If one or more residences or regularly occupied buildings or areas is subject to Level I concentrations as specified in section 6.3, assign a value of 50.
- If not, but if one or more a residences or regularly occupied buildings or areas is subject to Level II concentrations, assign a value of 45.
- If none of the residences and regularly occupied buildings and areas is subject to Level I or Level II concentrations, assign a value to this factor based on the shortest distance to any residence or regularly occupied building or area, as measured from any source at the site with an air migration containment factor value greater than 0. Based on this shortest distance, assign a value from Table 6–16 to the nearest individual factor.

Enter the value assigned in Table 6–1.

TABLE 6–16.—NEAREST INDIVIDUAL FACTOR VALUES

Distance to nearest individual (miles)	Assigned value
Level I concentrations *	50
Level II concentrations *	45
0 to ⅛	20
Greater than ⅛ to ¼	7
Greater than ¼ to 1/2	2
Greater than ½ to 1	1
Greater than 1	0

* Distance does not apply.

6.3.2 *Population.* In evaluating the population factor, count residents, students, and workers regularly present within the target distance limit. Do not count transient populations such as customers and travelers passing through the area.

In estimating residential population, when the estimate is based on the number of residences, multiply each residence by the average number of persons per residence for the county in which the residence is located.

6.3.2.1 *Level of contamination.* Evaluate the population factor based on three factors: Level I concentrations, Level II concentrations, and potential contamination.

Evaluate the population subject to Level I concentrations (see section 6.3) as specified in section 6.3.2.2, the population subject to Level II concentrations as specified in section 6.3.2.3, and the population subject to potential contamination as specified in section 6.3.2.4.

For the potential contamination factor, use population ranges in evaluating the factor as specified in section 6.3.2.4. For the Level I and Level II concentrations factors, use the population estimate, not population ranges, in evaluating both factors.

6.3.2.2 *Level I concentrations.* Sum the number of people subject to Level I concentrations. Multiply this sum by 10. Assign the product as the value for this factor. Enter this value in Table 6–1.

6.3.2.3 *Level II concentrations.* Sum the number of people subject to Level II concentrations. Do not include those people already counted under the Level I concentrations factor. Assign this sum as the value for this factor. Enter this value in Table 6–1.

6.3.2.4 *Potential contamination.* Determine the number of people within each distance category of the target distance limit (see Table 6–15) who are subject to potential contamination. Do not include those people already counted under the Level I and Level II concentrations factors.

Based on the number of people present within a distance category, assign a distance-weighted population value for that distance category from Table 6–17. (Note that the distance-weighted population values in Table 6–17 incorporate the distance weights from Table 6–15. Do not multiply the values from Table 6–17 by these distance weights.)

Calculate the potential contamination factor value (PI) as follows:

$$PI = \frac{1}{10} \sum_{i=1}^{n} W_i$$

where:

W_i = Distance-weighted population from Table 6–17 for distance category i.

n = Number of distance categories.

If PI is less than 1, do not round it to the nearest integer; if PI is 1 or more, round to the nearest integer. Enter this value in Table 6–1.

6.3.2.5 *Calculation of population factor value.* Sum the factor values for Level I concentrations, Level II concentrations, and potential contamination. Do not round this sum to the nearest integer. Assign this sum as the population factor value. Enter this value in Table 6–1.

TABLE 6–17.—DISTANCE-WEIGHTED POPULATION VALUES FOR POTENTIAL CONTAMINATION FACTOR FOR AIR PATHWAY *

Distance category (miles)	Number of people within the distance category												
	0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000
On a source	0	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455
Greater than 0 to ¼	0	1	4	13	41	131	408	1,304	4,081	13,034	40,812	130,340	408,114
Greater than ¼ to ½	0	0.2	0.9	3	9	28	88	282	882	2,815	8,815	28,153	88,153
Greater than ½ to 1	0	0.06	0.3	0.9	3	8	26	83	261	834	2,612	8,342	26,119
Greater than 1 to 2	0	0.02	0.09	0.3	0.8	3	8	27	83	266	833	2,659	8,326
Greater than 2 to 3	0	0.009	0.04	0.1	0.4	1	4	12	38	120	375	1,199	3,755
Greater than 3 to 4	0	0.005	0.02	0.07	0.2	0.7	2	7	23	73	229	730	2,285

* Round the number of people present within a distance category to nearest integer. Do not round the assigned distance-weighted population value to nearest integer.

6.3.3 *Resources.* Evaluate the resources factor as follows:

- Assign a value of 5 if one or more of the following resources are present within one-half mile of a source at the site having an air

migration containment factor value greater than 0:

–Commercial agriculture.

–Commercial silviculture.

–Major or designated recreation area.

• Assign a value of 0 if none of these resources is present.

Enter the value assigned in Table 6–1.

6.3.4 *Sensitive environments.* Evaluate sensitive environments based on two factors: actual contamination and potential contamination. Determine which factor applies as follows.

If no samples meet the criteria for an observed release to air and if there is no observed release by direct observation, consider all sensitive environments located, partially or wholly, within the target distance limit to be subject to potential contamination.

If one or more samples meet the criteria for an observed release to air or if there is an observed release by direct observation, determine the most distant location (that is, sample location or direct observation location) that meets the criteria for an observed release:

• If the most distant location meeting the criteria for an observed release is within the 4-mile target distance limit, identify the distance category from Table 6–15 in which it is located:

–Consider sensitive environments located, partially or wholly, anywhere within this distance category or anywhere within a distance category closer to a source at the site as subject to actual contamination.

–Consider all other sensitive environments located, partially or wholly, within the target distance limit as subject to potential contamination.

• If the most distant location meeting the criteria for an observed release is beyond the 4-mile target distance limit, identify the distance at which it is located:

–Consider sensitive environments located, partially or wholly, anywhere within a distance from the sources at the site equal to the distance to this location to be subject to actual contamination and include all such sensitive environments in the evaluation.

–Do not include any sensitive environments as subject to potential contamination.

6.3.4.1 *Actual contamination.* Determine those sensitive environments subject to actual contamination (i.e., those located partially or wholly within a distance category subject to actual contamination). Assign value(s) from Table 4–23 (section 4.1.4.3.1.1) to each sensitive environment subject to actual contamination.

For those sensitive environments that are wetlands, assign an additional value from Table 6–18. In assigning a value from Table 6–18, include only those portions of wetlands located within distance categories subject to actual contamination. If a wetland is located partially in a distance category subject to actual contamination and partially in one subject to potential contamination, then solely for purposes of Table 6–18, count the portion in the distance category subject to potential contamination under the potential contamination factor in section 6.3.4.2. Determine the total acreage of wetlands within those distance categories subject to actual contamination and assign a value from Table 6–18 based on this total acreage.

Calculate the actual contamination factor value (EA) as follows:

$$EA = WA + \sum_{i=1}^{n} S_i$$

where:

WA = Value assigned from Table 6–18 for wetlands in distance categories subject to actual contamination.

S_i = Value(s) assigned from Table 4–23 to sensitive environment i.

n = Number of sensitive environments subject to actual contamination.

Enter the value assigned in Table 6–1.

TABLE 6–18.—WETLANDS RATING VALUES FOR AIR MIGRATION PATHWAY [a]

Wetland area (acres)	Assigned value
Less than 1	0
1 to 50	25
Greater than 50 to 100	75
Greater than 100 to 150	125
Greater than 150 to 200	175
Greater than 200 to 300	250
Greater than 300 to 400	350
Greater than 400 to 500	450
Greater than 500	500

[a] Wetlands as defined in 40 CFR section 230.3.

6.3.4.2 *Potential contamination.* Determine those sensitive environments located, partially or wholly, within the target distance limit that are subject to potential contamination. Assign value(s) from Table 4–23 to each sensitive environment subject to potential contamination. Do not include those sensitive environments already counted for Table 4–23 under the actual contamination factor.

For each distance category subject to potential contamination, sum the value(s) assigned from Table 4–23 to the sensitive environments in that distance category. If a sensitive environment is located in more than one distance category, assign the sensitive environment only to that distance category having the highest distance weighting value from Table 6–15.

For those sensitive environments that are wetlands, assign an additional value from Table 6–18. In assigning a value from Table 6–18, include only those portions of wetlands located within distance categories subject to potential contamination, as specified in section 6.3.4.1. Treat the wetlands in each separate distance category as separate sensitive environments solely for purposes of applying Table 6–18. Determine the total acreage of wetlands within each of these distance categories and assign a separate value from Table 6–18 for each distance category.

Calculate the potential contamination factor value (EP) as follows:

$$EP = \frac{1}{10} \sum_{j=1}^{m} ([W_j + S_j]D_j)$$

Where:

$$S_j = \sum_{i=1}^{n} S_{ij}$$

S_{ij} = Value(s) assigned from Table 4–23 to sensitive environment in distance category j.

n = Number of sensitive environments subject to potential contamination.

W_j = Value assigned from Table 6–18 for wetland area in distance category j.

D_j = Distance weight from Table 6–15 for distance category j.

m = Number of distance categories subject to potential contamination.

If EP is less than 1, do not round it to the nearest integer; if EP is 1 or more, round to the nearest integer. Enter the value assigned in Table 6–1.

6.3.4.3 *Calculation of sensitive environments factor value.* Sum the factor values for actual contamination and potential contamination. Do not round this sum, designated as EB, to the nearest integer.

Because the pathway score based solely on sensitive environments is limited to a maximum of 60, use the value EB to determine the value for the sensitive environments factor as follows:

• Multiply the values assigned to likelihood of release (LR), waste characteristics (WC), and EB. Divide the product by 82,500.

–If the result is 60 or less, assign the value EB as the sensitive environments factor value.

–If the result exceeds 60, calculate a value EC as follows:

$$EC = \frac{(60)(82{,}500)}{(LR)(WC)}$$

Assign the value EC as the sensitive environments factor value. Do not round this value to the nearest integer.

Enter the value assigned for the sensitive environments factor in Table 6–1.

6.3.5 *Calculation of targets factor category value.* Sum the nearest individual, population, resources, and sensitive environments factor values. Do not round this sum to the nearest integer. Assign this sum as the targets factor category value. Enter this value in Table 6–1.

6.4 *Calculation of air migration pathway score.* Multiply the values for likelihood of release, waste characteristics, and targets, and round the product to the nearest integer. Then divide by 82,500. Assign the resulting value, subject to a maximum value of 100, as the air migration pathway score (S_a). Enter this score in Table 6–1.

7.0 Sites Containing Radioactive Substances.

In general, radioactive substances are hazardous substances under CERCLA and should be considered in HRS scoring. Releases of certain radioactive substances are, however, excluded from the definition of "release" in section 101(22) of CERCLA, as amended, and should not be considered in HRS scoring.

Evaluate sites containing radioactive substances using the instructions specified in sections 2 through 6, supplemented by the instructions in this section. Those factors denoted with a "yes" in Table 7-1 are evaluated differently for sites containing radioactive substances than for sites containing only nonradioactive hazardous substances, while those denoted with a "no" are not evaluated differently and are not addressed in this section.

TABLE 7-1.—HRS FACTORS EVALUATED DIFFERENTLY FOR RADIONUCLIDES

Ground water pathway	Status [a]	Surface water pathway	Status [a]	Soil exposure pathway	Status [a]	Air pathway	Status [a]
Likelihood of Release		**Likelihood of Release**		**Likelihood of Exposure**		**Likelihood of Release**	
Observed Release	Yes	Observed Release	Yes	Observed Contamination	Yes	Observed Release	Yes
Potential to Release	No	Potential to Release	No	Attractiveness/Accessibility to Nearby Residents	No	Gas Potential to Release	No
Containment	No	Overland Flow Containment.	No			Gas Containment	No
Net Precipitation	No	Runoff	No	Area of Contamination	No	Gas Source Type	No
Depth to Aquifer	No	Distance to Surface Water	No			Gas Migration Potential	No
Travel Time	No	Flood Frequency	No			Particulate Potential to Release	No
		Flood Containment	No			Particulate Containment	No
						Particulate Source Type	No
						Particulate Migration Potential.	No
Waste Characteristics		**Waste Characteristics**		**Waste Characteristics**		**Waste Characteristics**	
Toxicity	Yes	Toxicity/Ecotoxicity	Yes/Yes	Toxicity	Yes	Toxicity	Yes
Mobility	No	Persistence/Mobility	Yes/No	Hazardous Waste Quantity	Yes	Mobility	No
Hazardous Waste Quantity	Yes	Bioaccumulation Potential	No			Hazardous Waste Quantity	Yes
		Hazardous Waste Quantity	Yes				
Targets		**Targets**		**Targets**		**Targets**	
Nearest Well	Yes [b]	Nearest Intake	Yes [b]	Resident Individual	Yes [b]	Nearest Individual	Yes [b]
Population	Yes [b]	Drinking Water Population	Yes [b]	Resident Population	Yes [b]	Population	Yes [b]
Resources	No	Resources	No	Workers	No	Resources	No
Wellhead Protection Area	No	Sensitive Environments	Yes [b]	Resources	No	Sensitive Environments	No
		Human Food Chain Individual.	Yes [b]	Terrestrial Sensitive Environments.	No		
		Human Food Chain Population.	Yes [b]				
				Nearby Individual	No		
				Population Within 1 Mile	No		

[a] Factors evaluated differently are denoted by "yes"; factors not evaluated differently are denoted by "no."
[b] Difference is in the determination of Level I and Level II concentrations.

In general, sites containing mixed radioactive and other hazardous substances involve more evaluation than sites containing only radionuclides. For sites containing mixed radioactive and other hazardous substances, HRS factors are evaluated based on considerations of both the radioactive substances and the other hazardous substances in order to derive a single set of factor values for each factor category in each of the four pathways. Thus, the HRS score for these sites reflects the combined potential hazards posed by both the radioactive and other hazardous substances.

Section 7 is organized by factor category, similar to sections 3 through 6. Pathway-specific differences in evaluation criteria are specified under each factor category, as appropriate. These differences apply largely to the soil exposure pathway and to sites containing mixed radioactive and other hazardous substances. All evaluation criteria specified in sections 2 through 6 must be met, except where modified in section 7.

7.1 *Likelihood of release/likelihood of exposure.* Evaluate likelihood of release for the three migration pathways and likelihood of exposure for the soil exposure pathway as specified in sections 2 through 6, except: establish an observed release and observed contamination as specified in section 7.1.1. When an observed release cannot be established for a migration pathway, evaluate potential to release as specified in section 7.1.2. When observed contamination cannot be established, do not evaluate the soil exposure pathway.

7.1.1 *Observed release/observed contamination.* For radioactive substances, establish an observed release for each migration pathway by demonstrating that the site has released a radioactive substance to the pathway (or watershed or aquifer, as appropriate); establish observed contamination for the soil exposure pathway as indicated below. Base these demonstrations on one or more of the following, as appropriate to the pathway being evaluated:

- Direct observation:
  - –For each migration pathway, a material that contains one or more radionuclides has been seen entering the atmosphere, surface water, or ground water, as appropriate, or is known to have entered ground water or surface water through direct deposition, or
  - –For the surface water migration pathway, a source area containing radioactive substances has been flooded at a time that radioactive substances were present and one or more radioactive substances were in contact with the flood waters.
- Analysis of radionuclide concentrations in samples appropriate to the pathway (that is, ground water, soil, air, surface water, benthic, or sediment samples):
  - –For radionuclides that occur naturally and for radionuclides that are ubiquitous in the environment:
    - ––Measured concentration (in units of activity, for example, pCi per kilogram [pCi/kg], pCi per liter [pCi/1], pCi per cubic meter [pCi/m^3]) of a given radionuclide in the sample are at a level that:
      - –––Equals or exceeds a value 2 standard deviations above the mean site-specific background concentration for that

radionuclide in that type of sample, or

---Exceeds the upper-limit value of the range of regional background concentration values for that specific radionuclide in that type of sample.

--Some portion of the increase must be attributable to the site to establish the observed release (or observed contamination), and

--For the soil exposure pathway only, the radionuclide must also be present at the surface or covered by 2 feet or less of cover material (for example, soil) to establish observed contamination.

-For man-made radionuclides without ubiquitous background concentrations in the environment:

--Measured concentration (in units of activity) of a given radionuclide in a sample equals or exceeds the sample quantitation limit for that specific radionuclide in that type of media and is attributable to the site.

--However, if the radionuclide concentration equals or exceeds its sample quantitation limit, but its release can also be attributed to one or more neighboring sites, then the measured concentration of that radionuclide must also equal or exceed a value either 2 standard deviations above the mean concentration of that radionuclide contributed by those neighboring sites or 3 times its background concentration, whichever is lower.

--If the sample quantitation limit cannot be established:

---If the sample analysis was performed under the EPA Contract Laboratory Program, use the EPA contract-required quantitation limit (CRQL) in place of the sample quantitation limit in establishing an observed release (or observed contamination).

---If the sample analysis is not performed under the EPA Contract Labatory Program, use the detection limit in place of the sample quantitation limit.

--For the soil exposure pathway only, the radionuclide must also be present at the surface or covered by 2 feet or less of cover material (for example, soil) to establish observed contamination.

• Gamma radiation measurements (applies only to observed contamination for the soil exposure pathway):

-The gamma radiation exposure rate, as measured in microroentgens per hour (μR/hr) using a survey instrument held 1 meter above the ground surface (or 1 meter away from an aboveground source), equals or exceeds 2 times the site-specific background gamma radiation exposure rate.

-Some portion of the increase must be attributable to the site to establish observed contamination. The gamma-emitting radionuclides do not have to be within 2 feet of the surface of the source.

For the three migration pathways, if an observed release can be established for the pathway (or aquifer or watershed, as appropriate), assign the pathway (or aquifer or watershed) an observed release factor value of 550 and proceed to section 7.2. If an observed release cannot be established, assign an observed release factor value of 0 and proceed to section 7.1.2.

For the soil exposure pathway, if observed contamination can be established, assign the likelihood of exposure factor for resident population a value of 550 if there is an area of observed contamination in one or more locations listed in section 5.1; evaluate the likelihood of exposure factor for nearby population as specified in section 5.2.1; and proceed to section 7.2. If observed contamination cannot be established, do not evaluate the soil exposure pathway.

At sites containing mixed radioactive and other hazardous substances, evaluate observed release (or observed contamination) separately for radionuclides as described in this section and for other hazardous substances as described in sections 2 through 6.

For the three migration pathways, if an observed release can be established based on either radionuclides or other hazardous substances, or both, assign the pathway (or aquifer or watershed) an observed release factor value of 550 and proceed to section 7.2. If an observed release cannot be established based on either radionuclides or other hazardous substances, assign an observed release factor value of 0 and proceed to section 7.1.2.

For the soil exposure pathway, if observed contamination can be established based on either radionuclides or other hazardous substances, or both, assign the likelihood of exposure factor for resident population a value of 550 if there is an area of observed contamination in one or more locations listed in section 5.1; evaluate the likelihood of exposure factor for nearby population as specified in section 5.2.1; and proceed to section 7.2. If observed contamination cannot be established based on either radionuclides or other hazardous substances, do not evaluate the soil exposure pathway.

7.1.2 *Potential to release.* For the three migration pathways, evaluate potential to release for sites containing radionuclides in the same manner as specified for sites containing other hazardous substances. Base the evaluation on the physical and chemical properties of the radionuclides, not on their level of radioactivity.

For sites containing mixed radioactive and other hazardous substances, evaluate potential to release considering radionuclides and other hazardous substances together. Evaluate potential to release for each migration pathway as specified in sections 3, 4, or 6, as appropriate.

7.2 *Waste characteristics.* For radioactive substances, evaluate the human toxicity factor, the ecosystem toxicity factor, the surface water persistence factor, and the hazardous waste quantity factor as specified in the following sections. Evaluate all other waste characteristic factors as specified in sections 2 through 6.

7.2.1 Human toxicity. For radioactive substances, evaluate the human toxicity factor as specified below, not as specified in section 2.4.1.1.

Assign human toxicity factor values to those radionuclides available to the pathway based on quantitative dose-response parameters for cancer risks as follows:

• Evaluate radionuclides only on the basis of carcinogenicity and assign all radionuclides to weight-of-evidence category A.

• Assign a human toxicity factor value from Table 7–2 to each radionuclide based on its slope factor (also referred to as cancer potency factor).

-For each radionuclide, use the higher of the slope factors for inhalation and ingestion to assign the factor value.

-If only one slope factor is available for the radionuclide, use it to assign the toxicity factor value.

-If no slope factor is available for the radionuclide, assign that radionuclide a toxicity factor value of 0 and use other radionuclides for which a slope factor is available to evaluate the pathway.

• If all radionuclides available to a particular pathway are assigned a human toxicity factor value of 0 (that is, no slope factor is available for all the radionuclides), use a default human toxicity factor value of 1,000 as the human toxicity factor value for all radionuclides available to the pathway.

At sites containing mixed radioactive and other hazardous substances, evaluate the toxicity factor separately for the radioactive and other hazardous substances and assign each a separate toxicity factor value. This applies regardless of whether the radioactive and other hazardous substances are physically separated, combined chemically, or simply mixed together. Assign toxicity factor values to the radionuclides as specified above and to the other hazardous substances as specified in section 2.4.1.1.

At sites containing mixed radioactive and other hazardous substances, if all radionuclides available to a particular pathway are assigned a human toxicity factor value of 0, use a default human toxicity factor value of 1,000 for all those radionuclides even if nonradioactive hazardous substances available to the pathway are assigned human toxicity factor values greater than 0. Similarly, if all nonradioactive hazardous substances available to the pathway are assigned a human toxicity factor value of 0, use a default human toxicity factor value of 100 for all these nonradioactive hazardous substances even if radionuclides available to the pathway are assigned human toxicity factor values greater than 0.

7.2.2 *Ecosystem toxicity.* For the surface water environmental threat (see sections 4.1.4 and 4.2.4), assign an ecosystem toxicity factor value to radionuclides (alone or combined chemically or mixed with other hazardous substances) using the same slope factors and

procedures specified for the human toxicity factor in section 7.2.1, except: use a default of 100, not 1,000, if all radionuclides eligible to be evaluated for ecosystem toxicity receive an ecosystem toxicity factor value of 0.

TABLE 7-2.—TOXICITY FACTOR VALUES FOR RADIONUCLIDES

Cancer slope factor * (SF) $(pCi)^{-1}$	Assigned value
$3\times10^{-11}\leq SF$	10,000
$3\times10^{-12}\leq SF<3\times10^{-11}$	1,000
$SF<3\times10^{-12}$	100
SF not available for the radionuclide	0

* Radionuclide slope factors are estimates of age-averaged, individual lifetime total excess cancer risk per picocurie of radionuclide inhaled or ingested.

At sites containing mixed radioactive and other hazardous substances, evaluate the ecosystem toxicity factor separately for the radioactive and other hazardous substances and assign each a separate ecosystem toxicity factor value. This applies regardless of whether the radioactive and other hazardous substances are physically separated, combined chemically, or simply mixed together. Assign ecosystem toxicity factor values to the radionuclides as specified above and to the other hazardous substances as specified in sections 4.1.4.2.1.1 and 4.2.4.2.1.1. If all radionuclides available to a particular pathway are assigned an ecosystem toxicity factor value of 0, use a default ecosystem toxicity factor value of 100 for all these radionuclides even if nonradioactive hazardous substances available to the pathway are assigned ecosystem toxicity factor values greater than 0. Similarly, if all nonradioactive hazardous substances available to the pathway are assigned an ecosystem toxicity factor value of 0, use a default ecosystem toxicity factor value of 100 for all these nonradioactive hazardous substances even if radionuclides available to the pathway are assigned ecosystem toxicity factor values greater than 0.

7.2.3 *Persistence.* For radionuclides, evaluate the surface water persistence factor based solely on half-life; do not include sorption to sediments in the evaluation as is done for nonradioactive hazardous substances. Assign a persistence factor value from Table 4-10 (section 4.1.2.2.1.2) to each radionuclide based on half-life ($t_{1/2}$) calculated as follows:

$$t_{1/2}=\frac{1}{\frac{1}{r}+\frac{1}{v}}$$

where:

r = Radioactive half-life.
v = Volatilization half-life.

If the volatilization half-life cannot be estimated for a radionuclide from available data, delete it from the equation. Select the portion of Table 4-10 to use in assigning the persistence factor value as specified in section 4.1.2.2.1.2.

At sites containing mixed radioactive and other hazardous substances, evaluate the persistence factor separately for each radionuclide and for each nonradioactive hazardous substance, even if the available data indicate that they are combined chemically. Assign a persistence factor value to each radionuclide as specified in this section and to each nonradioactive hazardous substance as specified in section 4.1.2.2.1.2. When combined chemically, assign a single persistence factor value based on the higher of the two values assigned (individually) to the radioactive and nonradioactive components.

7.2.4 *Selection of substance potentially posing greatest hazard.* For each migration pathway (threat, aquifer, or watershed, as appropriate), select the radioactive substance or nonradioactive hazardous substance that potentially poses the greatest hazard based on its toxicity factor value, combined with the applicable mobility, persistence, and/or bioaccumulation (or ecosystem bioaccumulation) potential factor values. Combine these factor values as specified in sections 2, 3, 4, and 6. For the soil exposure pathway, base the selection on the toxicity factor alone (see sections 2 and 5).

7.2.5 *Hazardous waste quantity.* To calculate the hazardous waste quantity factor value for sites containing radioactive substances, evaluate source hazardous waste quantity (see section 2.4.2.1) using only the following two measures in the following hierarchy (these measures are consistent with Tiers A and B for nonradioactive hazardous substances in sections 2.4.2.1.1 and 2.4.2.1.2):

• Radionuclide constituent quantity (Tier A).

• Radionuclide wastestream quantity (Tier B).

7.2.5.1 *Source hazardous waste quantity for radionuclides.* For each migration pathway, assign a source hazardous waste quantity value to each source having a containment factor value greater than 0 for the pathway being evaluated. For the soil exposure pathway, assign a source hazardous waste quantity value to each area of observed contamination, as applicable to the threat being evaluated. Allocate hazardous substances and hazardous wastestreams to specific sources (or areas of observed contamination) as specified in section 2.4.2.

7.2.5.1.1 *Radionuclide constituent quantity (Tier A).* Evaluate radionuclide constituent quantity for each source (or area of observed contamination) based on the activity content of the radionuclides allocated to the source (or area of observed contamination) as follows:

• Estimate the net activity content (in curies) for the source (or area of observed contamination) based on:

–Manifests, or

–Either of the following equations, as applicable:

$$N=9.1\times10^{-7}(V)\sum_{i=1}^{n} AC_i$$

where:

N = Estimated net activity content (in curies) for the source (or area of observed contamination).

V = Total volume of material (in cubic yards) in a source (or area of observed contamination) containing radionuclides.

AC_i = Activity concentration above the respective background concentration (in pCi/g) for each radionuclide i allocated to the source (or area of observed contamination).

n = Number of radionuclides allocated to the source (or area of observed contamination) above the respective background concentrations.

or,

$$N=3.8\times10^{-12}(V)\sum_{i=1}^{n} AC_i$$

where:

N = Estimated net activity content (in curies) for the source (or area of observed contamination).

V = Total volume of material (in gallons) in a source (or area of observed contamination) containing radionuclides.

AC_i = Activity concentration above the respective background concentration (in pCi/l) for each radionuclide i allocated to the source (or area of observed contamination).

n = Number of radionuclides allocated to the source (or area of observed contamination) above the respective background concentrations.

– –Estimate volume for the source (or volume for the area of observed contamination) based on records or measurements.

– –For the soil exposure pathway, in estimating the volume for areas of observed contamination, do not include more than the first 2 feet of depth, except: for those types of areas of observed contamination listed in Tier C of Table 5-2 (section 5.1.2.2), include the entire depth, not just that within 2 feet of the surface.

• Convert from curies of radionuclides to equivalent pounds of nonradioactive hazardous substances by multiplying the activity estimate for the source (or area of observed contamination) by 1,000.

• Assign this resulting product as the radionuclide constituent quantity value for the source (or area of observed contamination).

If the radionuclide constituent quantity for the source (or area of observed

contamination) is adequately determined (that is, the total activity of all radionuclides in the source and releases from the source [or in the area of observed contamination] is known or is estimated with reasonable confidence), do not evaluate the radionuclide wastestream quantity measure in section 7.2.5.1.2. Instead, assign radionuclide wastestream quantity a value of 0 and proceed to section 7.2.5.1.3. If the radionuclide constituent quantity is not adequately determined, assign the source (or area of observed contamination) a value for radionuclide constituent quantity based on the available data and proceed to section 7.2.5.1.2.

7.2.5.1.2 *Radionuclide wastestream quantity (Tier B).* Evaluate radionuclide wastestream quantity for the source (or area of observed contamination) based on the activity content of radionuclide wastestreams allocated to the source (or area of observed contamination) as follows:

- Estimate the total volume (in cubic yards or in gallons) of wastestreams containing radionuclides allocated to the source (or area of observed contamination).
- Divide the volume in cubic yards by 0.55 (or the volume in gallons by 110) to convert to the activity content expressed in terms of equivalent pounds of nonradioactive hazardous substances.
- Assign the resulting value as the radionuclide wastestream quantity value for the source (or area of observed contamination).

7.2.5.1.3 *Calculation of source hazardous waste quantity value for radionuclides.* Select the higher of the values assigned to the source (or area of observed contamination) for radionuclide constituent quantity and radionuclide wastestream quantity. Assign this value as the source hazardous waste quantity value for the source (or area of observed contamination). Do not round to the nearest integer.

7.2.5.2 *Calculation of hazardous waste quantity factor value for radionuclides.* Sum the source hazardous waste quantity values assigned to all sources (or areas of observed contamination) for the pathway being evaluated and round this sum to the nearest integer, except: if the sum is greater than 0, but less than 1, round it to 1. Based on this value, select a hazardous waste quantity factor value for this pathway from Table 2–6 (section 2.4.2.2).

For a migration pathway, if the radionuclide constituent quantity is adequately determined (see section 7.2.5.1.1) for all sources (or all portions of sources and releases remaining after a removal action), assign the value from Table 2–6 as the hazardous waste quantity factor value for the pathway. If the radionuclide constituent quantity is not adequately determined for one or more sources (or one or more portions of sources or releases remaining after a removal action), assign a factor value as follows:

- If any target for that migration pathway is subject to Level I or Level II concentrations (see section 7.3), assign either the value from Table 2–6 or a value of 100, whichever is greater, as the hazardous waste quantity factor value for that pathway.
- If none of the targets for that pathway is subject to Level I or Level II concentrations, assign a factor value as follows:
  - –If there has been no removal action, assign either the value from Table 2–6 or a value of 10, whichever is greater, as the hazardous waste quantity factor value for that pathway.
  - –If there has been a removal action:
    - – –Determine values from Table 2–6 with and without consideration of the removal action.
    - – –If the value that would be assigned from Table 2–6 without consideration of the removal action would be 100 or greater, assign either the value from Table 2–6 with consideration of the removal action or a value of 100, whichever is greater, as the hazardous waste quantity factor value for the pathway.
    - – –If the value that would be assigned from Table 2–6 without consideration of the removal action would be less than 100, assign a value of 10 as the hazardous waste quantity factor value for the pathway.

For the soil exposure pathway, if the radionuclide constituent quantity is adequately determined for all areas of observed contamination, assign the value from Table 2–6 as the hazardous waste quantity factor value. If the radionuclide constituent quantity is not adequately determined for one or more areas of observed contamination, assign either the value from Table 2–6 or a value of 10, whichever is greater, as the hazardous waste quantity factor value.

7.2.5.3 *Calculation of hazardous waste quantity factor value for sites containing mixed radioactive and other hazardous substances.* For each source (or area of observed contamination) containing mixed radioactive and other hazardous substances, calculate two source hazardous waste quantity values—one based on radionuclides as specified in sections 7.2.5.1 through 7.2.5.1.3 and the other based on the nonradioactive hazardous substances as specified in sections 2.4.2.1 through 2.4.2.1.5 (that is, determine each value as if the other type of substance was not present). Sum the two values to determine a combined source hazardous waste quantity value for the source (or area of observed contamination). Do not round this value to the nearest integer.

Use this combined source hazardous waste quantity value to calculate the hazardous waste quantity factor value for the pathway as specified in section 2.4.2.2, except: if either the hazardous constituent quantity or the radionuclide constituent quantity, or both, are not adequately determined for one or more sources (or one or more portions of sources or releases remaining after a removal action) or for one or more areas of observed contamination, as applicable, assign the value from Table 2–6 or the default value applicable for the pathway, whichever is greater, as the hazardous waste quantity factor value for the pathway.

7.3 *Targets.* For radioactive substances, evaluate the targets factor category as specified in section 2.5 and sections 3 through 6, except: establish Level I and Level II concentrations at sampling locations as specified in sections 7.3.1 and 7.3.2.

For all pathways (and threats), use the same target distance limits for sites containing radioactive substances as is specified in sections 3 through 6 for sites containing nonradioactive hazardous substances. At sites containing mixed radioactive and other hazardous substances, include all sources (or areas of observed contamination) at the site in identifying the applicable targets for the pathway.

7.3.1 *Level of contamination at a sampling location.* Determine whether Level I or Level II concentrations apply at a sampling location (and thus to the associated targets) as follows:

- Select the benchmarks from section 7.3.2 applicable to the pathway (or threat) being evaluated.
- Compare the concentrations of radionuclides in the sample (or comparable samples) to their benchmark concentrations for the pathway (or threat) as specified in section 7.3.2. Treat comparable samples as specified in section 2.5.1.
- Determine which level applies based on this comparison.
- If none of the radionuclides eligible to be evaluated for the sampling location have an applicable benchmark, assign Level II to the actual contamination at that sampling location for the pathway (or threat).
- In making the comparison, consider only those samples, and only those radionuclides in the sample, that meet the criteria for an observed release (or observed contamination) for the pathway, except: tissue samples from aquatic human food chain organisms may also be used for the human food chain threat of the surface water pathway as specified in sections 4.1.3.3 and 4.2.3.3.

7.3.2 *Comparison to benchmarks.* Use the following media specific benchmarks (expressed in activity units, for example, pCi/l for water, pCi/kg for soil and for aquatic human food chain organisms, and pCi/m^3 for air) for making the comparisons for the indicated pathway (or threat):

- Maximum Contaminant Levels (MCLs)—ground water migration pathway and drinking water threat in surface water migration pathway.
- Uranium Mill Tailings Radiation Control Act (UMTRCA) standards—soil exposure pathway only.
- Screening concentration for cancer corresponding to that concentration that corresponds to the 10^{-6} individual cancer risk for inhalation exposures (air migration pathway) or for oral exposures (ground water migration pathway; drinking water or human food chain threats in surface water migration pathway; and soil exposure pathway).
  - –For the soil exposure pathway, include two screening concentrations for cancer—one for ingestion of surface materials and one for external radiation exposures from gamma-emitting radionuclides in surface materials.

Select the benchmark(s) applicable to the pathway (or threat) being evaluated. Compare the concentration of each radionuclide from the sampling location to its benchmark concentration(s) for that pathway (or threat). Use only those samples and only those radionuclides in the sample that meet the criteria for an observed release (or observed contamination) for the pathway, except: tissue samples from aquatic human food chain organisms may be used as specified in sections 4.1.3.3 and 4.2.3.3. If the concentration of any applicable radionuclide from any sample equals or exceeds its benchmark concentration, consider the sampling location to be subject to Level I concentrations for that pathway (or threat). If more than one benchmark applies to the radionuclide, assign Level I if the radionuclide concentration equals or exceeds the lowest applicable benchmark concentration. In addition, for the soil exposure pathway, assign Level I concentrations at the sampling location if measured gamma radiation exposure rates equal or exceed 2 times the background level (see section 7.1.1).

If no radionuclide individually equals or exceeds its benchmark concentration, but more than one radionuclide either meets the criteria for an observed release (or observed contamination) for the sample or is eligible to be evaluated for a tissue sample (see sections 4.1.3.3 and 4.2.3.3), calculate a value for index I for these radionuclides as specified in section 2.5.2. If I equals or exceeds 1, assign Level I to the sampling location. If I is less than 1, assign Level II.

At sites containing mixed radioactive and other hazardous substances, establish the level of contamination for each sampling location considering radioactive substances and nonradioactive hazardous substances separately. Compare the concentration of each radionuclide and each nonradioactive hazardous substance from the sampling location to its respective benchmark concentration(s). Use only those samples and only those substances in the sample that meet the criteria for an observed release (or observed contamination) for the pathway except: tissue samples from aquatic human food chain organisms may be used as specified in sections 4.1.3.3 and 4.2.3.3. If the concentration of one or more applicable radionuclides or other hazardous substances from any sample equals or exceeds its benchmark concentration, consider the sampling location to be subject to Level I concentrations. If more than one benchmark applies to a radionuclide or other hazardous substance, assign Level I if the concentration of the radionuclide or other hazardous substance equals or exceeds its lowest applicable benchmark concentration.

If no radionuclide or other hazardous substance individually exceed a benchmark concentration, but more than one radionuclide or other hazardous substance either meets the criteria for an observed release (or observed contamination) for the sample or is eligible to be evaluated for a tissue sample, calculate an index I for both types of substances as specified in section 2.5.2. Sum the index I values for the two types of substances. If the value, individually or combined, equals or exceeds 1, assign Level I to the sample location. If it is less than 1, calculate an index J for the nonradioactive hazardous substances as specified in section 2.5.2. If J equals or exceeds 1, assign Level I to the sampling location. If J is less than 1, assign Level II.

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Part III

Department of Transportation

Federal Aviation Administration

14 CFR Part 121

Anti-Drug Program for Personnel Engaged in Specified Transportation Activities; Final Rule, Extension of Compliance Dates; Request for Comments

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 121

[Docket No. 25148; Amdt. No. 121-221]

Anti-Drug Program for Personnel Engaged in Specified Transportation Activities

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; extension of compliance dates; request for comments.

SUMMARY: The FAA announces an extension of the dates by which certain persons performing services as contractor employees for parts 121 and 135 certificate holders or other aviation employers subject to the requirements of appendix I of part 121 must be covered by an anti-drug program approved by the FAA. This rulemaking action is necessary to facilitate implementation and administration of the final rule and is intended to provide the FAA with sufficient time to review an anticipated late submission of anti-drug plans and to prevent a potential disruption in the provision of contract aviation services to parts 121 and 135 certificate holders.

DATES: This final rule is effective on December 11, 1990. Comments must be received not later than January 28, 1991.

FOR FURTHER INFORMATION CONTACT: Diane Wood, Acting Manager, Drug Abatement Branch (AAM-220), Office of Aviation Medicine, Federal Aviation Administration, 400 Seventh Street SW., room 2336, Washington, DC 20591, telephone (202) 366-6710.

ADDRESSES: Comments may be mailed or delivered in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-204), Docket No. 25148, 800 Independence Avenue SW., Washington, DC 20591.

SUPPLEMENTARY INFORMATION:

Comments Invited

The amendments contained in this final rule extend certain compliance dates for drug testing contractor employees under the FAA anti-drug rule. It is needed immediately to delay the compliance deadlines, the first of which is imminent, previously specified in the final rule. Since the amendment imposes no additional burden on any person, it is being adopted without prior notice and prior public comment. However, the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034; February 26, 1979) provide that to the maximum extent possible, operating administrations of the Department of Transportation (DOT) should provide an opportunity for public comment on regulations issued without prior notice.

Accordingly, interested persons are invited to participate in the rulemaking by submitting such written data, views, or arguments as they may desire. Comments must include the regulatory document number of the amendment number identified in this final rule. Comments must also be submitted in duplicate to the address listed under the caption "Address" above. All comments received will be available for examination by interested persons in the Rules Docket. This amendment may be changed in light of the comments received on this final rule.

Commenters who want the FAA to acknowledge receipt of comments submitted on this final rule must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 25148." The postcard will be date/time stamped and returned to the commenter. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the public docket.

Background

On November 11, 1988, the FAA issued a final rule, "Anti-Drug Program for Personnel Engaged in Specified Aviation Activities," requiring specified aviation employers and operators to submit and to implement anti-drug programs for personnel performing sensitive safety- and security-related functions (53 FR 47024; November 21, 1988). These "covered" functions are set forth in section III of appendix I of the final rule. After issuance of the rule, the Air Transport Association (ATA) and the Regional Airline Association (RAA) petitioned the FAA to, among other things, extend the effective date of the final rule as it applied to the required testing of contractor employees performing covered functions and to have the FAA and the aviation industry use the period of the extension to determine the most effective way to include such contractor employees in an anti-drug plan. In particular, the ATA and RAA requested that the FAA reconsider whether contractors performing covered functions for parts 121 and 135 certificate holders should be able to file their own drug testing plans directly with the FAA rather than having to be included under the plans of their part 121 or part 135 employers as required by the final rule.

The FAA considered the petitions and, on April 11, 1989, issued an amendment to the final rule which included an extension of the compliance dates for drug testing of contractor employees and permitted contractors and consortiums (which may be composed of a combustion of contractors, employers or operators) to submit drug testing plans directly to the FAA for approval (54 FR 15148; April 14, 1989). The compliance date extensions included in this amendment permitted parts 121 and 135 certificate holders with more than 50 employees to delay the testing of contractor employees for 360 days from the date which drug testing of the certificate holders' direct employees was initiated. The final compliance date for testing of contractor employees was delayed until no later than December 11, 1990. In addition, the compliance dates in the final rule for testing contractor employees performing covered functions for part 135 certificate holders with 11-50 covered employees, part 135 certificate holders with 10 or fewer covered employees, other operators as defined in § 135.1 (c) and air traffic control facilities not operated by, or under contract with the FAA or the U.S. military, were similarly extended by the April 1989 amendment for a period of 360 days from the compliance date indicated in the final rule.

Discussion

The FAA has recently received letters from the ATA and the RAA expressing concern on behalf of their members regarding the ability of a substantial number of their members' contractors to have anti-drug plans approved by the FAA prior to December 11, 1990, the date on which drug testing of contractor employees under an FAA-approved anti-drug program must begin. Further, the ATA believes that because the FAA did not include a plan submission deadline for contractors in the amended anti-drug rule, a significant number of contractors will submit anti-drug plans to the FAA shortly before December 11. The ATA also suggests that few such plans will be adequate to receive immediate approval. The ATA feels that while such a situation would not be the fault of the airline industry or the FAA, the airline industry will suffer the consequences of a wide-spread service disruption precipitated by an inability to continue to use contractors performing key, covered functions for its members.

Both the ATA and the RAA have recommended that the FAA resolve what they feel to be a potentially disruptive situation by permitting parts 121 and 135 certificate holders with more than 50 covered employees to

continue to use employees of contractors who have not implemented FAA-approved anti-drug plans by December 11, 1990, as long as those contractors have permitted plans to the FAA by December 11. The ATA suggests that an 8-week extension be given to aviation employers to permit them to use contractors who submitted plans to the FAA by the December 11, 1990, compliance date, but who have not yet received approval. The RAA similarly requested relief in circumstances where contractors' previously submitted plans are pending approval.

Although a significant number of contractors have submitted anti-drug plans to the FAA beginning in early 1990, other contractors have not submitted plans or have only recently submitted plans due to confusion over the applicability of the FAA anti-drug rule to their particular activities. This situation has developed despite efforts of certificate holders to educate contractors regarding the need to obtain coverage under an FAA-approved anti-drug plan or face the consequences of the certificate holder ceasing to do business with them. Many contractors have submitted plans to the FAA which have been so significantly deficient in their content as to require the FAA to disapprove the plans.

For those plans which have only recently been submitted or which were submitted earlier but require modification prior to approval, additional time is necessary in order for the FAA to review and process them. Based on this situation, the FAA shares the concern of the ATA and RAA that a significant disruption in the aviation industry may occur if part 121 certificate holders and part 135 certificate holders with more than 50 covered employees must cease using contractor employees who are not subject to drug testing under an approved anti-drug plan after December 11, 1990, where the contractors have attempted to obtain approval by submitting a plan prior to the compliance date for initiating drug testing under an approved anti-drug program.

The FAA further recognizes the potential for the development of a similar disruption when the remaining groups of part 135 certificate holders and other operators in the later phases of rule implementation must ensure that their contractor employees are covered by an FAA-approved anti-drug program. Therefore, the FAA is amending the rule to permit part 121, part 135, other operators as defined in § 135.1(c), and covered air traffic control facilities to continue to use contractor employees to perform covered functions for a period not to exceed 90 days after the compliance date specified in the final rule for employers to implement anti-drug programs for their contractor employees, provided the contractor employee or such contractor employee's company has submitted an anti-drug plan to the FAA for approval prior to such compliance date. Thus, a contractor whose employees perform covered functions for a part 121 or a larger part 135 certificate holder must submit its anti-drug program to the FAA by December 11, 1990, to be covered by the extension. The FAA believes the 90-day extensions will provide sufficient time for the FAA to process any additional plan submissions and provide the industry with adequate temporary relief from the anticipated disruption. It should be noted that this amendment does not affect the compliance dates for contractor employees who are included under the anti-drug plan of a covered employer (e.g., a part 121 certificate holder). Drug testing of such contractor employees included in the covered employer's program for the first phase of rule implementation must begin no later than December 11, 1990.

Reason for No Notice and Immediate Adoption

This amendment merely extends the time period for compliance with the provisions of the existing rule and imposes no additional burden on any person. For this reason, notice and public comment procedures are impracticable, unnecessary, and contrary to public interest. Moreover, this amendment is needed immediately to delay the compliance deadlines previously specified in the final rule, the first of which is imminent. Under the implementation schedule published in the **Federal Register** on April 14, 1989, certain aviation employers would have been required to ensure that contractor employees performing specified functions were subject to drug testing under an FAA-approved anti-drug plan by December 11, 1990. To avoid disruption in the aviation industry and to facilitate the efficient implementation of the final anti-drug rule, the FAA has determined that good exists to make this final rule effective in less than 30 days.

Economic Assessment

Holding to the December 11 deadline to begin drug testing for contractor employees under an FAA-approved anti-drug program could result in substantial dislocations to air carrier operations and to the economic viability of these contractors. Hence, this final rule to extend the compliance date by 90 days is cost relieving and does not impose any additional costs on aviation employees or their contractors whose employees perform convered functions. The foregone potential benefits of postponing the compliance date by 90 days would not have been realized due to the fact that plans are being submitted so close to the December 11 deadline by which testing must begin under an FAA-approved plan that the FAA does not have adequate time to review and approve these plans to permit testing in accordance with the rule.

A similar situation is anticipated for later phases of implementation. In view of the foregoing, a full regulatory evaluation is therefore unnecessary for this rule.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 requires a Federal agency to review any final rule to assess its impact on small business. The amendment contained in this final rule only extends compliance date; consequently, the FAA has determined that this amendment to the final rule will not have a significant economic impact, positive or negative, on a substantial number of small entities.

Paperwork Reduction Act Approval

The recordkeeping and reporting requirements of the final anti-drug rule, issued on November 14, 1988, previously were submitted to the Office of Management and Budget (OMB) for approval in accordance with the Paperwork Reduction Act of 1980. OMB approved those requirements on February 2, 1989. Because this final rule does not amend the recordkeeping and reporting requirements, it is not necessary to amend the prior approval received from OMB.

Federalism Determination

The amendment set forth herein would not have substantial effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that such a preparation does not have federalism implications warranting the preparation of a Federalism Assessment.

Conclusion

The adoption of this amendment serves to extend currently existing compliance dates. The amendment

imposes no additional burden by any party. Therefore, the FAA has determined that this amendment is not a major rule under Executive Order 12291 but is significant under the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034; February 26, 1979). In addition, it is certified that under the criteria of the Regulatory Flexibility Act, this rule will not have a significant impact, positive or negative, on a substantial number of small entities, and the rule does not warrant preparation of a full regulatory evaluation as the overall impact on the aviation industry will be minimal.

List of Subjects in 14 CFR Part 121

Aircraft, Air Safety, Air transportations, Aviation safety, Drug abuse, Drugs, Narcotics, Safety, Transportation.

The Amendments

Accordingly, the FAA amends part 121 of the Federal Aviation Regulations (14 CFR part 121) as follows:

PART 121—CERTIFICATION AND OPERATIONS: DOMESTIC, FLAG, AND SUPPLEMENTAL AIR CARRIERS AND COMMERCIAL OPERATORS OF LARGE AIRCRAFT

1. The authority citation for part 121 continues to read as follows:

Authority: 49 U.S.C. 1354(a), 1355, 1356, 1357, 1401, 1421–1430, 1472, 1485, and 1502; 49 U.S.C. 106(g) (Revised, Pub. L. 97–449, January 12, 1983).

Appendix I—[Amended]

2. By revising paragraphs A(3), A(4)a, and A(4)b of section IX of appendix I to part 121 by adding the following sentence to the end of each paragraph:

* * * * *

However, notwithstanding the preceding sentence, an employer may continue to use contractor employees who are not subject to drug testing under an FAA-approved anti-drug program to perform a function listed in section III of this appendix for 90 days after the compliance date specified in this paragraph for implementation of the employer's anti-drug program for its contractor employees, provided that each such contractor employee or contractor employee's company has submitted, in accordance with the provisions of either paragraph A(6) or A(7) of this section IX, an anti-drug plan to the FAA for approval not later than such compliance date.

Issued in Washington, DC on December 11, 1990.

James B. Busey,

Administrator.

[FR Doc. 90–29296 Filed 12–11–90; 10:05 am]

BILLING CODE 4910–13–M

federal register

Friday
December 14, 1990

Part IV

Office of Management and Budget

Cumulative Report on Rescissions and Deferrals; Notice

OFFICE OF MANAGEMENT AND BUDGET

Cumulative Report on Rescissions and Deferrals

December 1, 1990.

This report is submitted in fulfillment of the requirement of section 1014(e) of the Congressional Budget and impoundment Control Act of 1974 (Pub. L. 93–344). Section 1014(e) requires a monthly report listing all budget authority for this fiscal year for which, as of the first day of the month, a special message has been transmitted to Congress.

This report gives the status, as of December 1, 1990, of 7 deferrals contained in the first special message for FY 1991. This message was transmitted to Congress on October 4, 1990.

Rescissions

As of the date of this report, no rescission proposals are pending before the Congress.

Deferrals (Table A and Attachment A)

As of December 1, 1990, $1,120.2 million in budget authority was being deferred from obligation. Attachment A shows the history and status of each deferral reported during FY 1991.

Information from Special Messages

The special message containing information on deferrals covered by this cumulative report is printed in the **Federal Register** cited below:

55 FR 41436, Thursday, October 11, 1990.

Richard G. Darman,

Director.

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TABLE A

STATUS OF FY 1991 DEFERRALS

	Amounts (In millions of dollars)
Deferrals proposed by the President.....	1,120.2
Routine Executive releases through December 1, 1990	0
Overturned by the Congress.....	0
Currently before the Congress.....	1,120.2

Attachments

ATTACHMENT A
Status of FY 1991 Deferrals - As of December 1, 1990
(Amounts in thousands of dollars)

Agency/Bureau/Account	Deferral Number	Amounts Transmitted: Original Request	Amounts Transmitted: Subsequent Change (+)	Date of Message	Releases(-): Cumulative OMB/ Agency	Releases(-): Congressionally Required	Congressional Action	Cumulative Adjustments (+)	Amount Deferred as of 12-1-90
FUNDS APPROPRIATED TO THE PRESIDENT									
International Security Assistance									
Economic support fund.....	D91-1	149,319		10-04-90					149,319
DEPARTMENT OF AGRICULTURE									
Forest Service									
Expenses, brush disposal.....	D91-2	135,955		10-04-90					135,955
Cooperative work.....	D91-3	273,468		10-04-90					273,468
DEPARTMENT OF DEFENSE - CIVIL									
Wildlife Conservation, Military Reservations									
Wildlife conservation, Defense.....	D91-4	1,186		10-04-90					1,186
DEPARTMENT OF HEALTH AND HUMAN SERVICES									
Social Security Administration									
Limitation on administrative expenses (construction).....	D91-5	7,127		10-04-90					7,127

ATTACHMENT A

Status of FY 1991 Deferrals - As of December 1, 1990

(Amounts in thousands of dollars)

Agency/Bureau/Account	Deferral Number	Amounts Transmitted: Original Request	Amounts Transmitted: Subsequent Change (+)	Date of Message	Releases(-): Cumulative OMB/ Agency	Releases(-): Congressionally Required	Congressional Action	Cumulative Adjustments (+)	Amount Deferred as of 12-1-90
DEPARTMENT OF STATE									
Bureau for Refugee Programs									
United States emergency refugee and migration assistance fund, executive....	D91-6	14,529		10-04-90					14,529
DEPARTMENT OF TRANSPORTATION									
Federal Aviation Administration									
Facilities and equipment (Airport and airway trust fund).....	D91-7	538,659		10-04-90					538,659
TOTAL, DEFERRALS.....		1,120,244	0		0	0		0	1,120,244

[FR Doc. 90-29371 Filed 12-13-90; 8:45 am]

BILLING CODE 3110-01-C

federal register

Friday
December 14, 1990

Part V

The President

Executive Order 12737—President's Commission on Environmental Quality

Federal Register
Vol. 55, No. 241
Friday, December 14, 1990

Presidential Documents

Title 3—

The President

Executive Order 12737 of December 12, 1990

President's Commission on Environmental Quality

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to establish, in accordance with the provisions of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), an advisory committee on environmental quality, it is hereby ordered as follows:

Section 1. *Establishment.* There is established the President's Commission on Environmental Quality ("Commission"). The Commission shall comprise not more than 25 members to be appointed by the President. One of the members shall be the Chairman of the Council on Environmental Quality. The remaining members shall be individuals from the private sector who have experience in various aspects of environmental and natural resources matters. The Chairman of the Council on Environmental Quality shall serve as Chairman of the Commission and shall report directly to the President.

Sec. 2. *Functions.* (a) The Commission, through the Chairman, shall advise the President on matters involving environmental quality.

(b) The Chairman may, from time to time, invite experts to submit information to the Commission and may direct the members to investigate and report to the Commission on specific environmental issues of national consequence.

Sec. 3. *Administration.* (a) The heads of executive agencies shall, to the extent permitted by law, provide to the Commission such information with respect to environmental and natural resources matters as the Commission requires for the purpose of carrying out its functions.

(b) Members of the Commission shall serve without any compensation for their work on the Commission. However, members appointed from among private citizens of the United States may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law for persons serving intermittently in the Government service (5 U.S.C. 5701–5707).

(c) Any expenses of the Commission shall be paid from the funds available for the expenses of the Council on Environmental Quality.

(d) The Office of Administration shall, on a reimbursable basis, provide such administrative services as may be required.

Sec. 4. *General.* Notwithstanding any other Executive order, the functions of the President under the Federal Advisory Committee Act, as amended, except that of reporting to the Congress, which are applicable to the Commission, shall be performed by the Council on Environmental Quality in accord with the guidelines and procedures established by the Administrator of General Services.

George Bush

THE WHITE HOUSE,
December 12, 1990.

[FR Doc. 90-29541

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Federal Register
Vol. 55, No. 241
Friday, December 14, 1990

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A cumulative list of Public Laws for the second session was published in Part II of the **Federal Register** on December 10, 1990.

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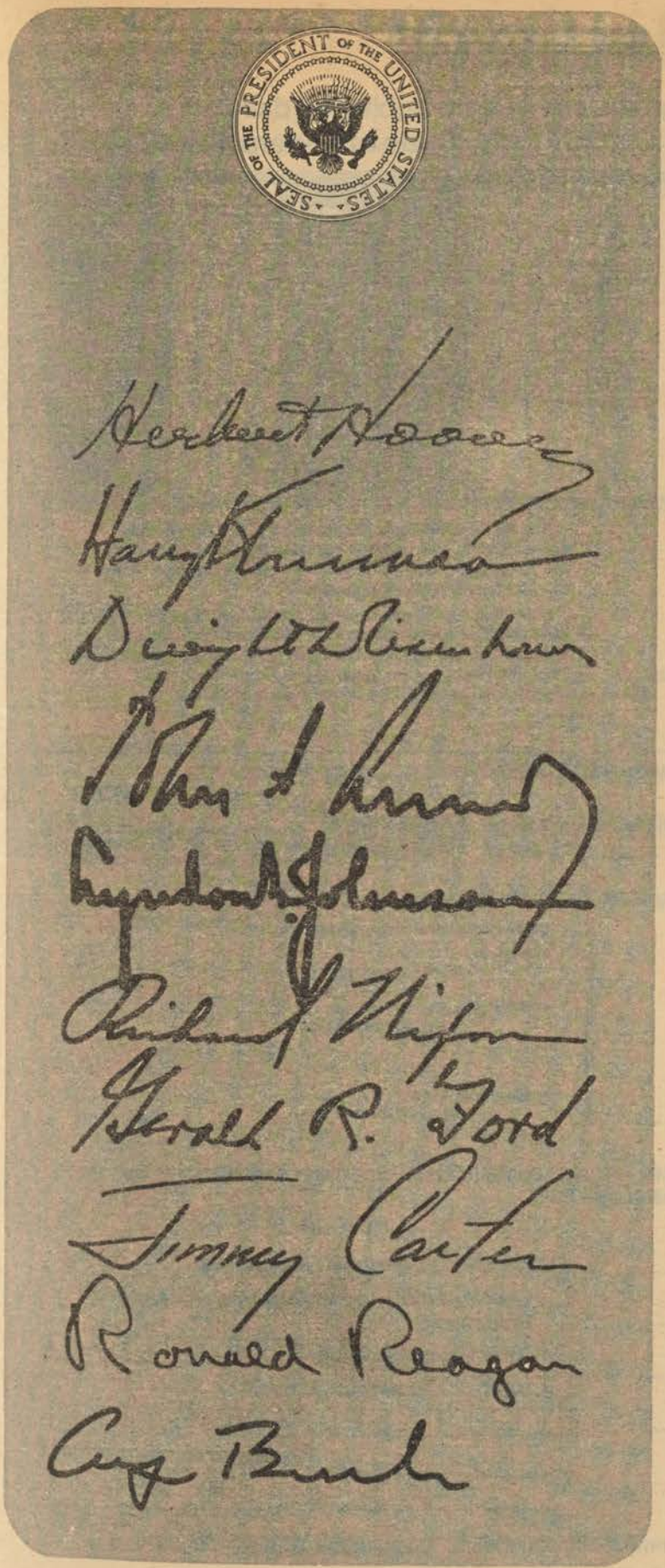

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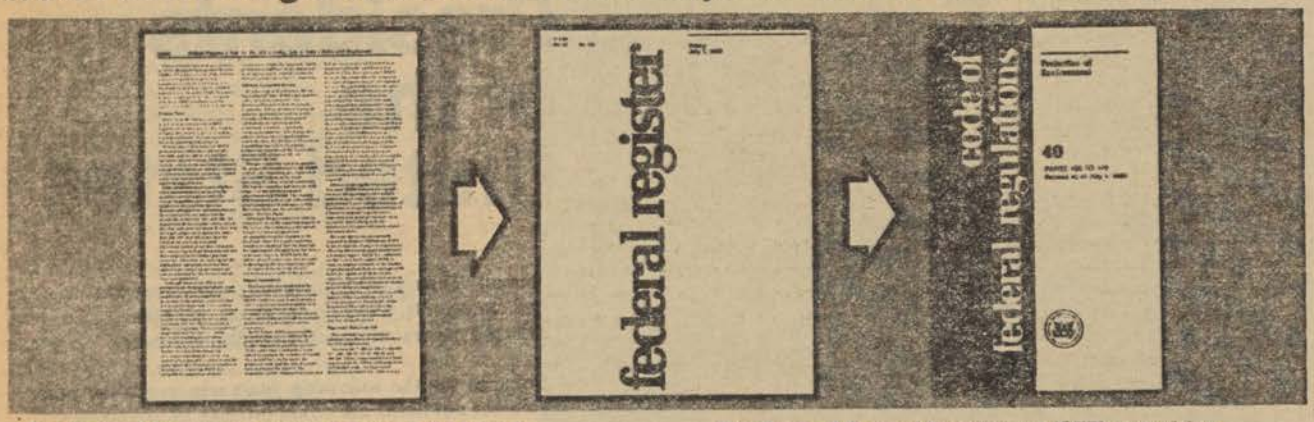

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