

public comments received will be addressed in a subsequent final rule based on this proposed rule. The EPA will not institute a second comment period on this document. Any parties interested in commenting on this action should do so at this time.

DATES: Comments on this proposed rule must be received in writing by January 8, 1996.

ADDRESSES: Written comments on this action should be addressed to: Sara Bartholomew, Operating Permits Section (A-5-2), Air and Toxics Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Copies of the District's submittal, EPA's Technical Support Document, and other supporting information used in developing the proposed approval are available for public inspection at EPA's Region IX office during normal business hours.

FOR FURTHER INFORMATION CONTACT: Sara Bartholomew (telephone 415/744-1170), Operating Permits Section (A-5-2), Air and Toxics Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

SUPPLEMENTARY INFORMATION: See the information provided in the direct final rule of the same title which is located in the Rules section of this Federal Register.

Authority: 42 U.S.C. 7401-7671q.

Dated: November 13, 1995.

Felicia Marcus,

Regional Administrator.

[FR Doc. 95-29835 Filed 12-6-95; 8:45 am]

BILLING CODE 6560-50-P

40 CFR Part 70

[AD-FRL-5341-6]

Clean Air Act Proposed Interim Approval of Operating Permits Program; San Diego Air Pollution Control District, California

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA proposes interim approval of the title V operating permits program submitted by the San Diego Air Pollution Control District (San Diego or District) for the purpose of complying with federal requirements for an approvable state program to issue operating permits to all major stationary sources and to certain other sources. Today's action also proposes approval of San Diego's mechanism for receiving

delegation of section 112 standards as promulgated.

In the final rules section of this Federal Register, EPA is promulgating interim approval of San Diego's title V program as a direct final rule without prior proposal because EPA views this submittal as noncontroversial and anticipates no adverse comments. A detailed rationale for this approval is set forth in the direct final rule. If no adverse comments are received in response to this proposed rule, no further activity is contemplated in relation to this rulemaking. If EPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. The EPA will not institute a second comment period on this document. Any parties interested in commenting on this action should do so at this time.

DATES: Comments on this proposed rule must be received in writing by January 8, 1996.

ADDRESSES: Written comments on this action should be addressed to: Celia Bloomfield, Operating Permits Section (A-5-2), Air and Toxics Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Copies of the District's submittal, EPA's Technical Support Document, and other supporting information used in developing the proposed approval are available for public inspection at EPA's Region IX office during normal business hours.

FOR FURTHER INFORMATION CONTACT: Celia Bloomfield (telephone 415/744-1249), Operating Permits Section (A-5-2), Air and Toxics Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

SUPPLEMENTARY INFORMATION: See the information provided in the direct final rule of the same title which is located in the Rules section of this Federal Register.

Authority: 42 U.S.C. 7401-7671q.

Dated: November 8, 1995.

Felicia Marcus,

Regional Administrator.

[FR Doc. 95-29837 Filed 12-6-95; 8:45 am]

BILLING CODE 6560-50-P

40 CFR Part 261

[SW-FRL-5342-6]

Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Proposed Exclusion

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule and request for comment.

SUMMARY: The Environmental Protection Agency (EPA or Agency) today is proposing to grant a petition submitted by Bethlehem Steel Corporation ("BSC"), Lackawanna, New York, to exclude (or "delist"), on a one-time basis, certain solid wastes contained in a landfill from being listed hazardous wastes. Based on careful analyses of the waste-specific information provided by the petitioner, the Agency has concluded that BSC's petitioned waste will not adversely affect human health and the environment. This action responds to BSC's petition to delist these wastes on a "generator-specific" basis from the hazardous waste lists. If the proposed decision is finalized, the petitioned waste will not be subject to regulation under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

The Agency is also proposing the use of a fate and transport model (the "EPACML" model) to evaluate the potential impact of the petitioned waste on human health and the environment, based on the waste-specific information provided by the petitioner. Specifically, EPA proposes to use this model to predict the concentration of hazardous constituents that may be released from the petitioned waste into groundwater if the petitioned waste is delisted and then disposed of in a Subtitle D landfill.

DATES: EPA is requesting public comments on this proposed decision and on the applicability of the fate and transport model used to evaluate the petition. Comments will be accepted until January 22, 1996. Comments postmarked after the close of the comment period will be stamped "late".

Any person may request a hearing on this proposed decision by filing a request with the Director, Hazardous Waste Identification Division, Office of Solid Waste, whose address appears below, by December 22, 1995. The request must contain the information prescribed in § 260.20(d).

ADDRESSES: Send three copies of your comments to EPA. Two copies should be sent to the Docket Clerk, Office of Solid Waste (Mail Code 5305), U.S. Environmental Protection Agency, 401

M Street SW., Washington, DC 20460. A third copy should be sent to James Kent, Waste Identification Branch, Office of Solid Waste (Mail Code 5304), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. Identify your comments at the top with this regulatory docket number: "F-95-B5EP-FFFFF".

Requests for a hearing should be addressed to the Director, Hazardous Waste Identification Division, Office of Solid Waste (Mail Code 5304), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460.

The RCRA regulatory docket for this proposed rule is located at Crystal Gateway #1, 1st Floor, 1235 Jefferson Davis Highway, Arlington, VA, and is available for viewing from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding Federal holidays. Call (703) 603-9230 for appointments. The public may copy material from any regulatory docket at no cost for the first 100 pages, and at a cost of \$0.15 per page for additional copies.

FOR FURTHER INFORMATION, CONTACT: For general information, contact the RCRA Hotline, toll free at (800) 424-9346, or at (703) 412-9810. For technical information concerning this notice, contact Chichang Chen, Waste Identification Branch, Office of Solid Waste (Mail Code 5304), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (202) 260-7392.

SUPPLEMENTARY INFORMATION:

I. Background

A. Authority

On January 16, 1981, as part of its final and interim final regulations implementing Section 3001 of RCRA, EPA published an amended list of hazardous wastes from non-specific and specific sources. This list has been amended several times, and is published in § 261.31 and § 261.32. These wastes are listed as hazardous because they exhibit one or more of the characteristics of hazardous wastes identified in Subpart C of Part 261 (*i.e.*, ignitability, corrosivity, reactivity, and toxicity) or meet the criteria for listing contained in § 261.11 (a)(2) or (a)(3).

Individual waste streams may vary, however, depending on raw materials, industrial processes, and other factors. Thus, while a waste that is described in these regulations generally is hazardous, a specific waste from an individual facility meeting the listing description may not be. For this reason, § 260.20 and § 260.22 provide an exclusion procedure, allowing persons to demonstrate that a specific waste from

a particular generating facility should not be regulated as a hazardous waste.

To have their wastes excluded, petitioners must show, first, that wastes generated at their facilities do not meet any of the criteria for which the wastes were listed. See § 260.22(a) and the background documents for the listed wastes. Second, the Administrator must determine, where he/she has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. Accordingly, a petitioner also must demonstrate that the waste does not exhibit any of the hazardous waste characteristics (*i.e.*, ignitability, reactivity, corrosivity, and toxicity), and must present sufficient information for the Agency to determine whether the waste contains any other toxicants at hazardous levels. See § 260.22(a), 42 U.S.C. § 6921(f), and the background documents for the listed wastes. Although wastes which are "delisted" (*i.e.*, excluded) have been evaluated to determine whether or not they exhibit any of the characteristics of hazardous waste, generators remain obligated under RCRA to determine whether or not their waste remains non-hazardous based on the hazardous waste characteristics.

In addition, residues from the treatment, storage, or disposal of listed hazardous wastes and mixtures containing listed hazardous wastes are also considered hazardous wastes. See §§ 261.3 (a)(2)(iv) and (c)(2)(i), referred to as the "mixture" and "derived-from" rules, respectively. Such wastes are also eligible for exclusion and remain hazardous wastes until excluded. On December 6, 1991, the U.S. Court of Appeals for the District of Columbia vacated the "mixture/derived from" rules and remanded them to the Agency on procedural grounds. *Shell Oil Co. v. EPA*, 950 F.2d 741 (D.C. Cir. 1991). On March 3, 1992, EPA reinstated the mixture and derived-from rules, and solicited comments on other ways to regulate waste mixtures and residues (57 FR 7628). The Agency plans to address issues related to waste mixtures and residues in a future rulemaking.

B. Approach Used To Evaluate This Petition

This petition requests a delisting for a hazardous waste listed as K060. In making the initial delisting determination, the Agency evaluated the petitioned waste against the listing criteria and factors cited in §§ 261.11 (a)(2) and (a)(3). Based on this review,

the Agency agrees with the petitioner that the waste is non-hazardous with respect to the original listing criteria. (If the Agency had found, based on this review, that the waste remained hazardous based on the factors for which the waste was originally listed, EPA would have proposed to deny the petition.) EPA then evaluated the waste with respect to other factors or criteria to assess whether there is a reasonable basis to believe that such additional factors could cause the waste to be hazardous. See §§ 260.22 (a) and (d). The Agency considered whether the waste is acutely toxic, and considered the toxicity of the constituents, the concentration of the constituents in the waste, their tendency to migrate and to bioaccumulate, their persistence in the environment once released from the waste, plausible and specific types of management of the petitioned waste, the quantities of waste generated, and waste variability.

For this delisting determination, the Agency used such information to identify plausible exposure routes (*i.e.*, groundwater, surface water, air) for hazardous constituents present in the petitioned waste. The Agency determined that disposal in a Subtitle D landfill is the most reasonable, worst-case disposal scenario for BSC's petitioned waste, and that the major exposure route of concern would be ingestion of contaminated groundwater. Therefore, the Agency is proposing to use a particular fate and transport model (the "EPACML" model) to predict the maximum allowable concentrations of hazardous constituents that may be released from the petitioned waste after disposal and to determine the potential impact of the disposal of BSC's petitioned waste on human health and the environment.

Specifically, the Agency used the maximum estimated waste volume and the maximum reported leachate concentrations as inputs to estimate the constituent concentrations in the groundwater at a hypothetical receptor well downgradient from the disposal site. The calculated receptor well concentrations (referred to as compliance-point concentrations) were then compared directly to the health-based levels used in delisting decision-making for the hazardous constituents of concern.

EPA believes that this fate and transport model represents a reasonable worst-case scenario for disposal of the petitioned waste in a landfill, and that a reasonable worst-case scenario is appropriate when evaluating whether a waste should be relieved of the protective management constraints of

RCRA Subtitle C. The use of a reasonable worst-case scenario results in conservative values for the compliance-point concentrations and ensures that the waste, once removed from hazardous waste regulation, will not pose a threat to human health or the environment. Because a delisted waste is no longer subject to hazardous waste control, the Agency is generally unable to predict and does not control how a waste will be managed after delisting. Therefore, EPA currently believes that it is inappropriate to consider extensive site-specific factors when applying the fate and transport model. For example, a generator may petition the Agency for delisting of a metal hydroxide sludge which is currently being managed in an on-site landfill and provide data on the nearest drinking water well, permeability of the aquifer, dispersivities, etc. If the Agency were to base its evaluation solely on these site-specific factors, the Agency might conclude that the waste, at that specific location, cannot affect the closest well, and the Agency might grant the petition. Upon promulgation of the exclusion, however, the generator is under no obligation to continue to manage the waste at the on-site landfill. In fact, the generator may well choose to either send the delisted waste off site immediately, or eventually reach the capacity of the on-site facility and subsequently send the waste off site to a facility which may have very different hydrogeological and exposure conditions.

The Agency also considers the applicability of ground-water monitoring data during the evaluation of delisting petitions. In this case, the Agency determined that, because BSC is seeking a delisting for waste managed on-site, ground-water monitoring data collected from the area where the petitioned waste is contained are necessary to determine whether hazardous constituents have migrated to the underlying groundwater. Ground-water monitoring data collected from BSC's monitoring wells will help characterize the potential impact (if any) of the disposal of BSC's waste on human health and the environment.

The Agency provides notice and an opportunity for comment before granting or denying a final exclusion. Thus, a final decision will not be made until all timely public comments (including those at public hearings, if any) on today's proposal are addressed. Late comments will be considered to the extent possible.

II. Disposition of Delisting Petition Bethlehem Steel Corporation, Lackawanna, New York

A. *Petition for Exclusion*

Bethlehem Steel Corporation (BSC), located in Lackawanna, New York, was engaged in primary metal-making and coke-making operations prior to 1983. BSC petitioned the Agency to exclude, on a one-time basis, the waste contained in an on-site landfill, presently listed as EPA Hazardous Waste No. K060—“Ammonia still lime sludge from coking operations”. The listed constituents of concern for EPA Hazardous Waste No. K060 are cyanide, naphthalene, phenolic compounds, and arsenic. BSC refers to this landfill as Hazardous Waste Management Unit No. 2 (HWM-2). Although only a portion of the waste in the landfill is the ammonia still lime sludge, the entire volume of waste is considered to be a listed waste in accordance with § 261.3(a)(2)(iv) (*i.e.*, the mixture rule). The mixture of listed ammonia still lime sludge and solid waste contained in HWM-2 is the subject of this petition.

BSC petitioned the Agency to exclude its waste because it does not believe that the waste meets the criteria of the listing. BSC claims that the mixture of ammonia still lime sludge and solid waste is not hazardous because the constituents of concern, although present in the waste, are present in either insignificant concentrations or, if present at significant levels, are essentially in immobile forms. BSC also believes that this waste is not hazardous for any other reason (*i.e.*, there are no additional constituents or factors that could cause the waste to be hazardous). Review of this petition included consideration of the original listing criteria, as well as the additional factors required by the Hazardous and Solid Waste Amendments (HSWA) of 1984. See Section 222 of HSWA, 42 USC 6921(f), and 40 CFR 260.22(d)(2)–(4). Today's proposal to grant this petition for delisting is the result of the Agency's evaluation of BSC's petition.

B. *Background*

On July 18, 1984, BSC petitioned the Agency to exclude the waste contained in its on-site landfill identified as HWM-2, and subsequently provided additional information. After evaluating the petition, the Agency proposed to deny BSC's petition to exclude the waste contained in HWM-2 on April 7, 1989 (see 54 FR 14101). The Agency's evaluation of the petition, which used the “VHS” fate and transport model and the analytical data provided by BSC, indicated that the petitioned waste

exhibited significant concentrations of leachable lead and benzo(a)pyrene. Furthermore, the Agency considered the sampling and analysis program conducted in support of the petition to be incomplete. Moreover, groundwater monitoring data collected from wells monitoring this on-site landfill indicated that the landfill may have been adversely impacting groundwater quality at the site. The Agency received public comments on the April 7, 1989 proposed decision between April and June 1989. On January 29, 1990, the Agency re-opened the comment period to enable public review of information supporting the proposed delisting health-based level for benzo(a)pyrene (see 55 FR 2847). The Agency published a final denial, including responses to public comments, in the Federal Register on August 26, 1991 (see 56 FR 41944). On October 30, 1991, BSC petitioned the U.S. Court of Appeals for the District of Columbia Circuit to overturn EPA's denial decision. Subsequently, BSC agreed to stay this litigation for a re-evaluation by EPA using a new fate and transport model (EPACML) and updated health-based levels, and on November 17, 1992 submitted extensive supplemental waste characterization and groundwater monitoring data. After reviewing the new data in conjunction with the existing petition information, the Agency now believes that the petitioned waste is eligible for an exclusion based on the current evaluation criteria. Therefore, the Agency hereby proposes to withdraw its final denial decision and to grant BSC's petition. The Agency's decision to re-evaluate BSC's petition was based on additional waste characterization and groundwater data that was collected subsequent to the publication of the final denial decision. The Agency's re-evaluation of BSC's petitioned waste contained in the HWM-2 landfill is the subject of today's proposal.

In support of its petition, BSC submitted: (1) detailed descriptions and schematics of its manufacturing process; (2) a list of all raw materials and Material Safety Data Sheets (MSDS) for all trade name materials that might be expected to have contributed to the waste; (3) results from total constituent analyses for the eight Toxicity Characteristic (TC) metals listed in § 261.24, antimony, nickel, thallium, and cyanide; (4) results from the Toxicity Characteristic Leaching Procedure (TCLP; SW-846, Method 1311) for the eight TC metals, antimony, nickel, and thallium; (5) results from the EP leachate procedure for the eight TC

metals, nickel, and cyanide; (6) results from total constituent analyses for sulfide and reactive sulfide; (7) results from total oil and grease analyses; (8) results from characteristics testing for ignitability, corrosivity, and reactivity; (9) results from total constituent analyses for 70 volatile organic and semivolatile organic constituents, including the TC organic constituents (excluding pesticides and herbicides); (10) results from the TCLP analyses for 63 volatile organic and semivolatile organic constituents, including the TC organic constituents (excluding pesticides and herbicides); and (11) groundwater monitoring data collected from wells monitoring the on-site landfill.

BSC conducted primary metal-making and coke-making operations during the period the ammonia still lime sludge was generated. In October 1983, BSC discontinued its primary metal-making operations and modified its coking processes so that the ammonia still lime sludge was no longer generated. (BSC now uses sodium hydroxide as the strong base at the ammonia still rather than lime slurry, and therefore ammonia still lime sludge is no longer generated.)

BSC's steel-making process involved refining molten iron with oxygen, flux (*i.e.*, dolomite or lime), and alloying materials in a basic oxygen furnace to produce carbon steels. BSC's iron-making process involved smelting of iron-bearing materials (*i.e.*, iron ore, sinter, and scrap) with coke, flux (*i.e.*, dolomite and lime), and preheated air in blast furnaces. The blast furnace slurry disposed of in BSC's landfill originated from the water scrubbing of blast furnace gas. According to BSC, blast furnace sludge has not been produced since the final removal of sludge from the thickener in November 1983.

Coke-making involves the destructive distillation of bituminous coal in coke ovens. Volatile matter evolves during the coking process (including the moisture content of the coal) and leaves the ovens through coke oven gas off-takes. This hot coke oven gas is cooled by spraying it with recycled flushing liquor consisting of a weak ammonia liquor (WAL) solution. As the coke oven gas is cooled, water and tar are condensed. The tar fraction is separated from the aqueous WAL in a decanter. The majority of the WAL is recycled back to the coke oven gas cooling process as flushing liquor. Any excess WAL is processed by solvent extraction to recover phenol or sodium phenolate. The excess WAL then is processed by steam stripping to release aqueous ammonia into the gas phase in an ammonia still. In the upper portion of

the still, free ammonia is stripped by steam (at temperatures of about 100 °C) and ammonia vapor rising from the lower portion. In the lower portion of the still, fixed ammonia compounds are dissociated by adjusting the pH with lime slurry and then injecting steam. The spent ammonia still lime slurry is drawn off the bottom and discharged to one of two settling basins. The sludge that settles out in these basins (*i.e.*, ammonia still lime sludge) is subsequently placed in the on-site landfill.

As stated previously, BSC disposed of its ammonia still lime sludge in its on-site HWM-2 landfill with other solid wastes between 1969 and November of 1983. BSC is not currently disposing of wastes in this landfill. Based on available records, BSC estimates that approximately two percent of the waste placed in the landfill is ammonia still lime sludge. The most significant wastes that were disposed of in the landfill include: blast furnace thickener sludge, basic oxygen furnace thickener sludge, sinter plant sludge, sludges generated from the treatment of wastewaters from a cold rolling mill, a steel pickling operation, and a hot-dip galvanizing line, and dredging spoils (from Smokes Creek). Only the ammonia still lime sludge is a listed hazardous waste.

BSC's preliminary sampling demonstration included data on ten samples collected from the landfill in January 1984. A detailed description of procedures used to collect three of these samples was not provided and is not available. For the remaining seven samples, BSC divided the landfill into four sections and randomly selected a partial core sample (*i.e.*, two-foot core samples were taken as opposed to full-depth core samples) from each of the four sections, two partial core samples from the central portion of the landfill, and an additional partial core sample from the southeast section. A grab sample was then taken from each of these seven core samples, resulting in seven grab samples. The three samples for which sampling procedure descriptions were not provided were analyzed for total constituent (*i.e.*, mass of a particular constituent per mass of waste) and extraction procedure (EP) leachable (*i.e.*, mass of a particular constituent per unit volume of extract) concentrations of arsenic, cyanide, naphthalene, and phenolic compounds. The extraction procedure used in these analyses, however, was not equivalent with the procedure described in SW-846 Method 1310 and therefore these data were not considered in the evaluation of BSC's petition. (For a more detailed description of the extraction

procedure used by BSC, see the RCRA public docket for today's notice.) The remaining seven grab samples were analyzed (using the EP) for leachable concentrations of the eight TC metals, nickel, cyanide, and sulfide; and the characteristics of corrosivity and reactivity.

BSC collected a second set of samples during April 1984. To collect these samples, BSC divided the landfill into six sections of approximately equal size. Within each section, six discrete samples were taken at random depths from evenly spaced boring locations. The samples then were composited, by section, to form six representative samples, one composite per section. These six composite samples were analyzed for total constituent concentrations of the eight TC metals, nickel, cyanide, benzene, benzo(a)pyrene, naphthalene, phenolic compounds, and tetrachloroethylene. In addition, these six composite samples were analyzed (using the EP) for leachable concentrations of the eight TC metals, nickel, and cyanide; total oil and grease content; and the characteristic of ignitability.

At EPA's request, BSC conducted additional sampling and testing of the central portion of the landfill in February of 1985. Specifically, BSC collected approximately ten two-foot long core samples from six locations within the central portion of the landfill. For each location, grab samples were taken from each of the core samples (approximately ten) and composited. These six composite samples were analyzed for total constituent and leachable concentrations (using the EP) of the eight TC metals (excluding mercury, selenium, and silver), nickel, and cyanide. In addition, these six composite samples were analyzed for total constituent concentrations of sulfide, benzene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, and phenolic compounds; and total oil and grease content.

In its comments to the Agency's April 7, 1989 proposed denial of its petition, BSC submitted the analytical results of an additional sampling event. In September 1988, four full-depth core samples were obtained from the landfill and were composited to form one composite sample. This sample was analyzed using the TCLP to quantify leachable concentrations of the TC contaminants listed in § 261.24 (excluding the pesticides/herbicides) and thirteen other organic constituents.

In June 1992, following the publication of the final denial notice for

BSC's petition in the Federal Register (see 56 FR 41944; August 26, 1991), BSC conducted additional sampling and testing of its petitioned waste. BSC established a uniform grid over the landfill dividing the landfill into seventeen sections, each 100 feet by 100 feet. Within each grid section a second uniform grid of 10-foot intervals was established for the selection of the individual boring locations. Alternating 10,000 square foot grid sections were selected for sampling. BSC used a random number table to select five boring locations within each 10,000 square foot grid section. This resulted in the selection of eight grid sections to yield eight composite samples of the material in the landfill, with each composite representative of five full-core sample aliquots from each grid section. These eight composite samples were analyzed for total constituent concentrations of 83 toxicants of potential concern¹ (including the eight TC metals). These eight composite samples were also analyzed for TCLP leachate concentrations of the toxicants of potential concern (excluding cyanide and polychlorinated biphenyls (PCBs)); and total oil and grease.

BSC claims that the analytical data obtained from the four sampling events that occurred from April 1984 through June 1992 are representative of any variation in the constituent concentrations in the petitioned waste. BSC believes that the data from the preliminary grab samples obtained in January 1984 are not representative of the entire waste volume contained in the landfill. BSC also believes that it has addressed the Agency's concern regarding the number of samples collected and the target analyses, as originally noted by the Agency in the April 7, 1989 proposal to deny BSC's petition. Specifically, in that proposal the Agency noted that, based on the dimensions of the landfill containing the petitioned waste, BSC should have

collected at least one sample for every 10,000 square foot section of the landfill. BSC's original estimate of the areal extent of the landfill was 5.3 acres; however, as discussed later in today's notice, BSC has demonstrated through detailed calculations (discussed later in today's notice) that a better estimate of the landfill area is 3.5 acres. Therefore, based on this revised estimate, BSC should have collected at least 15 composite samples. Since the April 1989 proposal, BSC has conducted additional sampling of the waste, bringing the total number of composite samples to 21, including 8 composite samples collected in June 1992 that have been analyzed for total constituent concentrations of 70 volatile organic and semivolatile organic constituents. The Agency believes, based on its re-evaluation of BSC's petition, that the combined results of BSC's sampling events are sufficient to characterize any variation in the constituent concentrations in the petitioned waste.

BSC also submitted ground-water monitoring information collected from wells monitoring the landfill to demonstrate that the petitioned waste was not adversely impacting ground-water quality. The ground-water monitoring information submitted by BSC, and more recent data received from State and EPA Regional authorities, included: (1) Well location information; (2) boring logs and well construction information for each well; (3) water levels and water level contour maps; and (4) results of the analysis of ground-water samples.

C. Agency Analysis

BSC used SW-846 Methods 7060 through 7760 (January 1984, April 1984, and February 1985 samples) to quantify the total constituent concentrations of the eight TC metals and nickel. BSC used SW-846 Method 6010 (June 1992 samples) to quantify the total constituent concentrations of the eight

TC metals (with the exception of mercury and selenium, for which BSC used SW-846 Methods 7471 and 7740, respectively), nickel, antimony, and thallium. "Methods for Chemical Analysis of Water and Wastes" Method 335.2 (April 1984 samples), SW-846 Method 9010 (February 1985 samples) and SW-846 Method 9012 (June 1992 samples) were used to quantify total cyanide concentrations in the petitioned waste. SW-846 Method 9030 (February 1985 samples) was used to quantify total sulfide levels in the petitioned waste. SW-846 Method 7.3.4.1 (June 1992 samples) was used to quantify reactive sulfide levels in the petitioned waste. SW-846 Method 1310 (samples prior to 1988) was used to determine the leachable concentrations of the eight TC metals, nickel, and cyanide. BSC prepared a toxicity characteristic leachate (according to the procedure in 51 FR 21685, June 13, 1986) to determine the leachable concentrations of the eight TC metals, nickel, antimony, and thallium in the June 1992 samples. Table 1 presents the maximum reported, and 95% Upper Confidence Limit (UCL) total constituent concentrations of the eight TC metals listed in § 261.24, nickel, antimony, thallium, cyanide, and sulfide. Table 1 also identifies the number of samples in which each constituent was detected. Table 2 presents the maximum reported, and 95% UCL EP leachate and TCLP leachate concentrations of the eight TC metals listed in § 261.24, nickel, antimony, thallium, and cyanide. (Analysis for leachable concentrations of sulfide or reactive sulfide is not necessary because the Agency's level of regulatory concern is based on the total constituent concentration of reactive sulfide.)

TABLE 1.—TOTAL CONSTITUENT CONCENTRATIONS (MG/KG) INORGANIC CONSTITUENTS

Constituents	Total Concentrations (mg/kg)		Number of Samples in which detected/total number of samples
	Maximum ¹	95% UCL ²	
Antimony	<12	<12	0/8
Arsenic	16.2	10.3	12/23
Barium	1,660	791	13/20
Cadmium	3.3	2.1	12/20
Chromium	172	100	20/20
Lead	7,520	2,810	20/20

¹ BSC chose to analyze waste samples for these constituents because they were: (1) identified by EPA during previous actions concerning this

petition as constituents of regulatory concern, or (2) identified as constituents that reasonably may be expected to be potentially present in the petitioned

waste, based on the processes from which the waste components were derived.

TABLE 1.—TOTAL CONSTITUENT CONCENTRATIONS (MG/KG) INORGANIC CONSTITUENTS—Continued

Constituents	Total Concentrations (mg/kg)		Number of Samples in which detected/total number of samples
	Maximum ¹	95% UCL ²	
Mercury	0.268	0.16	6/14
Nickel	64.6	30.6	12/20
Selenium	2.6	2.2	6/14
Silver	3.0	2.1	8/14
Thallium	43	32.6	5/8
Cyanide (total)	43.1	36.0	20/23
Reactive Sulfide	140	130.0	7/8

< Denotes that the constituent was not detected at the detection limit specified in the table.

¹ These levels represent the highest detected concentrations of each inorganic constituent found in any sample of the petitioned waste, and, if not detected, the highest detection limit. These levels do not necessarily represent the specific levels found in one sample.

² 95% Upper Confidence Limit (UCL) is the estimated upper 95 percent confidence interval for the average of sample concentrations based on the Student-t distribution applied to random samples. The average was calculated by considering nondetectable measurements to be measurements at the detection limits, except for arsenic, for which high detection limits (<100 mg/kg) for eight samples were not included.

TABLE 2.—EP/TCLP LEACHATE CONCENTRATIONS (MG/L) INORGANIC CONSTITUENTS

Constituents	EP/TCLP Leachate Concentrations (mg/l)			
	Maximum ¹		95% UCL ²	
	EP	TCLP	EP	TCLP
Antimony	NA	<0.06	NA	<0.06
Arsenic	0.034	<0.3	0.016	0.16
Barium	1.48	0.7	0.85	0.54
Cadmium	0.015	<0.005	0.005	<0.005
Chromium	0.144	0.023	0.034	0.024
Lead	1.61	0.11	0.37	0.059
Mercury	0.0007	<0.005	0.0004	<0.002
Nickel	0.59	0.21	0.28	0.15
Selenium	0.008	<0.3	0.003	<0.15
Silver	<0.001	<0.01	<0.001	<0.01
Thallium	NA	³ <0.3	NA	<0.17
Cyanide (total)	0.06	⁴ 2.1	0.03	NA

<Denotes that the constituent was not detected at the detection limit specified in the table.

NA: Not analyzed.

¹ These levels represent the highest detected concentrations of the inorganic constituents found in any extract of samples of the petitioned waste, and, if not detected, the highest detection limit. These levels do not necessarily represent the specific levels found in one sample.

² 95% Upper Confidence Limit (UCL) is the estimated upper 95 percent confidence interval for the average of sample concentrations based on the Student-t distribution applied to random samples. The average was calculated by considering non-detectable measurements to be measurements at the detection limits.

³ Three samples (including a duplicate) analyzed for thallium had a detection limit of 0.3 mg/l. Seven additional samples (including a duplicate) analyzed for thallium had a detection limit of 0.01 mg/l.

⁴ Calculated from the maximum detected total cyanide concentration of 43.1 mg/kg by assuming a dilution factor of twenty (based on 100 grams of sample and dilution with 2 liters of water) and a theoretical worst-case leaching of 100 percent.

BSC also performed the Synthetic Precipitation Leaching Procedure (SPLP; SW-846 Method 1312) on samples from June 1992 to further examine leachable lead levels. The SPLP is similar to the TCLP, except that the extraction fluid is a solution of dilute mineral acid (pH 4.2), rather than the concentrated solution of acetic acid used in the TCLP. EPA has used the SPLP to simulate the effect of acidic rainfall on the mobility of waste constituents (e.g., see 54 FR 15316; April 17, 1989). BSC claims that the SPLP is more representative of realistic leaching conditions at the current site of the waste in the on-site landfill. Lead was not detected (<0.003 mg/l) in any of the ten composite

samples (8 samples and 2 replicates) from the June 1992 sampling event using the SPLP procedure.

The detection limits in Tables 1 and 2 (and Tables 3 and 4 that follow) represent the lowest concentrations quantifiable by BSC when using the appropriate analytical methods to analyze the petitioned waste.

Using "Standard Methods for the Examination of Water and Wastewater (14th edition)" Method 502.D (April 1984 samples) and SW-846 Method 9071 (February 1985 and June 1992 samples), BSC determined that the maximum oil and grease content of the petitioned waste was 0.93 percent; therefore, the EP and the TCLP analyses

did not have to be modified in accordance with the Oily Waste Extraction Procedure (i.e., wastes having more than one percent total oil and grease may either have significant concentrations of constituents of concern in the oil phase, which may not be assessed using the standard EP or TCLP leachate procedure, or the concentration of oil and grease may be sufficient to coat the solid phase of the sample and interfere with the leaching of metals from the sample). See SW-846 Method 1330 for the Oily Waste Extraction Procedure. On the basis of test results provided by BSC, pursuant to § 260.22, none of the samples analyzed exhibited the characteristics of

ignitability, corrosivity, or reactivity. See § 261.21, § 261.22, and § 261.23, respectively.

BSC used unreferenced gas chromatographic/mass spectrometric (GC/MS) methods (April 1984 samples) to quantify total constituent concentrations of benzene, benzo(a)pyrene, and tetrachloroethylene. "Methods for Chemical Analysis of Water and Waste," Method 420.1 (April 1984 samples) was used to quantify phenol levels. SW-846 Method 8.86 (April 1984 samples) was used to quantify naphthalene concentrations. BSC used unreferenced SW-846 Methods (February 1985 samples) to quantify the total constituent concentrations of benzene, benzo(a)pyrene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)-pyrene, naphthalene, and phenols. BSC used SW-846 Methods 8240 and 8270 (June 1992 samples) to quantify total constituent concentrations of

volatile organic and semivolatile organic compounds, respectively. BSC prepared a toxicity characteristic leachate (according to the procedure in 51 FR 21685, June 13, 1986) to determine the leachable concentrations of volatile organic and semivolatile organic compounds in the September 1988 sample. BSC used SW-846 Method 1311 in conjunction with Methods 8240 and 8270 to determine the leachable concentrations of volatile organic and semivolatile organic compounds in the June 1992 samples.

Table 3 presents the maximum reported (or estimated) total constituent concentrations for hazardous organic constituents detected in the petitioned waste. Table 4 presents the maximum reported and estimated TCLP leachate concentrations for hazardous organic constituents detected in extracts of samples of the petitioned waste. Average values (and 95% UCLs) were not calculated because the number of

samples for most organic constituents were limited, and most yielded nondetectable constituent levels at varying detection limits. Furthermore, most constituents that were detected were found at levels below quantitation limits and are reported as "estimated" values. Tables 3 and 4 also identify the number of samples in which each constituent was detected. The total constituent concentrations of benzo(a)pyrene, naphthalene, and phenol in the six composite samples collected in April 1984 were presented in the petition on a dry weight basis. Because, for delisting purposes, the Agency evaluates wastes in their as-disposed condition, the concentrations of these three constituents were recalculated in Table 3 on a wet weight basis using percent solids data to account for the water that is normally present in the waste. (For further detail, see the RCRA public docket for today's notice.)

TABLE 3.—TOTAL CONSTITUENT CONCENTRATIONS (MG/KG) DETECTED ORGANIC CONSTITUENTS

Constituents	Total Concentrations (mg/kg)	
	Maximum ¹	Number of samples in which detected/total number of samples
Benzo(a)-anthracene	² 0.44	2/8
Benzo(a)pyrene ³	0.69	6/20
Chrysene	² 0.6	2/8
1,1-Dichloroethane	² 0.0075	1/8
Ethyl benzene	1.3	2/8
Fluoranthene	² 1.3	3/8
Indeno(1,2,3-cd)-pyrene	² 0.53	1/14
Methyl ethyl ketone	² 0.085	3/8
Naphthalene ³	² 0.87	15/23
Phenanthrene	² 2.0	5/8
Phenol ³	0.26	12/20
Pyrene	² 1.5	5/8
Toluene	² 0.0065	2/8
Xylenes	5	5/8

¹ These levels represent the highest concentration of each organic constituent found in any sample of the petitioned waste. These levels do not necessarily represent the specific levels found in one sample.

² These constituents were detected, but below quantitation limits; estimated values are given.

³ BSC's petition reported benzo(a)pyrene, naphthalene, and phenol concentrations for samples collected in April 1984 on a dry weight basis. Tabulated values are on a wet weight basis.

TABLE 4.—TCLP Leachate Concentrations (mg/l) Detected Organic Constituents

Constituents	TCLP Leachate Concentrations (mg/l) Maximum ¹
Ethyl benzene	0.036
Methylene chloride ² .....	.085
Naphthalene	³ .013
Phenol	³ .028
Toluene .....	.011
1,1,1-Trichloroethane .....	.006

TABLE 4.—TCLP Leachate Concentrations (mg/l) Detected Organic Constituents—Continued

Constituents	TCLP Leachate Concentrations (mg/l) Maximum ¹
Xylenes	³ .085

¹ These levels represent the highest concentration of each organic constituent found in any extract of samples of the petitioned waste. These levels do not necessarily represent the specific levels found in one sample.

² Found in blanks for some samples.

³ Concentrations estimated at less than the detection limit were reported and are included as maximum concentrations.

In its original petition, BSC submitted a signed certification stating that the landfill contained approximately 170,000 cubic yards of waste that had been accumulated for 14 years (1969 through November 1983). In the November 1992 supplemental information submittal, BSC claimed that this previous estimate of the volume of the landfill was not accurate. BSC stated that the initial estimate was based upon

an area of 5.3 acres and an average depth of 20 feet. BSC's recalculation of the volume of the landfill is based upon an area of 153,240 square feet (approximately 3.5 acres) and an average depth of 21.7 feet. In addition, BSC's recalculation takes into account the side slope of the landfill, assuming a conservative side slope of 1:1 (vertical to horizontal). BSC submitted a surveyor's report of the area to support its revised estimate of waste volume. BSC stated that the original surface area estimate was based on the outside edge of the roads surrounding the landfill (approximately 5 acres) rather than on the edge of the waste surface outline (approximately 3.5 acres). BSC stated that the best estimate of the volume of waste contained in the landfill is approximately 110,000 cubic yards. The Agency reviews a petitioner's estimates and, on occasion, has requested a petitioner to re-evaluate estimated waste volume. EPA accepts BSC's modified estimate of 110,000 cubic yards.

EPA does not generally verify submitted test data before proposing delisting decisions. The sworn affidavit submitted with this petition binds the petitioner to present truthful and accurate results. The Agency, however, has maintained a spot-check sampling and analysis program to verify the representative nature of data for some percentage of the submitted petitions. A spot-check visit to a selected facility may be initiated before finalizing a delisting petition or after granting an exclusion.

D. Agency Evaluation

The Agency considered the appropriateness of alternative waste management scenarios for BSC's

mixture of ammonia still lime sludge and solid wastes and decided, based on the information provided in the petition, that disposal in a Subtitle D landfill is the most reasonable, worst-case scenario for this waste. Under a landfill disposal scenario, the major exposure route of concern for any hazardous constituents would be ingestion of contaminated groundwater. The Agency, therefore, evaluated BSC's petitioned waste using the EPA's Composite Model for Landfills (EPACML), as modified for delisting evaluations, which predicts the potential for groundwater contamination from wastes that are landfilled. The EPACML model is more sophisticated than the VHS model used previously by the Agency for evaluating BSC's petitioned waste. See 56 FR 32993 (July 18, 1991), 56 FR 67197 (December 30, 1991), and the RCRA public docket for these notices for a detailed description of the EPACML model, the disposal assumptions, the modifications made for delisting, and the benefits of replacing the VHS model with the EPACML model for delisting. This model, which includes both unsaturated and saturated zone transport modules, was used to predict reasonable worst-case contaminant levels in groundwater at a compliance point (i.e., a receptor well serving as a drinking-water supply). Specifically, the model estimated the dilution/attenuation factor resulting from subsurface processes such as three-dimensional dispersion and dilution from groundwater recharge for a specific volume of waste.

The Agency requests public comments on its use of the EPACML model as applied to the evaluation of

BSC's waste. EPA will consider all comments on the validity of the EPACML model and its appropriateness for use here to evaluate the potential for groundwater contamination if BSC's petitioned wastes are disposed of in any Subtitle D landfill.

For the evaluation of BSC's petitioned waste, the Agency used the EPACML to evaluate the mobility of hazardous inorganic constituents detected in the extract of samples of BSC's petitioned waste. The Agency's evaluation, using BSC's estimated waste volume of 110,000 cubic yards and the maximum and 95% UCL leachate concentrations (see Table 2), generated the compliance-point concentrations for the constituents of concern as shown in Table 5. (See docket for this rule for details in the use of the EPACML in evaluating BSC's waste).

The Agency did not evaluate the mobility of antimony, silver and thallium from BSC's petitioned waste because they were not detected in the leachate extracts using the appropriate SW-846 analytical test methods and adequate detection limits (see Table 2). The Agency believes that it is inappropriate to evaluate non-detectable concentrations of a constituent of concern in its modeling efforts for RCRA delistings if the non-detectable value was obtained using the appropriate analytical method. If a constituent cannot be detected (when using the appropriate analytical method with an adequate detection limit), the Agency believes it is reasonable to assume that the constituent is not present and therefore does not present a threat to either human health or the environment.

TABLE 5.—EPACML: CALCULATED COMPLIANCE-POINT CONCENTRATIONS (MG/L) LANDFILL WASTE

Constituents	Compliance-Point Concen.		Levels of regulatory concern ³
	Maximum ¹	95% UCL ²	
Arsenic	0.00071	0.0033	0.05
Barium .....	.031	.018	2.0
Cadmium .....	.00031	.00010	.005
Chromium .....	.0030	.00071	.1
Lead .....	.034	.0077	.015
Mercury .....	.000015	.0000083	.002
Nickel .....	.012	.0058	.1
Selenium .....	.00017	.000063	.05
Cyanide .....	.044	.00063	.2

¹ Using the maximum EP or TCLP leachate level from Table 2, whichever is greater, and based on a DAF of 48 calculated using the EPACML for one time volume of 110,000 cubic yards

² Using the 95% UCL level from EP or TCLP data, from Table 2, whichever is greater, and based on a DAF of 48 calculated using the EPACML for one-time volume of 110,000 cubic yards.

³ See "Docket Report on Health-based Levels and Solubilities Used in the Evaluation of Delisting Petitions, Submitted Under 40 CFR § 260.20 and § 260.22", December 1994, located in the RCRA public docket.

The petitioned waste exhibited maximum and 95% UCL arsenic,

barium, cadmium, chromium, mercury, nickel, selenium, and cyanide levels at

the compliance point below the health-based levels used in delisting decision-

making. The Agency's evaluation of the extract data indicated that two grab samples of the petitioned waste contained leachable concentrations of lead at the compliance point above the health-based level of 0.015 mg/l used in

delisting decision-making. These two grab samples were collected in January 1984 during a preliminary sampling effort. However, since this sampling event, BSC has provided analytical results quantifying leachable lead

concentrations in 21 additional composite samples, including nine samples that were analyzed using the TCLP. Table 6 presents a summary of all the leachable lead data for BSC's petitioned waste.

TABLE 6.—SUMMARY OF LEACHABLE LEAD CONCENTRATIONS (MG/L) LANDFILL WASTE

Sampling date	Leachable lead concentration	Extraction method
January 1984 (grab samples)	0.426	EP
	0.08	EP
	0.97	EP
	0.474	EP
	0.052	EP
	0.045	EP
April 1984 (composite samples)	1.61	EP
	<0.01	EP
February 1985 (composite samples)	0.04	EP
	<0.01	EP
	0.013	EP
	<0.01	EP
	<0.01	EP
	<0.01	EP
September 1988 (composite samples)	0.041	EP
June 1992 (composite samples)	0.05	TCLP
	0.004	TCLP
	0.048	TCLP
	¹ 0.074	TCLP
	<0.003	TCLP
	0.003	TCLP
	0.004	TCLP
	¹ 0.021	TCLP
	0.110	TCLP

< Denotes that the constituent was not detected at the detection limit specified in the table.
¹ Concentration is average of duplicate samples.

For a number of reasons, the Agency believes that BSC's June 1992 sampling and analysis program provides a compelling demonstration that the higher leachable lead concentrations observed in the January 1984 sampling event do not truly represent the leachable lead concentrations in the petitioned waste. First, BSC used a different protocol to sample the petitioned waste in January 1984. Samples collected during January 1984 were simply partial core samples taken from sections of the landfill; whereas, samples collected during the later sampling events, particularly the June 1992 event, were collected and composited according to guidance typically given to petitioners. In the early stages of its review of BSC's petition, EPA raised questions concerning the differences between leachable lead data from samples collected in January 1984 and samples collected in April 1984. BSC conducted its February 1985 sampling program in response to the Agency's request to

collect additional, full-core composite samples of the central portion of the landfill in order to provide more information about leachable lead concentrations in the petitioned waste. Leachable lead data from BSC's February 1985 composite sampling program, and subsequent composite sampling programs in September 1988 and June 1992, expanded the data set to a total of 28 data values, 21 of which correspond to composite samples. As shown in Table 6, the maximum leachable lead concentration for the subset of preliminary grab samples (1.61 mg/l) is significantly greater than the maximum leachable lead concentration for the subset of composite samples (0.11 mg/l). The Agency notes that even the average leachable lead concentration of the subset of preliminary grab samples (calculated to be 0.52 mg/l) is significantly greater than the maximum leachable lead concentration of the subset of composite samples (i.e., 0.11 mg/l). Therefore, the Agency believes the preliminary grab samples may not

be truly representative of the leachable lead concentrations in the petitioned waste.

Second, samples of BSC's petitioned waste collected in the two later sampling events (September 1988 and June 1992) were subjected to the TCLP, rather than the EP. As of September 25, 1990 the Agency adopted the TCLP as a replacement for and improvement upon the EP in its hazardous waste regulatory program. Thus, the Agency now requires that petitioners provide TCLP data rather than EP data in support of their petitions. The Agency believes that the maximum leachable lead concentration for the subset of samples analyzed using the TCLP (reported to be 0.11 mg/l) will be more representative of the potential mobility of lead from BSC's petitioned waste than the earlier EP results. When the maximum TCLP level for lead (0.11 mg/l) is input to the EPACML, this yields a compliance point concentration (0.0022 mg/l) well below the level of concern (0.015 mg/l). Therefore, the TCLP data clearly indicates that

leachable lead levels are not a concern in BSC's waste.

Finally, the Agency calculated the average of the leachable lead data in Table 6 for the EP and TCLP data sets, disregarding whether the samples were collected using grab or compositing methods. The 95% UCL values (as shown in Table 2) are 0.37 mg/l for the EP data, and 0.059 mg/l for the TCLP data. When input into the EPACML, these values would yield compliance point concentrations of 0.0077 mg/l and 0.0012 mg/l, respectively, for the EP and TCLP data. Averaging all the EP and TCLP data yields a 95% UCL of 0.26 mg/l, which would lead to a compliance point concentration of 0.0054 mg/l. Thus, no matter how the data are averaged, the 95% UCL well compliance point would still be below the level of concern (0.015 mg/l). Therefore, for these reasons, the Agency believes that leachable lead concentrations in the petitioned waste would not cause this waste to be considered a hazardous waste for Subtitle C purposes and are not of concern.

As reported in Table 1, the maximum concentration of total cyanide in the petitioned waste is 43.1 mg/kg. Because reactive cyanide is a specific subcategory of the general class of cyanide compounds, the maximum level of reactive cyanide will not exceed 43.1 mg/kg. Thus, the Agency concludes that the concentration of reactive cyanide will be below the Agency's interim standard of 250 mg/kg. See "Interim Agency Thresholds for Toxic Gas Generation", July 12, 1985, internal Agency Memorandum in the RCRA public docket. Furthermore, the maximum reported level of reactive sulfide in BSC's waste is 140 mg/kg. This concentration is below the Agency's interim standard of 500 mg/kg. See the "Interim Agency Thresholds for Toxic Gas Generation" document cited above. Therefore, reactive cyanide and sulfide levels in BSC's petitioned waste would not cause this waste to be considered a hazardous waste for Subtitle C purposes and are not of concern.

The Agency also evaluated the mobility of the hazardous organic constituents detected in the extract of samples of BSC's petitioned waste using the EPACML. The Agency used the maximum reported leachate concentrations (see Table 4) and BSC's estimate of 110,000 cubic yards of accumulated waste as inputs in the EPACML in order to assess the potential impacts of these constituents upon the groundwater. The calculated compliance-point concentrations for the seven organic constituents detected in

sample extracts are presented in Table 7.

TABLE 7.—EPACML: CALCULATED COMPLIANCE-POINT CONCENTRATIONS (MG/L) LANDFILL WASTE

Constituents	Maximum compliance-point concentrations ¹	Levels of regulatory concern ²
Ethyl benzene	0.00075	0.7
Methylene chloride ...	0.0018	0.005
Naphthalene	0.00027	1.0
Phenol	0.00058	20.0
Toluene	0.00023	1
1,1,1-Trichloroethane	0.00013	0.2
Xylene	0.0018	10

¹Based on an estimated waste volume of 110,000 cubic yards in the landfill, the EPACML model calculated a dilution/attenuation factor of 48.

²See "Docket Report on Health-based Levels and Solubilities Used in the Evaluation of Delisting Petitions, Submitted Under 40 CFR § 260.20 and § 260.22", December 1994, located in the RCRA public docket.

The Agency believes that two of the seven constituents may not truly be present in the TCLP extract of BSC's waste. Methylene chloride is a common laboratory contaminant that also was observed in blanks for some of the samples. Furthermore, methylene chloride was not detected in any of the samples analyzed for total constituent levels. Similarly, 1,1,1 trichloroethane was not found in the total constituent analysis, and was detected only once out of eight samples in the TCLP analysis at a level (0.006 mg/l) close to the detection limit (0.005 mg/l). However, the Agency evaluated the reported maximum concentration for these two constituents to examine their potential risk. For all organics detected, the compliance point concentration (using maximum TCLP data in Table 7) are below the Agency's health-based level of concern.

The Agency did not evaluate the mobility of the remaining hazardous organic constituents from BSC's petitioned waste because they were not detected in the TCLP extracts using the appropriate SW-846 analytical test methods (see Table 4). As stated previously, for RCRA delistings, the Agency does not evaluate non-detectable concentrations of a constituent of concern in its modeling efforts if the non-detectable value was obtained using the appropriate analytical method.

The Agency concluded after reviewing BSC's processes that no other hazardous constituents, other than those tested for, are likely to be present in BSC's petitioned waste. The Agency

notes that, in its April 1989 proposal to deny BSC's petition, it concluded that BSC had failed to provide sufficient justification that the waste does not contain additional hazardous constituents. In particular, BSC had attempted to demonstrate, using an approach that relied on analyzing waste samples for a limited set of "indicator" parameters, that hazardous constituents were not present in the waste at levels of concern. The Agency believed that this original demonstration was inadequate for a number of reasons (see 54 FR 14101, April 7, 1989). As described previously in today's notice, BSC conducted additional sampling of the waste in June 1992, specifically analyzing samples for total constituent concentrations of 70 volatile organic and semivolatile organic constituents. Based on a re-evaluation of BSC's petition, including the new analytical results from the June 1992 sampling event, the Agency believes that no other hazardous constituents are likely to be present in BSC's petitioned waste. In addition, on the basis of test results and information provided by BSC, pursuant to § 260.22, the Agency concludes that the petitioned waste does not exhibit any of the characteristics of ignitability, corrosivity, or reactivity. See § 261.21, § 261.22, and § 261.23, respectively.

The Agency also re-evaluated groundwater monitoring data available for BSC's landfill, including data for groundwater samples collected from March 1985 through July 1992. The concentrations of all constituents monitored in the groundwater were detected in downgradient wells at concentrations below delisting health-based levels, except for lead, benzene, bis(2-ethylhexyl)phthalate, 1,1-dichloroethane, and 2,4,6-trichlorophenol. During this monitoring period, these constituents were detected at concentrations above delisting health-based levels in at least one upgradient well.

In its re-evaluation of the groundwater monitoring data, the Agency conducted statistical analyses for lead, bis(2-ethylhexyl)phthalate, 2,4,6-trichlorophenol, and 1,1-dichloroethane to determine if downgradient well concentrations statistically exceeded background well concentrations (see the docket for today's proposed rule). Based on the results of these analyses, the Agency concluded for the delisting evaluation that the downgradient concentrations of lead, bis(2-ethylhexyl)phthalate, 1,1-dichloroethane, and 2,4,6-trichlorophenol are not significantly greater than background well concentrations. For this reason, the

Agency believes that the petitioned waste is unlikely to be the source of the detected groundwater contamination.

The Agency also considered the significance of hexachlorobenzene, which was detected in the groundwater at one downgradient well during one round of sampling. This hexachlorobenzene concentration was reported as an estimated value (rather than an actual detected value) of 0.012 mg/l, based on a detection limit of 0.050 mg/l. However, hexachlorobenzene has not been reported as detected in any wells monitoring the HWM-2 landfill during any other round of analysis throughout the monitoring history of the area. Furthermore, this constituent was not detected in the petitioned waste, based on total constituent analyses of eight samples and TCLP leachate analyses of nine samples. The Agency, therefore, believes that hexachlorobenzene is not present at levels of concern for delisting.

The Agency evaluated BSC's demonstration that benzene detected in the downgradient wells actually originated from a source other than the petitioned waste. BSC's demonstration included an evaluation of each waste type placed in the HWM-2 landfill. BSC presented information to show that, based on the nature of the processes from which the components of the petitioned waste were generated (*i.e.*, ammonia still lime sludge, blast furnace thickener sludge, basic oxygen furnace thickener sludge, sinter plant sludge, cold rolling mill wastewater treatment sludge, and dredging spoils from Smokes Creek), benzene is not expected to be present in the petitioned waste at levels of concern. Specifically, BSC provided information concerning benzene concentrations in each of the individual waste components placed in the landfill. This information included: (1) Descriptions of the processes generating the blast furnace sludge, basic oxygen furnace sludge, and ammonia still lime sludge, (2) results from the analysis of extracts of samples of each of the individual waste components, and (3) results from the analysis of raw wastewaters from which these waste components originated. (A summary of the analytical results quantifying the concentrations of benzene in the individual waste components of the landfill is contained in the docket).

The information provided by BSC supports its claim that benzene is not expected to be present in the petitioned waste at levels of concern. In addition, the Agency notes that benzene has not been detected in total constituent analyses of 20 samples of the petitioned

waste, nor in leaching analyses of nine samples of the petitioned waste. Finally, three solid waste management units (designated as acid tar pits), which have received a large quantity of waste materials known to contain high concentrations of benzene (up to 29,000 mg/kg), are located approximately 1,600 feet upgradient of the downgradient wells monitoring the landfill containing the petitioned waste. In addition to a detailed characterization study of these tar pits, BSC provided calculations of the average groundwater velocity to demonstrate that contaminants released from these tar pits could have reached monitoring wells in the HWM-2 landfill area. For these reasons, the Agency believes that BSC's assertion regarding a potential upgradient source of benzene, other than the petitioned waste, is valid.

As mentioned earlier in this notice, the Agency also received more recent groundwater monitoring data from State and EPA Regional authorities. Such additional data were received in late 1993 and 1994, after the Agency had performed its statistical analyses of the data collected from March 1985 through July 1992 (as submitted by BSC in its petition and supplemental information). The Agency concluded that it is not necessary to perform further statistical analyses to incorporate the more recent data. The earlier data (March 1985 to July 1992) were sufficient for the Agency to conduct statistical analyses, and to conclude that the contaminants of concern were not released from the landfill containing the petitioned waste (*i.e.*, the existing groundwater contamination at the site is not attributable to the petitioned waste). In addition, based on the Agency's preliminary review of the more recent data, it appears that those data would not lead to any significant change in estimated constituent concentrations that would affect the earlier evaluation. The Agency, therefore, believes there is no need to devote additional Agency time and resources, which are scarce, to conducting further statistical analyses to include the additional groundwater monitoring data. The Agency has placed the groundwater monitoring data received from State and EPA Regional authorities in the RCRA public docket for today's notice for public comment.

During its evaluation of BSC's petition, the Agency also considered the potential impact of the petitioned waste via nongroundwater routes. With regard to airborne dispersal of waste, the Agency evaluated the potential hazards resulting from airborne exposure to waste contaminants from the petitioned waste using an air dispersion model for releases from a landfill. The results of

this evaluation indicated that there is no substantial present or potential hazard to human health from airborne exposure to constituents from BSC's petitioned waste. (A description of the Agency's assessment of the potential impact of airborne dispersal of BSC's waste is presented in the RCRA public docket for today's final rule.)

The Agency also considered the potential impact of the petitioned waste via a surface water route. The Agency believes that contaminant structures at municipal solid waste landfills can effectively control surface water runoff, as the recently promulgated Subtitle D regulations (see 56 FR 50978, October 9, 1991) prohibit pollutant discharges into surface waters. Furthermore, if the waste were to remain on-site, the HWM-2 landfill containing the petitioned waste is currently surrounded by a continuous berm that precludes runoff from the unit. Therefore, any significant future releases of contaminants from the petitioned waste at its current location via a surface water route are highly unlikely. If such surface water releases should occur, any releases and the HWM-2 unit are subject to the corrective action provisions of RCRA. In fact, if BSC's waste in the HWM-2 unit were delisted, the unit would remain a solid waste management unit under RCRA, and would be closed in accordance with an approved New York State plan.

While some contamination of surface water is possible through runoff from a waste disposal area (*i.e.*, storm water), the Agency believes that the dissolved concentrations of any hazardous constituents in the runoff will tend to be lower than the extraction procedure test results reported in today's notice because of the aggressive acidic medium used for extraction in the TCLP. The Agency also believes that, in general, leachate derived from the waste will not directly enter a surface water body without first traveling through the saturated subsurface where dilution of hazardous constituents may occur.

In addition, any transported contaminants would be further diluted in the receiving water body. Significant releases to surface water due to erosion of undissolved particulates in runoff are also unlikely, due to the controls noted above. Nevertheless, the Agency evaluated the potential hazards resulting from releases from a landfill to a nearby stream, as well as possible releases from the current landfill located on-site and adjacent to Lake Erie. The results of these evaluations indicate that BSC's waste would not present a threat to human health or the environment.

(See the docket to today's rule for a description of this analysis).

E. Conclusion

The Agency believes that BSC has demonstrated that the waste contained in its on-site landfill is not hazardous for Subtitle C purposes. The Agency believes that the sampling procedures used by BSC were adequate, and that the samples collected from the landfill are representative of the waste contained in the landfill.

The Agency, therefore, is proposing to withdraw its original denial of BSC's petition, and is proposing that BSC's petitioned waste be delisted as non-hazardous and thus not subject to regulation under RCRA Subtitle C. The Agency proposes to grant an exclusion to Bethlehem Steel Corporation's Lackawanna, New York, facility for its mixture of ammonia still lime sludge and solid waste described in its petition as EPA Hazardous Waste No. K060 and contained in its on-site HWM-2 landfill. The Agency's decision to exclude this waste is based on process descriptions, results from the analysis of samples of the petitioned waste, and results from the analysis of groundwater monitoring data available for BSC's landfill. If the proposed rule becomes effective, the waste contained in the HWM-2 landfill would no longer be subject to regulation under 40 CFR Parts 262 through 268 and the permitting standards of 40 CFR Part 270. Although management of the wastes covered by this petition would, upon final promulgation, be relieved from Subtitle C jurisdiction, the waste would remain a solid waste under RCRA. As such, the waste must be handled in accordance with all applicable Federal and State solid waste management regulations.

III. Limited Effect of Federal Exclusion

This proposed rule, if promulgated, would be issued under the Federal (RCRA) delisting program. States, however, are allowed to impose their own, non-RCRA regulatory requirements that are more stringent than EPA's, pursuant to section 3009 of RCRA. These more stringent requirements may include a provision which prohibits a Federally issued exclusion from taking effect in the States. Because a petitioner's waste may be regulated under a dual system (*i.e.*, both Federal and State programs), petitioners are urged to contact State regulatory authorities to determine the current status of their wastes under the State laws.

Furthermore, some States are authorized to administer a delisting program in lieu of the Federal program,

i.e., to make their own delisting decisions. Therefore, this proposed exclusion, if promulgated, would not apply in those authorized States. If the petitioned waste will be transported to any State with delisting authorization, BSC must obtain delisting authorization from that State before the waste may be managed as nonhazardous in that State.

IV. Effective Date

This rule, if made final, will become effective immediately upon final publication. The Hazardous and Solid Waste Amendments of 1984 amended Section 3010 of RCRA to allow rules to become effective in less than six months when the regulated community does not need the six-month period to come into compliance. That is the case here, because this rule, if finalized, would reduce the existing requirements for persons generating hazardous wastes. In light of the unnecessary hardship and expense that would be imposed on this petitioner by an effective date six months after publication and the fact that a six-month deadline is not necessary to achieve the purpose of Section 3010, EPA believes that this exclusion should be effective immediately upon final publication. These reasons also provide a basis for making this rule effective immediately, upon final publication, under the Administrative Procedure Act, pursuant to 5 USC 553(d).

V. Regulatory Impact

Under Executive Order 12866, EPA must conduct an "assessment of the potential costs and benefits" for all "significant" regulatory actions. The effect of this proposed rule would be to reduce the overall costs and economic impact of EPA's hazardous waste management regulations. This reduction would be achieved by excluding waste from EPA's lists of hazardous wastes, thereby enabling this facility to treat its waste as non-hazardous. Therefore, this proposed rule would not be a significant regulatory action under the Executive Order, and no assessment of costs and benefits is necessary. The Office of Management and Budget (OMB) has also exempted this proposed rule from the requirement for OMB review under Section (6) of Executive Order 12866.

VI. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601-612, whenever an agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the impact of the rule on small

entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). No regulatory flexibility analysis is required, however, if the Administrator or delegated representative certifies that the rule will not have a significant economic impact on a substantial number of small entities.

This rule, if promulgated, will not have an adverse economic impact on any small entities since its effect would be to reduce the overall costs of EPA's hazardous waste regulations and would be limited to one facility. Accordingly, I hereby certify that this proposed regulation, if promulgated, will not have a significant economic impact on a substantial number of small entities. This regulation, therefore, does not require a regulatory flexibility analysis.

VII. Paperwork Reduction Act

Information collection and record-keeping requirements associated with this proposed rule have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (Pub.L. 96-511, 44 U.S.C 3501 *et seq.*) and have been assigned OMB Control Number 2050-0053.

VIII. Unfunded Mandates Reform Act

Under section 202 of the Unfunded Mandates Reform Act of 1995 ("UMRA"), Public Law 104-4, which was signed into law on March 22, 1995, EPA generally must prepare a written statement for rules with Federal mandates that may result in estimated costs to State, local, and tribal governments in the aggregate, or to the private sector, of \$100 million or more in any one year. When such a statement is required for EPA rules, under section 205 of the UMRA EPA must identify and consider alternatives, including the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. EPA must select that alternative, unless the Administrator explains in the final rule why it was not selected or it is inconsistent with law. Before EPA establishes regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must develop under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, giving them meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising them

on compliance with the regulatory requirements.

The UMRA generally defines a Federal mandate for regulatory purposes as one that imposes an enforceable duty upon State, local, or tribal governments or the private sector. EPA finds that today's proposed delisting decision is deregulatory in nature and does not impose any enforceable duty on any State, local, or tribal governments or the private sector. In addition, the proposed delisting does not establish any regulatory requirements for small governments and so does not require a

small government agency plan under UMRA section 203.

List of Subjects in 40 CFR Part 261

Hazardous waste, Recycling, Reporting and Recordkeeping requirements.

Authority: Sec. 3001(f) RCRA, 42 U.S.C. 6921(f).

Dated: November 6, 1995.

Michael H. Shapiro,
Director, Office of Solid Waste.

For the reasons set out in the preamble, 40 CFR Part 261 is proposed to be amended as follows:

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for Part 261 continues to read as follows:

Authority: 42 U.S.C 6905, 6912(a), 6921, 6922, and 6938.

2. In Table 2 of Appendix IX, Part 261 add the following wastestream in alphabetical order by facility to read as follows:

Appendix IX—Wastes Excluded Under §§ 260.20 and 260.22.

TABLE 2.—WASTES EXCLUDED FROM SPECIFIC SOURCES

Facility	Address	Waste description
* Bethlehem Steel Corporation	* Lackawanna, New York	* Ammonia still lime sludge (EPA Hazardous Waste No. K060) and other solid waste generated from primary metal-making and coking operations. This is a one-time exclusion for approximately 110,000 cubic yards of waste contained in the on-site landfill referred to as HWM-2. This exclusion was published on [insert date of final rule].
*	*	*

[FR Doc. 95-29897 Filed 12-6-95; 8:45 am]
BILLING CODE 6560-50-P

DEPARTMENT OF DEFENSE

GENERAL SERVICES ADMINISTRATION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

48 CFR Part 9

[FAR Case 95-007 Correction]

Federal Acquisition Regulation; Corrections

AGENCIES: Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

ACTION: Correction.

SUMMARY: The Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council are issuing a correction to FAR case 95-007, Responsibility Determinations, published at 60 FR 55960, November 3, 1995. The correction reflects the changes implemented by Federal Acquisition Circular 90-32, FAR case 94-790, Acquisition of Commercial Items, Item III.

FOR FURTHER INFORMATION CONTACT: FAR Secretariat, Room 4037, GS Building, Washington, DC 20405, (202) 501-4755. Please cite correction to FAR case 95-007.

Correction

PART 9—CONTRACTOR QUALIFICATIONS

In proposed rule document 95-27294 on page 55960 in the issue of Friday, November 3, 1995, in the third column,

under amendatory instruction 3, the revised text should read as follows:

9.106-1 Conditions of preaward surveys.

(a) A preaward survey is normally required only when the information on hand or readily available to the contracting officer, including information from commercial sources, is not sufficient to make a determination regarding responsibility. However, if the contemplated contract will have a fixed price at or below the simplified acquisition threshold or will involve the acquisition of commercial items (see part 12), the contracting officer should not request a preaward survey unless circumstances justify its cost.

* * * * *
Dated: December 1, 1995.

Edward C. Loeb,
Acting Director, Office of Federal Acquisition Policy.

[FR Doc. 95-29773 Filed 12-6-95; 8:45 am]
BILLING CODE 6820-EP-M