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WATER POLLUTION CONTROL LEGISLATION
REFUSE ACT PERMIT PROGRAM

Part 9

GOVERNMENT
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HEARINGS
BEFORE THE
SUBCOMMITTEE ON
AIR AND WATER POLLUTION
OF THE
COMMITTEE ON PUBLIC WORKS
UNITED STATES SENATE
NINETY-SECOND CONGRESS

FIRST SESSION
ON

S. 75, S. 192, S. 280, S. 281, S. 523, S. 573, S. 601, S. 679, S. 927,
S. 1011, S. 1012, S. 1013, S. 1014, S. 1015, and S. 1017

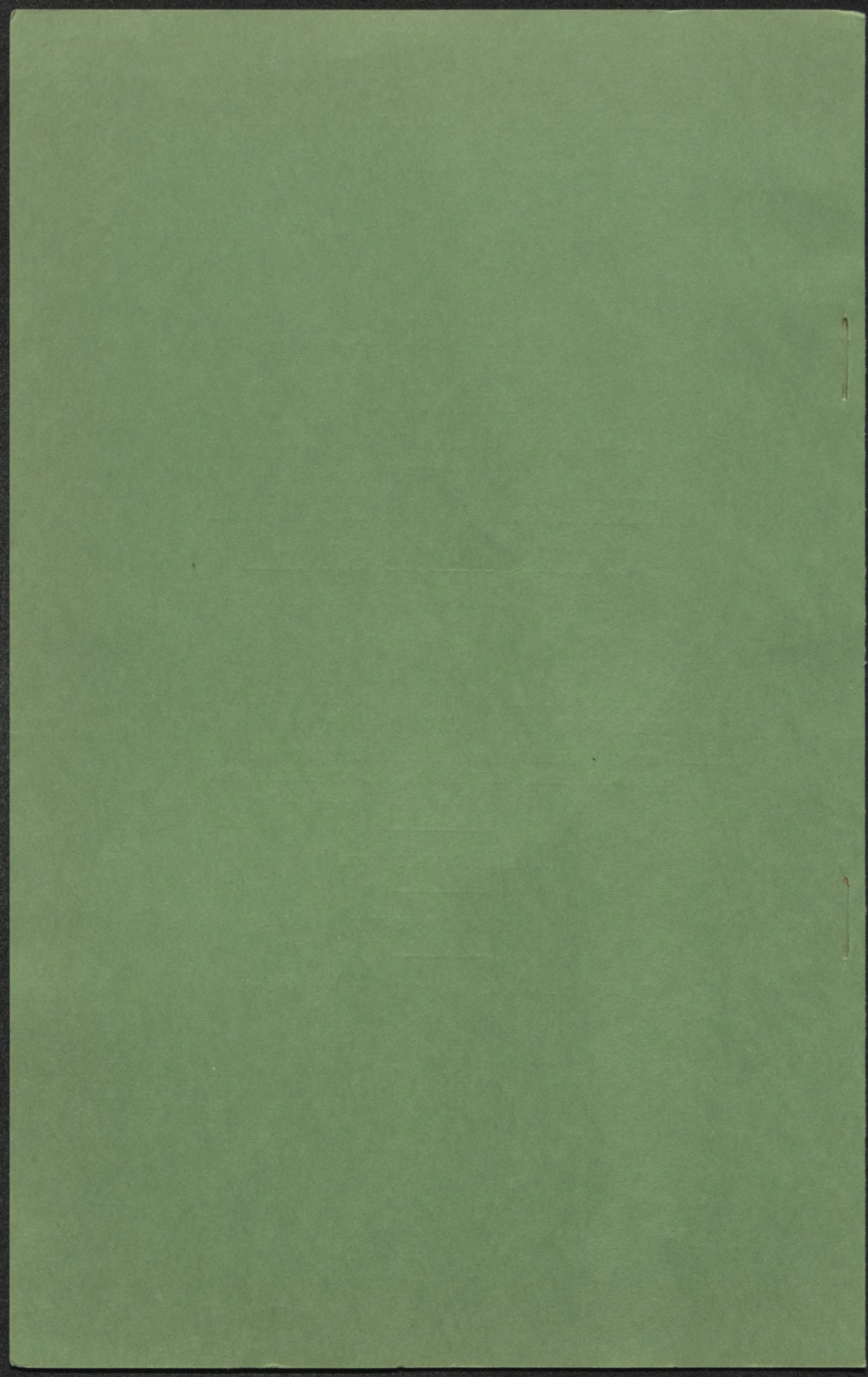
BILLS AMENDING THE FEDERAL WATER POLLUTION CONTROL
ACT AND OTHER PENDING LEGISLATION RELATING
TO WATER POLLUTION CONTROL

JUNE 22 AND 23, 1971

SERIAL NO. 92-H27

Printed for the use of the Committee on Public Works





WATER POLLUTION CONTROL LEGISLATION
REFUSE ACT PERMIT PROGRAM
Part 9

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HEARINGS

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CHRONICLES

AT THE BIRTH OF THE NATION

THE GREAT YEAR 1776

In the month of June, 1776, the Continental Congress fled from Philadelphia to Lancaster, and then to York, and finally to the city of Lancaster, where they remained for a short time.

On the 22d of June, 1776, the British evacuated Philadelphia.

The British evacuated Philadelphia on the 26th of September, 1776, and moved back to New York City. The Continental Congress followed them and fought the Battle of Red Bank on the 1st of December, 1776.

ADDITIONAL VOLUMES IN THE SERIES

For a complete list of the volumes in the series, please refer to the back cover of this volume. The series is published by the American Historical Association, and is available in both hardcover and paperback editions.

REFUSE ACT PERMIT PROGRAM

TUESDAY, JUNE 22, 1971

U.S. SENATE,
SUBCOMMITTEE ON AIR AND WATER POLLUTION
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to call, in room EF-100 the Capitol, Senator Edmund S. Muskie (chairman of the subcommittee) presiding.

Present: Senators Randolph, Muskie, Tunney, Cooper, Boggs, Beall, and Buckley.

Senator MUSKIE. I wonder if we might begin.

I thought we might get started because we are likely to be running to the floor for votes.

I would like to take maximum advantage of our witnesses. There will be a vote at 10:20 and another one at about 11:45.

I would suggest that we vote quickly at the desk so that we can come back and get maximum use of the time between the two votes.

I would also like to express my appreciation to you and your people for coming here this morning.

This invitation resulted from Senator Randolph's concern about a letter which he had received from the steel industry on the implications of the guidelines issued by the department and agency with respect to the permit program.

I will place a copy of that letter in the record.

(The letter referred to follows:)

AMERICAN IRON & STEEL INSTITUTE,
New York, N.Y., June 15, 1971.

HON. JENNINGS RANDOLPH,
*Chairman, Committee on Public Works,
U.S. Senate, Washington, D.C.*

DEAR MR. CHAIRMAN: Enclosed is a memorandum recently submitted by the domestic steel industry to the Corps of Engineers and the Environmental Protection Agency, commenting upon the deadline of July 1 for filing application forms for discharge permits under the 1899 Refuse Act. Our statement also contains information concerning the economic impact of such requirement on the steel industry.

As this requirement pertains only to monitoring, rather than to capital expenditures for equipment to improve water quality control, we thought you would be interested in the attached statement.

With best wishes,
Sincerely,

JOHN P. ROCHE,
President.

Enclosure.

(4291)

AMERICAN IRON & STEEL INSTITUTE,
New York, N.Y., June 2, 1971.

Lt. Gen. FREDERICK J. CLARKE,
Chief of Engineers, Corps of Engineers,
Washington, D.C.

DEAR GENERAL CLARKE: Reference is made to the proposed Corps of Engineers Application Form for Discharges which must be filed with the Corps by July 1, 1971. We are submitting the statement appeared hereto on behalf of the American Iron and Steel Institute, whose member companies last year accounted for more than 95% of the raw steel produced in the United States.

Our statement provides commentary on the deadline for filing of July 1, 1971, and upon the cost impact of such filing to the steel industry.

In view of the fact that extensive engineering time and manpower will be required to prepare the application forms, we earnestly request that the deadline for filing the subject application forms be extended until January 1, 1972. This will provide the necessary time for engineering work requisite for the preparation of the forms.

Additionally, we wish to emphasize that the heavy cost burden described in the attached statement is associated only with monitoring outfalls, and not with future expenditures for water pollution control equipment which may be required to improve water quality itself.

We urge that consideration be given to extension of the deadline for filing as requested.

Sincerely,

JOHN P. ROCHE,
President.

TECHNICAL PROBLEMS WITH PERMIT APPLICATION

COMMENTS AND RECOMMENDATIONS

The following comments of the steel industry with regard to the Corps of Engineers Application Form for Discharges are intended to point out the burdensomeness of the task and the extreme difficulty of completing the applications for every outfall by July 1, 1971.

Deadline

The deadline of July 1, 1971 appears unreasonable because most steel companies have only received, unofficially, copies of the final permit applications and instructions as late as June 1, 1971. Thus, 30 days before the deadline, we still did not have printed forms available for all outfalls. It is strongly recommended that industry be given a minimum of 90 days from receipt of the permit applications to submit the forms, assuming that the data is readily available.

Completion of the forms requires that several maps and drawings plus other descriptive information be prepared for each outfall and that analysis of the water for numerous parameters be reported for each outfall and intake. To illustrate the magnitude of the job of assembling this information, a large steel company may have up to 300 outfalls and 100 intakes located in many plants throughout the country; while it is estimated that the steel industry has over 1500 outfalls and 500 intakes. Considerable engineering time and manpower will have to be expended for each outfall and intake to initially prepare the application.

The analysis presents an even greater timing problem. Since steel companies do not have available analytical data on each discharge stream for all of the parameters required, new samples will have to be obtained for every outfall and intake. There is considerable question whether there are enough analytical facilities available, both inhouse and commercial, having all of the necessary equipment to analyze before July 1 just *one* sample from each steel industry outfall and intake for all of the parameters required. Since the application form requests data on average pounds per day and maximum pounds per day, a series of flow measurements and analyses would be required over period of time, which makes the July 1 deadline even more unattainable. In view of these facts, it is recommended that the requirements for permit application be reconsidered.

Costs

We also wish to point out the exorbitant costs involved in obtaining the required analyses. The instructions encompassing requirements not only for average flows and analysis but maximum weight discharges for individual components, in pounds per day would require continuous flow measurement and continuous analysis of all components in all outfalls and intakes. For many parameters this represents a physical impossibility. Even more importantly, it represents expenditures in untold millions of dollars for measuring and monitoring equipment, plus the acquisition of a tremendous mass of data, much of which is totally unnecessary. For example, a moderate program would involve installations of a measuring and proportional sampling device on each outfall and intake at an estimated cost of \$50,000 each. Analysis of a daily sample for the 11 parameters specified in Part A of Eng Form 4345-1, May 71, would cost approximately \$100 per day or \$36,000 per year. Thus the total cost for the steel industry, with an estimated 1500 outfalls and 500 intakes, would be \$100,000,000 for installation and \$70,000,000 per year for daily analysis of just the 11 general parameters. To these costs would also be added the cost of analyzing the additional parameters for specific industries, which we understand will be required at a later date. These analyses for the steel industry could be double the cost of analyzing for the 11 general parameters, or \$14,000,000 per year. There is no indication that these data would have any significant relation to water quality.

While, in some few cases, it may be desirable to monitor some specific components in certain outfalls, a permit program should realistically be based on a finite program of representative composite, or grab, samples. As a logical program, we suggest that analysis of one 24-hour sample for each discharge obtained during a period of normal plant operation be sufficient for purposes of the application form and that reporting of maximum loads not be required.

It should be noted that the costs of chemical analyses discussed above are in addition to the substantial engineering and clerical costs involved in preparing the drawings and filling out the application forms.

Suggested meeting

The present permit system, including the parameters to be analyzed and the frequency of analysis were determined by the EPA independent of consultation with the steel industry. We feel it is extremely important that there be a technical meeting between the industry and EPA to discuss and resolve these points cooperatively.

Senator MUSKIE. The committee thought it would be useful if you would brief us on what has taken place, what your reaction is to the problems which have surfaced, and the status of the program at this point.

It is difficult for us to move ahead with the water pollution legislation without an up-to-date understanding of where the permit program stands.

We want to be informal and as complete as can be. The members, some of whom are not here yet, but who were at the session last week, I am sure, would have many questions they would like to ask.

STATEMENT OF HON. RUSSELL TRAIN, CHAIRMAN, COUNCIL ON ENVIRONMENTAL QUALITY; ACCOMPANIED BY BRIG. GEN. RICHARD H. GROVES, U.S. ARMY, CORPS OF ENGINEERS; AND THOMAS CARROLL, ASSISTANT ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY

Mr. TRAIN. Thank you, Mr. Chairman.

Speaking for myself and for General Groves and Mr. Carroll of the EPA, I know we all appreciate the opportunity to be with you this morning.

This is a very important subject and there is a lot of public discussion and concern and perhaps some uncertainty about it so I think that any opportunity of this sort to improve the committee's understanding as to how this is proceeding and for us to understand better some of your concerns, can only be very valuable.

I hasten to say my own familiarity with the details of administration of the program is not terribly great.

I do not stay very close to the day to day administration, especially with the responsibility of the corps and of EPA.

One thing that our Council tries to do is keep out of the operational responsibilities of the agencies to the extent that we can.

We are, of course, involved in policy, such as the policy that went into the development of the permit program and its announcement by the President last December, and we recognize we can't separate policy from administration in any very clear sense and that many of the administrative and enforcement aspects of the program really do go to overall policy as well.

So I am not saying that I have no concern over the matters that are before you but simply pointing out that perhaps Mr. Carroll and General Groves may be more familiar with the specific aspects of administration.

I have glanced at the letter from the Iron & Steel Institute to Chairman Randolph. I gather the two points that they bring up primarily go to the time for compliance, they are requesting an extension of the July 1 effective date of the program, I think by some 6 months. I am not too sure whether it is 3 months or 6 months, but a substantial extension of time. They also refer, I gather in the letter, to their own estimates of the cost of the program which they urge upon you as being excessively burdensome.

Senator MUSKIE. I think what they ask is 90 days from receipt of the permit application.

Mr. TRAIN. On both of these points let me make the general comments and be more specific, I don't think this program is one that has been sprung without notice upon industry at all.

Now it is true, I believe, as they point out in the letter, that application forms may not have been distributed until the first of June or something on that order, but the general permit program announced by the President and outlined in draft Corps regulations, last December was the subject of extensive briefings of industry groups, I am sure including the Iron & Steel Institute. At or about that same time the committees of Congress and, of course, individual Members of Congress received similar briefings.

I was questioned, as I recall, by your committee last August at the hearings on our first annual report on Environmental Quality about a permit program and the implementation of the Refuse Act and I indicated at that time that the corps, particularly, was moving ahead as rapidly as possible with the development of the implementation of a permit program. You may also recall that Congress supplemented the appropriations for the corps so they could start administration of the permit program.

It has also been brought to my attention, of course, that the 1899 act in section 10, which is the section which deals not with the Refuse

Act aspects but with the obstructions to navigation aspects, has called for many years for permit applications, detailed drawings, specifications with respect to discharges, and all of this I think General Groves would be able to amplify on.

I think many of the things we are talking about have been matters that have been required for some time and whether they have been enforced over the years is something perhaps else again, but my main point here is I don't think this has been a matter of taking industry really by surprise. They have had a great deal of notice and simply based upon the record which is made in that particular letter I would not be persuaded that a case has been made for extension.

Obviously the administration of any program such as this has to be an exercise of reasonable discretion in the handling of applications of this sort, taking into account the particular circumstances, but that is a far cry from saying that we should at this point give a blanket extension to discharges in the Nation's waterways under the permit program.

Insofar as costs are concerned I have no way of analyzing these costs myself.

I would note that the permit program isn't requiring new water quality standards; the permit program is simply a mechanism for bringing more certainty and efficiency and effectiveness into the implementation of the water quality law.

Perhaps these gentlemen could amplify on that. I think for an opener that might be my remarks.

Senator MUSKIE. I think I would like to divide the discussion in two sections, if the committee has no objection.

First of all, the discussion will be dealing with specific points raised by the steel industry's memorandum. Then we can evaluate what the industry has said.

And then, I would like to get to the broader question of how this permit program and whatever guidelines established under it relate to the water quality standards program which we are rewriting in this legislation.

What we are concerned about is whether we are going to have two parallel water quality programs, one developed under the permit program, for which there are very skimpy statutory guidelines; all you have is the 1899 law.

We want to know what kind of water quality standards we are setting up in that program, what its relationship may be to the program which we are undertaking to revise.

May I say to the members of the committee who have just come in that Mr. Train has just given us a general opening statement. I have suggested to him that we divide our discussion into two sections; the first section dealing specifically with the positions raised by the steel industry's letter, and the second dealing with the broader question of the relationship between the permit program and the water quality standards program.

General Groves, I wonder if you would like to address yourself now to the first part of that discussion, the steel industry's letter and the points that have been raised.

I would like to suggest to Members that we vote quickly at the desk so that we can come back. There will be another vote at 11:45. If we go up and come back, we can have quite a bit of time. Why don't we do that now.

(Whereupon, a short recess was taken.)

Senator MUSKIE. I wonder if we might start. Senators are notably slow in returning to the scene of action.

General Groves, I think you may proceed in any way that you like, and then we will turn to questions of the committee.

General GROVES. Thank you, Mr. Chairman.

I believe it would be useful for the committee if we reviewed very briefly the chronology of events relating to the permit program as they would be visible to industry.

I go back in the beginning to May 1970. At that time we issued notice that as a part of the section 10 permit we would require detailed description of effluents. This went out to the field, the section 10 permits are now being received on that basis.

The next significant event in the period July-September where Mr. Jordan, the special assistant for Civil Works, appeared twice before the Senate Commerce Committee and announced we would have this permit program.

December 23 was the Executive order announcing it and at the same time the President announced the effective date of July 1.

On December 31 we published draft regulations in the Federal Register and we specifically described at that time what would be required in the way of information on discharges, we asked for comments.

On the 23d of April the permit form was published in the Federal Register for comments.

On the 7th of April the final regulations were published in the Register.

On the 13th of April we distributed the application form that we intended to use. It was available to industry, we would expect, about the 25th.

However, on the 16th of April it was included in the "Environmental Reporter."

On the 6th of May there were two meetings held in Washington with industry, one under the sponsorship of the Office of Management and Budget and another one under the auspices of the Department of Commerce, the National Industrial Pollution Control Council.

This led to some revisions in the form at the request of industry, primarily, which is the reason why the final form has been delayed until recently.

Based also on those discussions we agreed to slip the due date on the information required by what is now section 2(b) of the permit application form, the quantitative data relating to effluents.

At the same time we issued instructions to our field and we also made available to the industry through the news media that we would continue to use the old application form, anybody who had filed one could continue to use it and we would accept it.

On the 21st of May it was officially announced by Mr. Ruckelshaus and Secretary Beal that section 2(b) would be slipped until October 1. Again we said that old forms previously filed would be processed.

On the 22nd of May we issued the revised form, part I, part II, and part II(A).

We expect that this was probably available to industry at the end of May.

In the meantime during the month of May we had a number of conferences all over the country with industry, with the associations representing them, the high light was probably on the 26th of May when there was a closed circuit television program in which all agencies participated jointly with the National Association of Manufacturers.

The current status of the program forms as of today is part I is out, part II and part II(A) are out, and in the hands of industry; part II(B), the part that is not needed until October 1, is now being printed, we expect it will be available on the first of July.

The permit form which is now being finalized, we expect this to be done on Friday and it will be available soon thereafter.

Turning now to the matter raised in the letter, we feel on this basis that the July 1 deadline is not unreasonable because industry has certainly been aware or should have been aware for a long time that July 1 was coming upon it and the information that they were required to furnish or will be required to furnish again has been well noted.

I should point out, sir, that most of the people we are dealing with in this letter, the steel industry, should probably have section 10 permits. They probably are in need, if they don't have them, of a section 10 permit and if that was the case they would also have on file with us in the proper form the necessary maps and drawings in order to obtain a section 13 permit and they probably would also have on file with us detailed information on the effluents, so they may well in many occasions have that.

Senator MUSKIE. I wonder if you would describe what a section 10 permit is, what a section 13 permit is.

General GROVES. Yes, sir.

We are talking about two sections of the 1899 River and Harbors Act. Section 10 requires that anyone who constructs or places an obstruction to navigation in a navigable water can do so only with a permit from the Secretary of the Army.

Section 13 in the Refuse Act says that no one can deposit or permit to flow into a navigable waterway of the United States or a tributary thereof or place it on the bank in such a way that it will enter those waterways any refuse without a permit from the Secretary of the Army with the exception that refuse flowing in a liquid state from streets or sewers is accepted.

Section 10 permits we have been requiring for many, many years, we process about 8,000 applications per year.

We estimate that there are probably on the order of 100,000 of these permits in effect today.

Senator MUSKIE. And do those permits include effluents?

General GROVES. Since last May, sir, we have required detailed information on effluents passing through a section 10 structure, May of 1970.

Senator MUSKIE. What kinds of standards were related to the section 10 permit before May?

General GROVES. This basic information—I can provide to you the regulation for the record.

Senator MUSKIE. That would be helpful.

(The regulation referred to follows:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, D.C., March 18, 1968.

Regulation No. 1145-2-303.*

CIVIL REGULATORY FUNCTIONS: PERMITS—POLICY, PRACTICE, AND PROCEDURE

1. *Purpose and Scope.* This regulation prescribes the policy, practice and procedure to be used by all Corps of Engineers installations and activities in connection with the issuance of permits for construction or other work in and adjacent to navigable waters of the United States.

2. *Laws Authorizing Issuance of Permits.*

a. Section 10 of the River and Harbor Act approved 3 March 1899 (30 Stat. 1151; 33 U.S.C. 403) prohibits the placing of any structure in or over any navigable water of the United States outside established Federal harbor lines, or where no harbor lines have been established, or excavating from or depositing material in such waters, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. The instrument of authorization is designated as a permit. The authority of the Secretary of the Army to prevent obstructions to navigation in the navigable waters of the United States was extended to artificial islands and fixed structures located on the Outer Continental Shelf (43 U.S.C. 1333(f)).

b. Section 14 of the River and Harbor Act approved 3 March 1899 (30 Stat. 1152; 33 U.S.C. 408) provides that the Secretary of the Army on the recommendation of the Chief of Engineers may grant permission for the temporary occupation or use of any sea wall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the United States.

c. Section 1 of the River and Harbor Act approved 13 June 1902 (32 Stat. 371; 33 U.S.C. 565) provides that any person or persons, corporations, municipal or private, desiring to improve any navigable river, or any part, at their own expense and risk may do so upon the approval of the plans and specifications of the proposed improvement by the Secretary of the Army and the Chief of Engineers.

d. Work and construction in navigable waters by all Federal agencies are subject to the laws for the protection and preservation of navigable waters, including such work and construction performed by the Corps of Engineers in the capacity of a construction agency for other branches and services. Approval of plans and specifications by the Corps of Engineers does not constitute the approval contemplated under these laws. Division and District Engineers will therefore advise such agencies accordingly and cooperate to the fullest extent with a view to facilitating the issuance of permits and furnishing such assistance as may be desired in connection with the permit applications.

e. The laws do not require permits for pipe, wire, or cable crossings when attached to the fixed parts of bridges if the pipe, wire, or cable does not reduce the headroom or clear width of boat passages under the bridge. Such attachments will be considered a part of the bridge, and the bridge owner will be responsible for them under his bridge approval.

f. For minor structures and work in unimproved waterways or in improved waterways where such structures and work are well removed from the fairways used by navigation, authorization may be by a letter of permission. The letter of permission will be in letter form and will contain substantially the language on the face of ENG Form 1721 (Civil), ENG Form No. 96c, W.D., Eng., or ENG Form 2029, as appropriate. District Engineers may reproduce locally a form

* This Regulation rescinds ER 1145-2-303, 10 Apr. 63.

letter, as appropriate, to meet their needs. No drawings will be required to be submitted, nor will any public notice be issued in such cases. This procedure may be utilized when, in the opinion of the District Engineer concerned, there could be no opposition and authorization would unquestionably be given. If State law or local ordinance requires approval of the structures or work, a copy of such approval will be submitted with the application. Aerial crossings and submarine cables and other underwater crossings will not be regarded as minor structures or work.

3. *Form of Application and Plans.*

a. The applications and plans will be prepared in accordance with instructions in pamphlet entitled "Permits for Work in Navigable Waters." District Engineers will furnish applicants all proper advice and assistance in the preparation of the application and plans.

b. Applicants for permits for dredging and filling operations, cooling water outfalls from steam electric plants, and similar work which may affect the navigable capacity of a waterway or have a pollution impact on a waterway are required to furnish the following additional information with their applications: (1) the type and quantity of solids to be removed or deposited, (i.e., 3000 yards of sand; 10,000 yards of polluted silt), (2) proposed method of measurement, (i.e., in place; scow volume), and (3) alternate methods of disposal and impact of alternate methods of disposal on the economy of the industry and the environmental effects on the waterway.

c. Applicants for permits for outfall sewers from industrial plants which may affect the navigable capacity of a waterway or have a pollution impact on a waterway are required to furnish the following supplemental information in addition to that required in paragraph 3b above with their applications: (1) proposed method of instrumentation to determine the effects of the deposition of the solids on the waterway, (2) basis for cost reimbursement for removal of the solids by the United States or by private dredging by the industry, and (3) the industry's plans and schedule for a deliberate program of plant improvement ultimately to eliminate the deposition of solids and pollution.

d. Applicants are required to furnish any other factors considered necessary to protect the navigability of public waters and the financial interests of the United States.

4. *Public Notice and Consultation With Interested Parties.*

a. Unless the application is for minor structures and work in unimproved waterways or in improved waterways where such structures and work are removed from the fairways used by navigation, or for which environmental factors are not involved, or for fixed structures or artificial islands on Outer Continental Shelf lands under mineral lease from the Department of the Interior, the District Engineer will send notices to all parties deemed likely to be interested, such as State or local harbor commission, proper city authorities if the site of the proposed work is within corporate limits of any city, adjacent property owners, the Coastal Engineering Research Center if proposed work involves structures or dredging along the shores of the sea or Great Lakes, the U.S. Fish and Wildlife Service and the head of the agency exercising administration over the wildlife resources of the State whenever the waters of any waterway are impounded, diverted, or otherwise controlled for any purpose, and owners or associations of owners of boat lines. A sketch showing the location and extent of the work proposed will be shown on the reverse side of notices for known controversial cases and for major structures or work and in other instances in the discretion of the District Engineer. Copies of the notice will be posted in the post offices or other public places in the vicinity of the site. A copy of every notice issued will be sent to the Chief of Engineers, attention: ENGCW-ON. The public notice is mandatory, and no permit or extension of time in which to complete work authorized by permit will be granted unless notice has been issued and a reasonable time afforded for protest, except as above provided.

b. Notice of applications for permits for fixed structures or artificial islands on Outer Continental Shelf lands under mineral lease from the Department of the Interior will be sent to parties and agencies interested in or responsible for national security or navigation. Copies of the notice will be posted in post offices or other public places in the vicinity of the site. A copy of each notice will be sent to the Chief of Engineers. Attention: ENGCW-ON. No permit will be issued until after the date set forth in the notice for submitting comments.

c. District Engineers will take action under section 10 of the River and Harbor Act of 3 March 1899 (33 U.S.C. 403) on applications for approval of plans of

structures in navigable waters of the United States to be used in connection with seaplane operations. Designation as landing areas by the Federal Aviation Agency or local authorities will be accepted as primary authority for the operations. Where primary authority for seaplane operations exists and there is no objection to any proposed structures but there are objections to the seaplane operations, the objection should be presented to the Federal Aviation Agency, or local authority for consideration and advice before final action is taken.

d. Public notices will be issued in connection with cableways for stream gaging purposes, gage installations, and other non-project structures constructed by the Corps of Engineers in or over navigable waters. Copies of such notices will be sent to all known interested parties. Where installation is made by the Corps of Engineers, detailed plans will be filed in the office of the District Engineer.

e. Notices should state the name of the applicant, should give the location and a brief description of work (and when not self-evident, the ultimate use of the project) for which application for approval is made, should state where the plans may be seen, should include a sketch of all proposed major structures or work when necessary for a full understanding of the proposed work, and should fix a limiting date within which comments will be received. The period so fixed should be as brief as will afford, to all having a legitimate objection, a reasonable opportunity to be heard. If time is an essential element, interested parties will be given a minimum period of 10 days after receipt of the notice in which to present protests. The period normally should be not less than 30 days after the actual mailing of the notice. A longer period will be afforded if necessary in exceptional or especially important cases. Except in cases involving permits for fixed structures or artificial islands on Outer Continental Shelf lands under mineral lease from the Department of the Interior, the notice will contain a statement similar to the following: "The determination as to whether a permit will be issued will be based on an evaluation of all relevant factors including the effect of the proposed work on navigation, fish and wildlife, conservation, pollution, and the general public interest. Comments on these factors will be accepted and made part of the record and will be considered in determining whether it would be in the best public interest to grant a permit." In cases involving such fixed structures or artificial islands, the notice will contain a statement similar to the following: "The determination on the issuance of a permit will be based on an evaluation of factors affecting navigation and national security. Comments on these factors will be made a part of the record."

f. Copies of the notices sent to interested parties, together with a list of parties to whom sent, will accompany all applications for permits submitted to the Chief of Engineers for necessary action.

g. When an application is received for a permit to authorize the disposal of radio-active waste at sea, District Engineers will coordinate such requests with the United States Atomic Energy Commission, Division of Licensing and Regulatory Functions, Washington, D.C. 20545.

h. In all instances when response to a public notice has been received from a Member of Congress either in behalf of a constituent or himself, the District Engineer will inform the Member of Congress of the final action taken on the application.

i. In all instances when substantive objections are received in response to a public notice, the District Engineer will inform the applicant of the objections giving full and complete information to give him an opportunity to comment thereon.

5. *Public Hearings.*

a. ER 1135-2-5 dated 14 April 1967 prescribes the policy on holding public hearings. It states why and when hearings shall be held and specifies the appropriations from which the expenses of public hearings shall be paid.

b. It is the policy of the Chief of Engineers to conduct his civil works program in an atmosphere of public understanding, trust, and mutual cooperation and in a manner responsive to public needs and desires. To this end, public hearings are helpful and will be held whenever there appears to be sufficient public interest to justify such action. In case of doubt, a public hearing should be held.

c. Among the instances warranting public hearings are general public opposition to issuance of a permit for work in navigable waters of the United States. District Engineers will notify the Division Engineers of the need for a hearing, state the proposed arrangements and obtain his concurrence. Public hearings will be held in connection with applications for permits in navigable waters of

the United States when Congressional interests or responsible local authorities make an official and valid request therefor and such action will fulfil the above-stated policy and objectives.

d. Since the Corps of Engineers considers only the effect on navigation and national security, public hearings will not normally be held in connection with applications for permits for artificial islands or fixed structure on Outer Continental Shelf lands under mineral lease from the Department of the Interior which has responsibility for other aspects of the public interest. Public hearings will be held by the Corps of Engineers only when in the District Engineer's judgment opponents have a reasonable complaint based on interference with navigation or on adverse effects on national security.

e. The format and issuance of notice of a public hearing, actions of the District Engineer prior thereto, conduct of the hearing, and actions of the District Engineer subsequent thereto will conform to the instructions contained ER 1135-2-5 dated April 1967.

6. *General Policies on Issuing Permits.*

a. The decision as to whether a permit will be issued must rest on an evaluation of all relevant factors, including the effect of the proposed work on navigation, fish and wildlife, conservation, pollution, aesthetics, ecology, and the general public interest except that in the case of permits for fixed structures or artificial islands on Outer Continental Shelf lands under mineral lease from the Department of the Interior, the decision will be based on the effect of the work on navigation and national security. In cases where the structure is unobjectionable but when State or local authorities decline to give their consent to the work, it is not usual for the Corps of Engineers to issue a permit. It practically becomes of no value in the event of opposition by State or local authority and may be regarded by such authority as an act of discourtesy. In such cases the applicant may be informed that the structure is unobjectionable and that the permit would be issued were the consent of local authority also forthcoming.

b. In cases of conflicting property rights the Corps of Engineers cannot undertake to adjudicate rival claims. In reporting such cases for the action of the Chief of Engineers, the District Engineer will state the attitude of adjacent or neighboring property owners whose interests may be affected by the work proposed and will also state his views concerning any alleged adverse effects so far as regards the possible use of such property.

c. Where it is found that the work for which a permit is desired may interfere with a proposed flood control project, the applicant and the party or parties responsible for fulfillment of the requirements of local cooperation should be apprised in writing of the fact and of the possibility that a flood control project which may be constructed in the vicinity of the proposed work would necessitate its removal or reconstruction. It should be pointed out to the applicant and to local interests that the Corps of Engineers' function in approving plans for structures in navigable waters is to insure that the structures meet the requirements of navigation and the public interest and that the application for a permit will be considered on that basis. They should also be informed that the United States will in no case be liable for any damage or injury to the structures or work authorized which may be caused by or result from future operations undertaken by the Government for the conservation or improvement of navigation, or for other purposes, and no claims or right to compensation will accrue from any such damage.

d. Consideration should be given to the effect of proposed coastal structures or improvements upon existing navigation projects and upon adjacent shore properties. In doubtful or important cases involving effects of wave action and currents the advice of the Coastal Engineering Research Center should be sought. In the event adverse effects upon adjacent properties can reasonably be anticipated because of the proposed work, the applicant should be so informed in writing as well as any responsible local governmental agency and the views of the affected parties should be obtained before issuance of a permit. The applicant and any protestants will be informed that issuance of the permit signifies that the work is unobjectionable but does not relieve the permittee from liability for any resultant damage to property.

e. Whenever the waters of any stream or other body of water are proposed to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever (the Fish and Wildlife Coordination Act, as amended), applications for permits to author-

ize such work will be coordinated with the Regional Director, U.S. Fish and Wildlife Service, and the head of the agency exercising administration over the fish and wildlife resources in the particular State wherein the proposed work will be performed to obtain their views with respect to the prevention of loss and damage to fish and wildlife resources. Should these agencies indicate that the proposed work will be harmful to fish and wildlife, their views will be made known to the applicant and an effort made to reach a compromise solution. Failing in this respect, the case will be forwarded for the consideration of the Chief of Engineers. In reviewing permit applications, consideration should also be given to the effect of the proposed work on fish and wildlife resources as one item which might involve the public interest.

f. With regard to small boat structures, the District Engineer should examine the permit applications not only from the standpoint of their possible obstruction to navigation but also as to their structural stability to withstand wave action or other forces. If proposed facilities obviously are not designed to withstand wave action or other forces and may collapse and create hazards to navigation, District Engineers should inform applicants of the hazards involved and encourage safety in location, design and operation. District Engineers should act in a capacity of general guidance only in efforts to reach mutually satisfactory solutions. When it has been determined that such facilities will not obstruct navigation but some doubt exists as to their structural stability and particularly when shipping interests have protested or expressed concern over possible damage from wave action, the District Engineer will attach a "flier" to a permit worded as follows:

The permittee is advised that approval of the structure was based on a determination that there would be no obstruction to navigation but that under conditions existing in the waterway, a possibility exists that the structure may be damaged by wave wash from passing vessels, that unreasonable slowing down of vessel traffic cannot be required because it would tend to nullify the navigation benefits on which the project was justified, and that issuance of the permit should not be construed as relieving the permittee of taking proper steps to insure the structure and boats moored thereto will not be damaged by wave wash normally to be expected in the waterway.

g. Prior to the issuance of a permit for work in navigable waters of the United States, District Engineers are required to send a notice to all known interested parties including the responsible State agency or agencies. In some States these notices go to several agencies. Sometimes conflicting comments are received from these agencies on the effect of a project on water and related resources which are sources of potential embarrassment both to the State and to the Department of the Army. Recently procedural arrangements were concluded with 39 States which designated a single State agency or individual to provide a single coordinated State position with respect to any application for a permit. With respect to each State which has not designated a single State agency or individual to provide a coordinated State viewpoint, District Engineers will elicit from the Governor an expression of his views and desires concerning applications for permits which are controversial prior to submittal of the applications to the Chief of Engineers. It is intended that the views of the single State agency, individual, or the desires of the Governor, as the case may be, will be accorded the greatest weight in reaching a judgment determination as to whether a permit will be issued. Department of the Army action will be based on the Federal consideration of navigation and other pertinent factors.

h. Executive Order #11288 specifies the responsibilities of all Federal agencies to improve water quality through prevention, control, and abatement of water pollution from Federal government activities in the United States. The provisions of this Order are applicable to the pollutional aspects of all dredging operations including the disposal of dredged material. In compliance therewith and insofar as practicable and consistent with the interests of the United States within available appropriations, the Corps of Engineers shall cooperate with the Secretary of the Interior and with State and interstate agencies and municipalities in preventing or controlling water pollution. Accordingly, District Engineers shall consult with regional representatives of the Federal Water Pollution Control Administration on pollution problems associated with those dredging projects having a water pollution impact and shall avail themselves of the technical advice and assistance which may be provided by the Federal Water

Pollution Control Administration. District Engineers shall likewise cooperate with responsible State water pollution control agencies having similar jurisdiction. These provisions shall in no way eliminate or negate responsibilities with respect to other ecological effects covered by other competent authorities and laws. Consideration must be given to the pollutional aspects of dredging operations including the disposal of spoil and measures to control the toxic, bacterial, biological, chemical, physical and other pollutional characteristics inherent in these operations. Pollution control for dredging under navigation permits issued under authority of Section 10 of the River and Harbor Act of 3 March 1899 (33 U.S.C. 403) will be accomplished by adding the desired control as a condition to the permit. The establishment of sampling procedures to enforce State and/or Federal standards and the subsequent proof of violation of the regulation and/or standards are considered to be the responsibility of the Secretary of the Interior through the Federal Water Pollution Control Administration and/or the State agency having jurisdiction over water pollution. State regulations will be considered guidelines until Federal standards are prescribed. District and Division Engineers will add the following condition to such permits: "That the permittee shall comply promptly with any regulations, conditions, or instructions affecting the work hereby authorized if and when issued by the Federal Water Pollution Control Administration and/or the State water pollution control agency having jurisdiction to abate or prevent water pollution. Such regulations, conditions or instructions in effect or prescribed by the Federal Water Pollution Control Administration or State agency are hereby made a condition of this permit."

i. On 7 April 1965, the United States Court of Appeals for the 8th Circuit in *Northwest Paper Company v. Federal Power Commission*, (344 F. 2d 47, CA No. 17, 679, April 7, 1965) concluded that by the Federal Water Power Act of 1920, Congress centralized the authority over water power projects in the Federal Power Commission. The same Court on the same date reached the same conclusion in *Minnesota Power & Light Company v. Federal Power Commission*, (344 F. 2d 53, CA 8 No. 17, 680, April 7, 1965). The effect of the 7 April decisions was to affirm the opinion of the Attorney General of 3 May 1921 (32 Op. A.G. 525), that the functions of the Chief of Engineers and the Secretary of the Army to authorize non-Federal water power projects or modifications of existing pre-1920 non-Federal water power projects were transferred to the Federal Power Commission by the Federal Water Power Act of 1920 (41 Stat. 1063). Applications for approval of repairs, maintenance or modifications for non-Federal water power projects authorized under the River and Harbor Acts as well as special Acts of Congress prior to 1920, or requests for advice with respect thereto should be referred to the Federal Power Commission for consideration in accordance with the provisions of the Federal Water Power Act. The permittee should be advised that his application is being referred to the Federal Power Commission for consideration. It should be pointed out that in the event a Commission license is necessary to authorize modifications, the project plans affecting navigation would be submitted by the Commission to the Chief of Engineers and the Secretary of the Army for approval prior to the issuance of any such license in accordance with Section 4(e) of the Federal Water Power Act. Such approval would in effect constitute approval of modifications to the original structure as contemplated by the early River and Harbor Acts and Special Acts of Congress prior to 1920.

7. *Illegal Deposits in Navigable Waters.*

a. Sections 10 and 13 of the River and Harbor Act of 3 March 1899 (33 U.S.C. 403, 407) is designed to protect navigation and the navigable capacity of Federal navigable waters and places responsibility for enforcement upon the Department of the Army. The opinion of the Supreme Court of the United States in *United States v. Republic Steel Corp., et al*, 362 U.S. 482 (1960), dated 16 May 1960 affirms the applicability of the law to suspended solids contained in industrial wastes. A report to the Congress of the United States by the Comptroller General of the United States dated 29 December 1966 recommended that the Corps of Engineers be directed to (1) identify industrial plants depositing waste solids in navigable waters, (2) provide a means for measuring the quantity of deposited waste solids and each plant's responsibility for the removal thereof, (3) require each plant so identified to either stop depositing waste solids or receive permission to continue depositing and participate in the cost of removal thereof, and (4) take appropriate legal action against plants refusing to cooperate under (3) above.

b. The instructions and program that follow in this paragraph deal with the problem of illegal deposits in navigable waterways under the law which explicitly concerns navigation. The Corps of Engineers has a responsibility for pollution abatement and is carrying out that responsibility under various other media. However, the water pollution control program is a long-range program which at best will require several years' work before pollution of navigable waterways is controlled. It is related to the industrial wastes problem discussed in the following sub-paragraphs which has for its primary purpose the control of deposition of industrial waste solids into navigable waters and the provision of a system for insuring that any plants which are allowed to continue depositing such solids participate in the cost of maintenance dredging. This will also be beneficial to pollution reduction, but not to the full extent to be accomplished by all methods.

c. The enforcement of the River and Harbor Act of 3 March 1899 should be directed to achieve the following objectives: (1) complete abatement, wherever feasible, of the discharge of industrial wastes proscribed under the law that reduce the capacity of navigable waters, (2) financial reimbursement to the United States for maintenance dredging costs attributable to industrial wastes, or in lieu thereof assumption of dredging responsibility and costs by the industrial establishments responsible, (3) placing all illegal discharges of industrial wastes that cannot be halted at once, under the provisions of an agreement between the Corps of Engineers and the industrial establishment setting forth any conditions necessary to protect the rights of navigation and the United States and providing the financial consideration contemplated in (2) above, (4) consistent application of the law throughout the United States and its Territories and within major industries, and (5) implementation of the enforcement of the law on a priority basis within the limits of the Corps of Engineers' capabilities.

d. The concern of the Department of the Army in industrial wastes under this program lies in the effect the suspended solids contained in the effluent from industrial outfalls have on the navigable capacity of the waterway. The Department is primarily concerned under this program with the shoaling of authorized improved navigation channels and in placing the responsibility and/or cost for removing these shoals on those industries that are causing them.

e. No requirement for contribution should be imposed for the dredging of shoaling in a navigable water if the refuse matter causing the shoaling is deposited in a navigable water or tributary as a result of a "flowing from streets and sewers and passing therefrom in a liquid state", 33 U.S.C. 407. This exemption applies to discharges from sanitary sewers, storm sewers, and sewage disposal plants, but does not exempt industrial discharges from a manufacturing establishment or mill of any kind. Matter carried into a navigable water by natural drainage or erosion is considered to come within the exemption for materials flowing from streets, but unnatural drainage or erosion would be covered as from an unprotected construction site.

f. On a priority basis all District Engineers will arrange for progressive notification of the provisions of the law to all industries using navigable waters for industrial waste disposal. The owners should be notified either to cease the deposition of industrial waste solids immediately or to seek an agreement with the District Engineer for continuance pursuant to 33 U.S.C. 403 which would prescribe the owners' responsibility for removal.

g. Following receipt of any request for an agreement to continue the deposition of industrial waste solids, the request will be investigated to determine type and quantity of deposited solids anticipated, practical methods of measurement, basis for cost reimbursement or private dredging by the industry, and other factors necessary to protect the navigability of public waters and the financial interests of the United States. The investigation should include the industry's plans for a deliberate program of plant improvement ultimately to eliminate the contribution of solids. Each agreement will contain a provision putting the industry on notice that the agreement in no way grants any license to violate any Federal, state or local laws regarding pollution.

h. The District Engineer at Chicago, Illinois has underway a study to develop certain techniques and criteria for accurate determination of an industrial plant's total suspended solids discharge from its effluents. It is expected that techniques will be developed for determining (1) solids transport load in effluents which may vary abruptly and frequently throughout any period, (2) the occurrence of flocculation of the finer particles carried in the effluent and ways in

which sedimentation of materials of this type occurs, both in simple and complicated environments, and (3) measurement of in-place density of sediments, for converting weight of solids in suspension in the effluent to volume of sediment in the waterway in order to correlate dredging quantities with suspended solids discharge which is measured in ppm. When techniques and criteria have been developed after completion of the study by the Chicago District Engineer, Corps-wide policies and procedures will be prescribed and disseminated. In the meantime the directives contained in this paragraph should be followed.

8. Revalidation of Permits.

a. The majority of permits have the normal 3-year completion dates. The time limits for completion of such permits are extended only after issuance of the required public notice. If substantial protests are received in response to the public notice, public hearings are held. If protests are not resolved as a result of the hearing procedure, the case is referred to the Chief of Engineers for decision. This procedure in effect constitutes revalidation. In some cases, where the economy of the using permittee requires long range commitments, permits are issued for considerably longer than 3 years. In such circumstances, the permittee may involve substantial investment for shops and access on the premise that the permitted adjunct facility will be available when necessary. Under such circumstances the permittee may be entitled to a firm commitment free from re-examination or revalidation on a 5-year or other limited term basis. At law, the permit authority is extremely broad, giving the Secretary of the Army the legal power to revoke or modify a permit at any time, whether work has or has not yet started, or is complete. The outer legal limit of the authority is that it shall not be "arbitrary or capricious", an extremely broad standard. It is quite clear, however, that much of that power is in practice very theoretical; once land-fills or other work, with concomitant commitments, are undertaken in reliance on a permit, the practical possibility of exercising the permit authority to revoke or modify for anything less than a demonstrably major federal interest is all but non-existent. It follows that the crucial question is to formulate policy for issuing permits that (1) gives reasonable assurance to the permittee that plans and investments made in reliance on the permit are not unnecessarily placed in jeopardy, (2) adequately safeguards the federal interests (including navigation) that may arise subsequent to the initial issuance of the permit, and (3) puts the permittee on notice of the possible risks he undertakes when he relies on the permit authority by advising him in advance of when the permit will be re-evaluated.

b. Accordingly, District Engineers will immediately institute a practice of periodic revalidation for all present and future permits in all navigable waters of the United States issued for more than the normal 3-year completion date. For those permits already issued and work thereon has not commenced, District Engineers over the next 12 months will issue public revalidation notices on all permits which are now at least five years old, and then continue this practice year by year until all outstanding permits have been revalidated. For those permits already issued, where review by the District Engineer reveals that work thereon has been commenced and is progressing in a timely and satisfactory manner and there are no known objections not previously considered, District Engineers need not issue the public revalidation notices. For those permits issued in the future, the 5-year period for revalidation will be measured from the date of issuance of the permit. The permittees for future permits will be placed on notice when their permits are issued that their permits will be revalidated at the expiration of 5 years. Likewise, permittees having valid permits presently in effect that are not at least five years old will be informed that their permits will be revalidated 5 years after the date of issuance. The revalidation procedure will be continued in the future at five year intervals, measured from the date of the most recent revalidation in accordance with the above, and permittees will be given notice to this effect. It should be clearly understood that revalidation of future permits will be done on the same basis as revalidation for existing permits, i.e.: where work under the permit has not commenced. As a practical matter, however, the merits of outstanding permits should always be re-examined if the work authorized has become controversial and there has not been a fairly recent public hearing.

c. The revalidation procedure will not apply to blanket permits for oil well structures and oil well operations issued for longer than the normal 3-year completion period.

9. *Memorandum of Understanding between the Departments of the Army and Interior.*

a. A Memorandum of Understanding between the Department of the Army and the Department of the Interior was consummated on 13 July 1967 setting forth the policies and procedures for coordinating actions in processing permit applications for dredging, filling, excavating and other related work in the navigable waters of the United States. All concerned District and Division Engineers will comply with the policies and procedures stated in the attached Memorandum of Understanding (Appendix I). Every effort will be made to resolve at field level any differences of views that may develop between the two Departments. Cases involving unresolved objections will be forwarded to the Chief of Engineers, attention, (ENG CW-ON).

b. Attached is a listing of the regional offices of the Federal Water Pollution Control Administration, the Bureau of Sport Fisheries and Wildlife and the National Park Service by areas of responsibility to assist in the required coordination (Appendix II). District Engineers will assure that these offices are informed of proposed work in navigable waters of interest to them.

10. *Authority for the Corps of Engineers to Issue Permits.*

a. The Secretary of the Army has authorized the issuance of Department of the Army permits by field agencies of the Corps of Engineers, at the option of the Chief of Engineers, for work and structures in or over navigable waters in cases which are entirely routine and which involve no doubt as to the law, facts, or regulations nor any opposition or other considerations which should be decided by higher authority.

b. The authority above granted is not a delegation of discretionary powers (decision JAG, 13 May 1904). It is essential to the legality of a permit issued under such authority that it strictly conform to the limitations prescribed for its issue. No modification of the conditions in the standard form prescribed in paragraph 14, following, except as provided in paragraphs 15 and 18, following, inclusive, may be made by District Engineers.

11. *Authority for Field Agencies of the Corps of Engineers to Issue Permits.*

a. Division and District Engineers are authorized to issue, in the name of the Secretary of the Army, permits under Section 10 and Section 14 of the Act of 3 March 1899 (33 U.S.C. 403, 408) for work and structures in or over navigable waters in cases which are entirely routine and which involve no doubt as to the law, facts, or regulations nor any opposition or other considerations which should be decided by higher authority.

b. A case is held to be entirely routine, as determined by the Division Engineer, if the approval of the plans would unquestionably be given were the matter presented to the Chief of Engineers and the Secretary of the Army. The mere fact that proposed work is extensive in scope does not necessarily remove it from the class of routine cases if no possible objection to the work can be foreseen. Applications for permits for works in navigable waters which extend a reasonable distance beyond harbor lines, or are connected with works constructed without the authorization of the Department of the Army, but presumably in ignorance of the law, will be considered routine, if they otherwise conform to the foregoing criteria.

c. This authorization will not be construed to apply to submarine cables for which, under the provisions of an Act of Congress approved 27 May 1921 "Relating to the landing and operation of submarine cables in the United States," licenses are required from the Federal Communications Commission in compliance with Executive Order 10530 dated 10 May 1954. Also this authorization will not be construed as applying to transmission lines which form a part of a water-power "project" as defined in Section 3(11) of the Federal Power Act.

d. All applications for permits not falling within the provisions of this paragraph will be forwarded for the consideration of the Chief of Engineers as specified in paragraph 20, following.

12. *Construction and Other Work Performed Without Prior Authority.*

a. District Engineers are authorized to approve plans for structures and work of the classes for which they are authorized to issue permits (see paragraph 11, preceding), when the application for approval is submitted after the commencement or completion of the structures or work, subject to the following rules:

(1) Approval will be limited to those cases where the necessary primary authority, State or Federal as the case may be, validly exists, when the work was innocently constructed, and when there is no objection to the work.

(2) The applicant will submit the plans in the prescribed form, (see paragraph 3, preceding),

(3) Notice of the application will be duly issued, (see paragraph 4, preceding),

(4) The approval will be issued in the prescribed form, ENG Form No. 96c, W.D., Eng.,

(5) The approval will be signed and recorded as prescribed for permits, (see paragraphs 21 and 22 following),

(6) Application for the approval of plans for work which has been completed requiring action of higher authority will be reported on in the form prescribed for permit applications, (see paragraph 20 following), and

(7) When forwarding approval, the applicant will be informed that the law contemplates prior approval and that, in the future, plans must be submitted in ample time for their consideration by the Chief of Engineers before constructed is started.

13. *Necessary Primary Authority.*

a. For work constructed by State or municipal agencies, the primary authority will be presumed without proof. If the law of the States requires a license for or approval of the work from a constituted State agency, a copy of such license or approval will be required and may be accepted as evidence of the primary authority. If there is no State regulation of work in navigable waters, the necessary primary authority may be that granted in the charter of a corporation, or the authority inherent in the ownership of the land on which the work is located. The applicant will in such cases be required to furnish an extract from the charter, or a statement of ownership. Special care will be exercised in order that Federal approval is not granted when there is doubt of the right of the builder to construct and utilize the work.

14. *Forms of Permit.*

a. A printed copy of ENG Form 1721 (Civil), as amended to date of issue of permit, will be used ordinarily for the letter of authorization. Permits of Federal agencies will be executed on ENG Form 2029. Subsequent approval of plans will be accomplished on ENG Form No. 96c. District Engineers will keep themselves supplied with a sufficient number of such forms to cover current needs. Immediately upon the issue of an amended form, all old forms on hand will be destroyed as soon as a supply of the amended form can be obtained. Letters of permission for minor structures and work will be prepared as indicated in paragraph 2, preceding. District Engineers will assure that the statement in the note at the head of ENG Form 1721 (Civil) and ENG Form 96c reading "it merely expresses the assent of the Federal Government so far as concerns the public rights of navigation" is deleted by lining through each word of the sentence.

15. *Description of Work on Permit Forms.*

a. All essential parts of the work to be authorized will be enumerated in the space provided in the permit form, as for example, "To construct a wharf and dolphins" or "To construct a bulkhead and to dredge, depositing the dredge-material shoreward of the bulkhead."

b. Limitations on the scope of the work that do not remove the case from the jurisdiction of the District Engineers (see paragraph 11 preceding) will be incorporated in the permit as follows:

(1) By clearly showing them on the drawings. This is the normal and preferred method.

(2) By including them in the description of the work. This method will be followed when the limitation cannot be shown on the drawing or when the limitation, though shown on the drawing, is so essential as to require special emphasis. Examples of descriptions containing limitations are:

(a) To dredge to a depth of not more than 10 feet below mean low water, the dredged material to be deposited on the established dumping ground at ----- or on shore at -----.

(b) To lay a submarine cable so that the depth within the limits of the navigable channel will be not less than 30 feet below mean low water.

(c) To dredge the approaches to a wharf and to deposit the dredged material in the waterway at the location shown on the attached plan, and in such manner as to leave a clear depth of not less than 13 feet below pool level.

(d) To construct and maintain a temporary wharf for a period of not more than 2 years.

When the foregoing methods are inapplicable, or when the proposed limitation is not of a routine nature, the case will be forwarded to the Chief of Engineers with recommendation that a special condition or conditions be included in the permit (see paragraph 17, following).

c. Place of deposit of dredged material to be shown. All permits authorizing dredging will show, both on the drawings and in the description of the work, or in one only if not practicable in both, the exact place where the dredged material is to be deposited. Examples of descriptions are:

(1) To dredge a slip, the dredged material to be deposited on the established dumping ground in ----- off -----.

(2) To dredge sand and gravel, the material to be placed ashore for commercial purposes.

If the deposit is to be shoreward of a bulkhead, either in the waterway or on shore, the plans must be sufficiently detailed to show that the structure will be adequate to confine the material.

16. *Standard Conditions.*

a. Condition (j) of the standard permit form will be completed by inserting a specific date, normally 31 December of the third year, subsequent to the year of issuance. Thus the limiting date fixed in permits issued in 1968 should normally be 31 December 1971. District Engineers are not authorized to fix a later date for completion. If special reasons so require, a shorter period may be specified provided that the limit expires in all cases on the last day of a quarter, that is, 31, March, 30 June, 30 September, or 31 December. Experience has shown a tendency to prescribe insufficient time limits, thus subjecting the Corps of Engineers and the permittee to unnecessary annoyance and expense in accomplishing extensions. The full authorized time should usually be allowed. Work or operations of a temporary nature should be limited to a period as short as is considered reasonable. This will be accomplished by including in the description on the first page of the permit for work or operations the restriction "to be removed (or completed) on or before the ----- day of -----," naming the last day of a quarter, and the time limit in condition (j) of the permit form will prescribe the same date.

b. District Engineers are authorized to insert, in proper cases, the following additional clause: "That this permit is revocable at the will of the Secretary of the Army."

17. *Special Conditions.*

a. If conditions other than those authorized in paragraphs 15 and 16, preceding, and 18, following, and in addition to those expressed in the standard permit form are regarded as necessary, or if any modification of conditions of the standard form is regarded as essential, the application will be forwarded for action by the Chief of Engineers. The exact wording of the recommended conditions will be given with explanatory statements showing why they are proposed, and whether they are acceptable to the applicant.

b. When compensatory works or the removal of temporary structures are required of the applicant, or in other unusual cases when there is reason to anticipate that the applicant may fail to carry out parts of the work, an additional condition will be submitted to the Chief of Engineers for approval, requiring the applicant to furnish a bond insuring compliance with the permit requirements. The applicant should be fully informed concerning the proposed conditions, including the amount and conditions of the proposed bond, and be given an opportunity to present his views before the case is forwarded for consideration by the Chief of Engineers. Copies of all pertinent correspondence will accompany the case.

c. Approval of special conditions that have or may be given by the Chief of Engineers on proper presentation of the need therefor may be used thereafter as standard conditions in similar circumstances.

18. *Aerial Transmission Lines.*

a. District Engineers are authorized and directed to insert in permits for aerial transmission lines and similar installations over navigable waters the following condition: "That the permittee shall comply promptly with any future regulations or instructions affecting the work hereby authorized if and

when issued in accordance with law by any department of the Federal Government for the aid or protection of aerial navigation."

b. When applications are received for permits for transmission lines crossing navigable waters of the United States and for easements for rights-of-way for transmission lines across, over, and upon lands of the United States under the control and jurisdiction of the Department of the Army, the District Engineer shall first determine whether the transmission line forms a part of a waterpower project as the term "project" is defined in section 3(11) of the Federal Power Act. Where the proposed transmission line does not form a part of a waterpower project, action will be taken to issue a permit in accordance with the provisions of section 10 of the River and Harbor Act approved 3 March, 1899, (30 Stat. 1151; 33 U.S.C. 403) for transmission lines crossing the navigable waters of the United States, and to grant an easement under the Act approved 4 March 1911, for rights-of-way for transmission lines over, across, and upon lands of the United States under the jurisdiction and control of the Department of the Army. Where the proposed transmission line forms a part of a waterpower project the applicant should be informed of the law on the subject (sec. 4(e), Federal Power Act), and be directed to submit the application to the Federal Power Commission. In cases of doubt, the application will be forwarded to the Chief of Engineers with the views and recommendations of the Division and District Engineers.

c. In the interest of safety for transmission lines over navigable waters the following clearances should be provided:

Clearance above clearance required for bridges

Nominal system voltage, kv.:	<i>Fect</i>
115 -----	20
138 -----	22
161 -----	24
230 -----	26
345 -----	30
500 -----	35
700 -----	42
750 to 765 -----	45

For transmission lines over navigable waters designated in the advance approval category, the following clearances should be provided:

Clearance above maximum high water

Nominal system voltage, kv.:	<i>Fect</i>
0 to 15 -----	20
15 to 92 -----	22
115 to 161 -----	24
230 -----	26
345 -----	30
500 -----	35
700 -----	42
750 to 765 -----	45

These clearances are the minimum desirable under the most adverse conditions which result in the greatest line sag, including temperature, load, length of span, and type of supports. These clearances are not required for telephone lines, stream gaging and ferry cables, etc.

d. Whenever a permit is issued for the erection of an aerial transmission line across a navigable water of the United States, an additional copy, unsigned and uninitialed, will be prepared and forwarded directly to the Director, U.S. Coast and Geodetic Survey, Department of Commerce, Washington, D.C. 20230, reference file No. 83-sb.a. for crossings across waters charted by that agency. The District Engineer will advise that agency when the aerial transmission line has been completed and whether the work has been completed in accordance with the approved plans.

19. *Fish Havens.*

a. When an application is received for a permit for the construction of artificial obstructions to enhance fish propagation along the coasts of the United

States, the District Engineer will send notices to all parties known to be interested including the Commander, U.S. Naval Oceanographic Office, Washington, D.C., 20390 and the Director, U.S. Coast and Geodetic Survey, Department of Commerce, Washington, D.C. 20230. For fish havens along the Atlantic and Gulf Coasts, notices should be sent also to the U.S. Department of the Interior, Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife, Sandy Hook Marine Laboratory, Fort Hancock, Highlands, New Jersey, 07732.

b. Whenever a permit is issued for the construction of a fish haven, duplicate copies, unsigned and uninitialed, will be prepared and forwarded to the Chief of Engineers, attention ENG CW-ON, for transmittal to the Oceanographic Office and the Coast and Geodetic Survey. An additional copy will be furnished, when required, for transmittal to the Sandy Hook Marine Laboratory.

c. The attention of the permittee should be directed to condition (i) of the permit in the letter transmitting the permit. The District Engineer will report to the Chief of Engineers, attention ENG CW-ON, when the work is commenced and completed, and whether the work has been completed in accordance with the approved plans. Extra copies of such reports shall be furnished for transmittal to the Oceanographic Office, the Coast and Geodetic Survey, and the Sandy Hook Marine Laboratory, when required.

20. *Reports on Permit Applications.*

a. The report of a District Engineer on an application for a permit requiring action by the Chief of Engineers will be indorsed upon the application and comments made in the following form. The report will be forwarded through the Division Engineer.

- (1) Name of applicant
- (2) Location of proposed work indicating the waterway distance from the mouth of the waterway, and nearest town.
- (3) State or other primary authority
- (4) Character of proposed work
- (5) Views of State and local authorities
- (6) Date of public notice or public hearing and summary of objections offered with comments of the District Engineer thereon.
- (7) Views of District Engineer concerning probable effect on:
 - (a) Navigation, present and prospective, with reasons
 - (b) Harbor lines, if established. If none are established relation of the proposed work to lines which reasonably could be expected to be adopted.
 - (c) Flood heights and drift
 - (d) Beach erosion or accretion
 - (e) Fish and Wildlife
 - (f) Pollution
 - (g) Aesthetics
 - (h) Ecology
 - (i) Oceanography
 - (j) Public interest
- (8) Other pertinent remarks
- (9) Recommendations including any special conditions
- (10) List of all inclosures

21. *Signature of Permits Issued by District Engineers.*

a. It is essential to the legality of a permit that it contain the name of the District Engineer as the issuing officer. However, the permit need not be signed by the District Engineer, in person; but may be signed for and in behalf of him by whomever he may designate.

22. *Number and Disposition of Copies.*

a. Whether issued by general or special authority two signed copies of the permit will ordinarily be prepared. The drawings showing the work will be securely attached to each copy, care being taken that none of the information on the plans is obliterated or damaged. Additional copies will be prepared as required by paragraphs 18 and 19, preceding.

b. One signed copy of the permit will be delivered to the permittee. District Engineers in transmitting permits to permittees will caution them that if any material changes in the location or plans of the structure or work are found necessary on account of unforeseen or altered conditions or otherwise, revised

plans should be submitted promptly to the District Engineer in order that these revised plans, if found unobjectionable, may receive the approval required by law before construction is begun.

c. The second signed copy, with plans on tracing linen, vellum or heavy tracing paper attached must be clear and legible in all its details and be identical in every respect with that issued to the permittee without added notation of any kind and will be filed in the Office of the District Engineer to form the legal record of the authorization.

d. Whenever a permittee is required to pay or deposit with the District Engineer any sum of money for any purpose, a contract number will be assigned and placed on all copies of the permit. The signed copy on file in the Office of the District Engineer will be used for site audit by the General Accounting Office.

23. *Extensions of Time.*

a. District Engineers are authorized to revive and extend for successive periods not exceeding three years each the life of permits which they have issued, whether by general or special authority. Provided, that the public notice required by paragraph 4, preceding, is issued and that evidence satisfactory to the District Engineer is furnished of the bona fide intention of the permittee to complete the work, and provided, there has been no change in the attendant circumstances since the permit was issued.

b. The letter granting the extension will be in substantially the following form:

In accordance with your written request dated _____, the authorization granted by the Secretary of the Army, in letter dated _____, from the District Engineer at _____, to (here follow the identical wording of the description of the work in the permit) is hereby specifically extended to (give date).

The conditions to which the authorization is made subject, excepting the time limit for completion, remain in full force and effect.

If the structure or work authorized is not completed on or before the date herein specified, the authorization, if not previously revoked or specifically further extended, will cease and become null and void.

By authority of the Secretary of the Army.

(If any condition of the standard permit form has been amended, the condition as amended will be added to the letter of extension if not contained in the original permit or prior extension or modification thereof.)

c. The letter will be signed in duplicate and distribution made as prescribed for permits. (See paragraph 22 preceding.)

d. All applications for extensions of time not falling within the provisions of paragraph 23a, above, will be forwarded for the consideration of the Chief of Engineers, with a full statement of circumstances, and with the recommendations of the Division and District Engineers.

24. *Revision of Plans.*

a. District Engineers are empowered to approve revised plans for work for which they are authorized to issue permits. (See paragraph 11, preceding.)

b. Notices of the revised plans will be sent as prescribed in paragraph 4, preceding, to all parties of interest unless the revision is clearly such as to have no adverse effect on navigation or any other public interest.

c. The approval will be in substantially the following form:

In accordance with your written request dated _____; the revised plans hereto attached are approved to supersede the plans for the work authorized by the Secretary of the Army, in letter dated _____, from the District Engineer at _____, to (here follow the identical wording of the description of the work in the permit).

The conditions to which the work is made subject remain in full force and effect.

By authority of the Secretary of the Army.

d. The letter will be signed in duplicate and distribution made as prescribed for permits. (See paragraph 22, preceding.)

e. All applications for approval of revised plans not falling within the provisions of paragraph 24a, above, will be forwarded for the consideration of the Chief of Engineers, with a full statement of circumstances, and with the recommendations of the Division and District Engineers.

25. *Cancellation and Revocation of Permits.*

a. Division and District Engineers are without authority to cancel or revoke permits but District Engineers are authorized to accept voluntary relinquishment of a permit from the permittee.

b. Whenever during the life of a permit it is found that operations or interests of the United States require alteration in the position of the structure or work authorized by the permit, or that any operations or work under the permit causes unreasonable obstruction to free navigation, or adversely affects the general public interest, the District Engineer will forward through the Division Engineer a full report, with recommendations as to action to be taken.

26. *Transfer of Permits.*

a. Permits express the assent of the Federal Government so far as concerns the public rights of navigation and the general public interest. Although issued to a specific party, the assent is not limited to execution of the work by that party and the permit may be availed of by the assignees or purchasers of the property affected, provided the terms of the permit are strictly complied with.

27. *Supervision of Work and Report.*

a. District Engineers will supervise all work authorized under permits and will require that the work be conducted and executed in conformance with the approved plans. Such inspections as are necessary for this purpose must be made on timely occasions during construction, and such notices and instructions will be given permittees to insure that they do not depart from the approved plans. District Engineers will note at the expiration of the time limit of the permit or upon completion of the work if at an earlier date, whether the conditions have been observed and whether the structures or operations as completed are in accordance with the approved plans. If the work is in accordance with the approved plans, no report will be made. If the final inspection shows a material departure from the authorized plans, the District Engineer will call upon the permittee to furnish plans showing the work as actually constructed. Should there be non-compliance with the conditions of the permit, a demand for compliance should be made and consideration given to criminal or injunctive action under subparagraph (b) below.

b. Attention has recently been directed to an increasing number of operations being conducted in the navigable waters of the United States either without a valid permit or not in accordance with authorized permit plans. The person responsible for such work should be advised to cease operations immediately and apply for a permit before continuing. If operations are continued without a permit, action should be taken to enjoin further work under Section 12 of the River and Harbor Act of 3 March 1899 (33 U.S.C. 406), which provides for criminal prosecution of violators and authorizes the issuance of an injunction for removal of construction prohibited by (33 U.S.C. 403). Since legal action requires liaison with the Department of Justice, when voluntary compliance does not result, a report will be furnished District Counsel who will prepare a litigation report pursuant to ECI 52-201. The report should state whether criminal prosecution alone is recommended or whether the unauthorized work will so materially affect navigation and the general public interest as to require restoration of the waterway to its original condition. District Engineers will make every effort to stop operations in navigable waters undertaken without a permit and to insure that authorized operations are in accordance with the conditions and approved plans of the permit.

c. It is not the practice of the Department of the Army to issue letters certifying that completed work conforms to the permit. That question is a matter of fact to be determined in case of controversy by the usual rules of court procedure.

28. *Expenses of Inspection*

a. The condition requiring that the permittee will bear all expenses for inspection, or any other operations by the United States in connection with permits granted under the provisions of section 10 and 14 of the River and Harbor Act approved 3 March 1899 (33 U.S.C. 403, 408), will be applied only to special or elaborate supervision considered necessary and involving unusual expense. The expense of inspection of the character described in section 6 of the River and Harbor Act approved 3 March 1905, should be paid in accordance with the provisions of that section. (33 U.S.C. 417) (See paragraphs 17 and 22, preceding). Expenses incurred in connection with inspection of work or structures built or proposed to be built in navigable waters of the United States will be paid by the Federal Government. These funds are available from the General Regula-

tory Functions Account under the Operation and Maintenance Appropriation. The said section 6 does not contemplate extensive supervision of the work authorized. While there may be cases wherein inspection of the work may be required, it is not intended that the permittee should be required to bear the costs incurred in connection with such supervision except in cases involving unusual expenses. District Engineers are authorized, however, to assign a full-time inspector to dredging and fill operations in cases involving a substantial amount of work whenever, in their opinion, such action is considered warranted and to collect the costs incurred in connection with such inspections.

b. The cost of supervising dumping of dredged material in navigable waters, requiring the exclusive time of one or more inspectors, will be collected from the permittee unless other action is specifically approved by the Chief of Engineers. General authority to collect during a fiscal year the expenses of inspection of other classes of work will be granted by the Chief of Engineers in proper cases if the usual number of permits of the class warrants such course. The initial request for such authority will show the justification for the collection, the nature of the expenses, the usual range of the amount to be collected, and the usual number of cases of the class handled during the year. Thereafter requests for renewal of the authority should be included in the annual request for authorities.

c. In cases not covered by general authority as provided above, specific authority will be obtained in each instance before making any collection from a permittee. Division Engineers are authorized to grant such authority if the operations to be inspected are expected to be completed within six months, and if no doubt or disagreement arises as to the propriety of the collection. Otherwise, the authority of the Chief of Engineers will be obtained. Each request for special authority will show the character of the work, the necessity for the proposed collection, and the estimated amount to be collected.

d. When general or special authority for the collection of expenses has been granted, the District Engineer is authorized to require, in proper cases, initial and subsequent advance deposits from the permittee in amounts generally not exceeding the estimated cost of inspection during the ensuing month. In cases where deposits are not promptly made or where an additional fraction of a month will probably finish the work, under the permit or in other cases regarded as exceptional, larger deposits may be required. If it appears advisable to require advance deposits in excess of this limitation, during the life of the permit, the case will be presented to the Chief of Engineers for approval.

e. On completion of work under a permit, and the payment of expenses by the permittee without protest, the account will be closed, outstanding deposits returned to the permittee, and a final statement of the account will be furnished the Chief of Engineers through the Division Engineer. If the account is protested by the permittee, it will be referred to the Chief of Engineers for approval before it is closed and before returning any deposits to the permittee.

f. District Engineers may assign to the work of inspection one or more qualified inspectors for such time as may be necessary to insure compliance with the conditions of the permit. These inspectors will be treated in all respects as regular employees of the United States and will be paid by the District Engineer from any available appropriation in his charge, on regular pay rolls or service vouchers. At the end of each month the amount chargeable for the cost of inspection pertaining to the permit will be collected from the permittee and will be taken up on the account current and deposited in a designated depository to the credit of the Treasurer of the United States, on account of reimbursement of the appropriation from which the expenses of the inspection were paid.

g. The District Engineer will take such measures as he may consider necessary to insure the United States against loss through possible failure of the permittee to supply the necessary funds to liquidate indebtedness for services paid for by the United States in connection with the inspection and supervision of his permit. This may be accomplished by requiring the permittee to keep on deposit with the District Engineer at all times an amount equal to the estimated cost of inspection and supervision for the ensuing month, such deposit preferably being in the form of a certified check, payable to the District Engineer. Certified checks so deposited will be carried in a special deposit account (guaranty for inspection expenses) and upon completion of the work under the permit the funds will be returned to the permittee provided he has paid the actual cost of inspection.

h. The permittee will not be required or permitted to pay the United States inspector either directly or through the District Engineer, nor will the inspector be laid off or furloughed in order that he may be employed by the permittee to supervise the permit operations.

29. *Permits for Fishing Structures.*

a. Special regulations for the issuance of permits for fish traps in specified localities have been issued by the Chief of Engineers. Cases not covered by such regulations will be submitted to the Chief of Engineers for approval.

b. Prior to action by the Corps of Engineers on an application for permission to construct a fish weir, trap, or similar contrivance in any navigable water of the United States, the applicant will be required to furnish the Corps of Engineers with evidence that the proper license has been granted by the State or municipal authorities in cases where the laws prescribe such requirements, or to show that there is no State law or municipal regulations requiring such license.

30. *Lighting Fishing Structures.*

a. Fishing structures and appliances in navigable waters of the United States will be lighted for the safety of navigation as follows. Lights will be displayed between sunset and sunrise. They will be placed at each end of the structure, except where the inner end terminates at such a point where there could be no practicable navigation between it and the high-water line of the adjacent coast. In such case no inner light will be required. The outer light will be white, and the inner light will be red. The size, capacity, and manner of maintenance of the lights will be specified in the Department of the Army permit authorizing the erection of the structure or appliance. When several structures or appliances are placed on one line with no navigable passage between them, they will be considered for lighting purposes as one structure.

b. By authority of the Secretary of the Army, conditions in the following form will be included in all permits for fishing structures and appliances in navigable waters of the United States, issued by the Chief of Engineers or by District Engineers specially authorized by him to issue such permits.

(1) That the weir, trap, or pound will be lighted between sunset and sunrise, by and at the expense of the permittee, for the safety of navigation. The lights will be displayed at each end, and at an elevation of not less than _____ feet above high water. The outer light will be white, the inner light will be red, and both will be equal to _____ with a capacity to burn _____ days unattended. They will be subject to the inspection of the District Engineer before use.

(2) That there will be installed and maintained on the weir, trap, or pound, by and at the expense of the permittee, such additional lights and signals as may be prescribed by the U.S. Coast Guard. Provisions will be made for proper attendance by watchman or otherwise of all lights and signals to insure that they are in effective condition at all times.

31. *Permits Affecting the Outer Limits of the Territorial Sea.*

a. All applications for permits for structures or work in Coastal waters will be specifically reviewed to consider the impact on the base line from which to measure the width of the three-mile belt of submerged land given to the States by the Submerged Lands Act. Where any change in the base line would result, the application with report thereon will be forwarded to the Chief of Engineers for discussion with the Attorney General before final action is taken.

For the Chief of Engineers:

MILES L. WACHENDORF,
Colonel, Corps of Engineers,
Executive.

APPENDIX I

MEMORANDUM OF UNDERSTANDING BETWEEN THE SECRETARY OF THE INTERIOR AND THE SECRETARY OF THE ARMY

In recognition of the responsibilities of the Secretary of the Army under sections 10 and 13 of the Act of March 3, 1899 (33 U.S.C. 403 and 407), relating to the control of dredging, filling, and excavation in the navigable waters of the United States, and control of refuse in such waters, and the interrelationship of those responsibilities with the responsibilities of the Secretary of the Interior

under the Federal Water Pollution Control Act, as amended (33 U.S.C. 466 *et seq.*), the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-666c), and the Fish and Wildlife Act of 1956, as amended (16 U.S.C. 742a *et seq.*), relating to the control and prevention of water pollution in such waters and the conservation of the Nation's natural resources and related environment, including fish and wildlife and recreational values therein; in recognition of our joint responsibilities under Executive Order No. 11288 to improve water quality through the prevention, control, and abatement of water pollution from Federal and federally licensed activities; and in recognition of other provisions of law and policy, we, the two Secretaries, adopt the following policies and procedures:

POLICIES

1. It is the policy of the two Secretaries that there shall be full coordination and cooperation between their respective Departments on the above responsibilities at all organizational levels, and it is their view that maximum efforts in the discharge of those responsibilities, including the resolution of differing views, must be undertaken at the earliest practicable time and at the field organizational unit most directly concerned. Accordingly, District Engineers of the U.S. Army Corps of Engineers shall coordinate with the Regional Directors of the Secretary of the Interior on fish and wildlife, recreation, and pollution problems associated with dredging, filling, and excavation operations to be conducted under permits issued under the 1899 Act in the navigable waters of the United States, and they shall avail themselves of the technical advice and assistance which such Directors may provide.

2. The Secretary of the Army will seek the advice and counsel of the Secretary of the Interior on difficult cases. If the Secretary of the Interior advises that proposed operations will unreasonably impair natural resources or the related environment, including the fish and wildlife and recreational values thereof, or will reduce the quality of such waters in violation of applicable water quality standards, the Secretary of the Army in acting on the request for a permit will carefully evaluate the advantages and benefits of the operations in relation to the resultant loss or damage, including all data presented by the Secretary of the Interior, and will either deny the permit or include such conditions in the permit as he determines to be in the public interest, including provisions that will assure compliance with water quality standards established in accordance with law.

PROCEDURES FOR CARRYING OUT THESE POLICIES

1. Upon receipt of an application for a permit for dredging, filling, excavation, or other related work in navigable waters of the United States, the District Engineers shall send notices to all interested parties, including the appropriate Regional Directors of the Federal Water Pollution Control Administration, the United States Fish and Wildlife Service, and the National Park Service of the Department of the Interior, and the appropriate State conservation, resources, and water pollution agencies.

2. Such Regional Directors of the Secretary of the Interior shall immediately make such studies and investigations as they deem necessary or desirable, consult with the appropriate State agencies, and advise the District Engineers whether the work proposed by the permit applicant, including the deposit of any material in or near the navigable waters of the United States, will reduce the quality of such waters in violation of applicable water quality standards or unreasonably impair natural resources or the related environment.

3. The District Engineer will hold public hearings on permit applications whenever response to a public notice indicates that hearings are desirable to afford all interested parties full opportunity to be heard on objections raised.

4. The District Engineer, in deciding whether a permit should be issued, shall weigh all relevant factors in reaching his decision. In any case where Directors of the Secretary of the Interior advise the District Engineers that proposed work will impair the water quality in violation of applicable water quality standards or unreasonably impair the natural resources or the related environment, he shall, within the limits of his responsibility, encourage the applicant to take steps that will resolve the objections to the work. Failing in this respect, the District Engineer shall forward the case for the consideration of the Chief of Engineers and the appropriate Regional Director of the Secretary of the Interior

shall submit his views and recommendations to his agency's Washington Headquarters.

5. The Chief of Engineers shall refer to the Under Secretary of the Interior all those cases referred to him containing unresolved substantive differences of views and he shall include his analysis thereof, for the purpose of obtaining the Department of Interior's comments prior to final determination of the issues.

6. In those cases where the Chief of Engineers and the Under Secretary are unable to resolve the remaining issues, the cases will be referred to the Secretary of the Army for decision in consultation with the Secretary of the Interior.

7. If in the course of operations within this understanding, either Secretary finds its terms in need of modification, he may notify the other of the nature of the desired changes. In that event the Secretaries shall within 90 days negotiate such amendment as is considered desirable or may agree upon termination of this understanding at the end of the period.

STEWART L. UDALL,

Secretary of the Interior.

STANLEY RESOR,

Secretary of the Army.

Dated July 13, 1967.

Appendix II

LISTING

FEDERAL WATER POLLUTION CONTROL ADMINISTRATION

The Federal Water Pollution Control Administration field organization consists of nine regional offices. The regional boundaries are based on drainage basin areas. The regions, their regional office locations, and the basin areas and States they cover are as follows:

Regional offices and areas of responsibility

<i>Region</i>	<i>Constituent basins and States covered</i>
Regional Director, FWPCA, Northeast Atlantic Regional Office, Rm. 2303 John F. Kennedy Fed. Bldg., Boston, Mass. 02203.	All New England Basins and the Hudson-Champlain and Delaware River Basins: Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Vermont, Rhode Island.
Regional Director, FWPCA, Middle Atlantic Regional Office, 300 West Main Street, Charlottesville, Va. 22901.	Chesapeake-Susquehanna River and all other Coastal basins in Virginia, North Carolina, and South Carolina, excluding the Savannah River Basin: Maryland, North Carolina, Pennsylvania, South Carolina, Virginia, District of Columbia.
Regional Director, FWPCA, Southeast Regional Office, Suite 300, 1321 Peachtree Street, NE., Atlanta, Ga. 30309.	All coastal basins extending from and including the Savannah River Basin to the Pearl River Basin in Mississippi, the Tennessee River Basin, and Puerto Rico and the Virgin Islands: Alabama, Florida, Georgia, Mississippi, Tennessee, Puerto Rico, Virgin Islands.
Regional Director, FWPCA, Ohio Basin Regional Office, 4676 Columbia Parkway, Cincinnati, Ohio 45226.	All basins within the Ohio River watershed, except the Tennessee: Indiana, Kentucky, Ohio, West Virginia.
Regional Director, FWPCA, Great Lakes Regional Office, 33 East Congress Parkway, Room 410, Chicago, Ill. 60605.	The Great Lakes-St. Lawrence Basins and Upper Mississippi River Basin: Illinois, Iowa, Michigan, Minnesota, Wisconsin.
Regional Director, FWPCA, Missouri Basin Regional Office, 601 East 12th Street, Kansas City, Mo. 64106.	Missouri River, Souris River, Red River of the North, and Rainy River Basin: Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, Wyoming.

Regional offices and areas of responsibility—Continued

<i>Region</i>	<i>Constituent basins and States covered</i>
Regional Director, FWPCA, South Central Regional Office, 1114 Commerce Street, Dallas, Tex. 75202.	Arkansas-Red-White River Basins, Lower Mississippi River Basin, Rio Grande Basin and all basins in Texas and Louisiana west of the Pearl River Basin draining into the Gulf of Mexico: Arkansas, Louisiana, New Mexico, Oklahoma, Texas.
Regional Director, FWPCA, Southwest Regional Office, Room 1802, 100 McAllister Street, San Francisco, Calif. 94102.	Colorado River Basin, Great Basin, and all coastal or interior basins in California, Hawaii, and Guam: Arizona, California, Hawaii, Nevada, Utah, Guam.
Regional Director, FWPCA, Northwest Regional Office, Room 570—Pittock Block, Portland, Oreg. 97205.	Columbia River Basin, coastal basins and waters of Oregon and Washington, and all basins in Alaska: Alaska, Idaho, Montana, Oregon, Washington.

Each region is under the supervision and direction of a regional director who is responsible directly to the Commissioner for activities within the region. Where the regional boundary does not conform to the State boundary, activities requiring State-wide administration, such as construction grants and State program grants, are assigned to the regional director with responsibility for the region in which the State is located.

BUREAU OF SPORT FISHERIES AND WILDLIFE

Regions and Areas (States) of responsibility

No. 1.—Regional Director, Pacific Region, Bureau of Sport Fisheries and Wildlife, 730 North East Pacific Street, P.O. Box 3737, Portland, Oreg. 97208; Hawaii, California, Idaho, Montana, Oregon, Washington.

No. 2.—Regional Director, Southwest Region, Bureau of Sport Fisheries and Wildlife, Federal Building and U.S. Courthouse, P.O. Box 1306, 500 Gold Avenue, SW., Albuquerque, N. Mex. 87103; Arizona, Colorado, Kansas, New Mexico, Oklahoma, Texas, Utah, Wyoming.

No. 3.—Regional Director, North Central Region, Bureau of Sport Fisheries and Wildlife, 1006 West Lake Street, Minneapolis, Minn. 55408; Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.

No. 4.—Regional Director, Southeast Region, Bureau of Sport Fisheries and Wildlife, 809 Peachtree—7th Building, Atlanta, Ga. 30323; Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, Puerto Rico, and Virgin Islands.

No. 5.—Regional Director, Northeast Region, Bureau of Sport Fisheries and Wildlife, U.S. Post Office and Courthouse, Boston, Mass. 02109; Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia.

Alaska.—River Basins Supervisor, Bureau of Commercial Fisheries, P.O. Box 1688, Juneau, Alaska 99801.

NATIONAL PARK SERVICE

Regions and areas of responsibility

Regional Director, Southeast Region, National Park Service, Federal Building, Box 10008, 400 North Eighth Street, Richmond, Va. 23240; Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia.

Regional Director, Midwest Region, National Park Service, 1709 Jackson Street, Omaha, Nebr. 68102; Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, Wyoming, Colorado.

Regional Director, Southwest Region, National Park Service, Old Santa Fe Trail, P.O. Box 728, Santa Fe, N. Mex. 87501; Arizona, New Mexico, Oklahoma, Texas, Utah.

Regional Director, Western Region, National Park Service, 450 Golden Gate Avenue, P.O. Box 36063, San Francisco, Calif. 94102: California, Idaho, Nevada, Oregon, Washington, Alaska, Hawaii.

Regional Director, Northeast Region, National Park Service, 143 South Third Street, Philadelphia, Pa. 19106: Connecticut, Delaware, Illinois, Indiana, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Wisconsin.

Regional Director, National Capital Region, National Park Service, 1100 Ohio Drive SW., Washington, D.C. 20242: District of Columbia, Maryland.

General GROVES. Basically, sir, we are interested through the years prior to May 1970, in the type and nature of the structure so that we could determine whether or not it constituted a hindrance to navigation, this was the basic test that we applied.

However, as the water quality standards emerged and became apparent to us that section 10 and section 13 were related, which they very definitely are, we felt compelled to require this additional information on effluents.

Senator MUSKIE. Section 10 prior to—was it April of this year?

General GROVES. May of 1970, sir.

Senator MUSKIE. Prior to May of 1970, it was not used to control effluent discharges?

General GROVES. Basically no; no, sir.

Senator MUSKIE. And it is now being used to control effluent discharges or that is the object of the present policy?

General GROVES. No, sir; the basic purpose of section 10 is to control obstructions to navigation.

Senator MUSKIE. And it is going to continue to be that?

General GROVES. That will continue to be its basic purpose.

In May of 1970, we picked up detailed information on effluents.

Senator BOGGS. Would you at this point give us an example on the application prior to May 1970, with an example following May of 1970?

General GROVES. Yes, sir.

An example of how section 10 might routinely be applied would be the construction of a pier or a wharf that extends out into the navigable waterways which would constitute an obstruction.

Senator MUSKIE. Would this include an outfall as well?

General GROVES. Yes, sir; an outfall if it extended into the navigable waters.

The historic use of section 13, what it was originally intended to do again was to control the possible creation of obstructions to navigation.

Initially it related to the deposit of sediments which would create navigational hazards, but through the years, and there is quite a history of judicial application that has gradually extended to where it came to include oil and gasoline, for instance, until today refuse by definition is in effect any matter which is foreign to the natural state.

Senator BOGGS. That is all under section 10?

General GROVES. That is section 13.

Senator BOGGS. It was applied to piers and so forth before May 1970.

General GROVES. We still apply section 10 routinely to structures in navigable waters.

Senator BOGGS. But section 10 doesn't apply to solid wastes or fluids of any kind, does it?

General GROVES. We require now in section 10 permit applications that the applicant describe such phenomena that may be present. The form that we have got here which is before you is a universal form, part I is the form that will be used on all corps' applications either under section 10 or section 13 and the issuing authority would decide what type of permit to issue.

He might even issue a dual permit, section 10 and 13.

Senator BOGGS. I had the impression that since May 1970, under section 10, you were taking different action than before; that is the distinction on which I was focusing.

General GROVES. I think the magic thing about May 1970 as it pertains to section 10, as it relates to obstructions, is that at that time we began to get input from EPA and its predecessor on water quality standards and we began to use this to assemble data.

Senator BOGGS. It was more or less for gathering information, rather than for permit purposes?

General GROVES. That is correct, until July 1 of this year there has never been a section 13 permit.

Senator BOGGS. Thank you.

General GROVES. As far as the rest of this letter, sir, from the steel industry, the only point in which the corps has responsibility and on which I can properly address myself relating to instrumentation would pertain to siltation and sedimentation.

Here we would require data on effluents and we would be responsible to determine whether or not it might constitute a hazard to navigation.

The type of tests that would be performed here are relatively simple, probably relatively inexpensive.

I should point out, sir, too, that our general attitude with respect to the problems, and we have many problems, we expect on July 1 to receive even on the limited programs we are about to put into effect, the program is far more limited than the possible extent of the act, we expect to receive applications covering somewhere in excess of 100,000 discharges.

At the present time we have had somewhere in the neighborhood of 400 applications, and the number is escalating very rapidly. Our attitude in processing these things is that if anyone files with us on July 1 to the extent of his ability and proceeds from that point forward in good faith we are very ready and willing to cooperate with them to the fullest extent possible to get us all where we want to be.

Senator MUSKIE. Even though the information is not complete?

General GROVES. If he doesn't have the ability to get it we will help him and if together we can't get it we will just have to do the best we can.

Senator MUSKIE. With respect to the steel industry letter, let me ask a couple of questions for clarification.

You have this copy?

General GROVES. Yes, sir.

Senator MUSKIE. The memo says that in order to provide the information in the application, I gather that is what they say, what will be required is the installation of the measuring and proportion sam-

pling device on each outfall. Is that in your judgment a reasonable statement?

General GROVES. Sir, if I may, I would like to defer to EPA because the information that would be produced by this is prepared by them.

Senator MUSKIE. In other words, what I want to know, without taking you through each statement, is whether what is said is a reasonable description of the requirements that the steel industry is being asked to meet in order to file an application by the deadline of July 1. Is this a reasonable statement of what the requirements are?

Mr. CARROLL. Mr. Chairman, I think that statement overstates considerably the requirements that must be met by the industry to comply with the program by July 1 deadline.

If I may, I would like to point out three or four places where we feel that is the case. In submitting their initial applications we feel that much of the historical data is already available to those industries, the type of data required on July 1 is rather basic to the operations of any ongoing enterprises such as temperature flow and that sort of thing.

Second, we have said to this industry and to other industries that we would accept estimates and they can take on hand samples, they do not need to require finite monitoring devices for their initial application.

It is our estimate that the cost per measuring point, per initial capital equipment is more in the neighborhood of \$10,000 than the \$150,000 indicated in this letter.

Senator MUSKIE. On that specific point, has there been a discussion with the industry about this discrepancy in what has been required to measure?

Mr. CARROLL. I don't believe specifically with this industry, Mr. Chairman.

General Groves has described the NAM meeting, the telecast, we have indicated generally the sort of things, but we have not sat down specifically with the Institute itself.

Senator MUSKIE. What is the explanation for this wide discrepancy?

Mr. CARROLL. I think the explanation is, as I read this letter, that they have put forth a hypothesis here of the maximum requirement of monitoring in every case that might conceivably come up.

I can exemplify that by going on to the monitoring requirements they describe. They suggest that a daily sample will be required in each of these outfalls and intake points.

This is not exactly correct. There may be situations where a daily sample would be required. We don't know what those situations are yet. It is the intent of these regulations that in those schedules where the nature and type of outfall varies widely there will be a higher degree of frequency required for monitoring as the effluent changes.

I am advised this is not typically true of the steel industry; they have rather constant manufacturing processes, therefore there is a rather constant type of outfall.

In the hypothesis in the long run they may be required to take perhaps a monthly sample but certainly not daily.

You can't describe that more fully until we actually take a look at their preliminary forms and see what the content is of their effluent.

Senator MUSKIE. What you seem to be saying is that as you learn more about the nature of the effluents and the particular outfalls, you can be more precise in stating your requirements.

Now, here is an industry trying to anticipate what position it might be put into by what it includes in its permit application. In that kind of a case, should the industry play safe and go much, further than you might ultimately require it to go?

What should industry do, not knowing in advance what the ultimate monitoring requirements may be? What should industry do in order to prepare itself for the proper permit application?

Mr. CARROLL. I think General Groves indicated it very well; our intention here is to take that data which is supplied on July 1 and try in cooperation with that industry to develop those requirements and not do it unilaterally or independent of any consultation with them.

The alternative to that is, of course, to set finite rules in advance. We would prefer not to do that.

Senator MUSKIE. Where is the requirement in the permit application that this discussion revolves around? It sounds to me as though the industry to play safe is proposing the maximum that you will subject them to.

Mr. CARROLL. In section A, part I, of the permit, it is the attachment the second page from the back; you don't have the actual form there.

(The permit application forms, including the section A referred to, follow:)

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

APPLICATION FOR PERMIT TO DISCHARGE OR WORK IN NAVIGABLE WATERS AND THEIR TRIBUTARIES

SECTION I. GENERAL INFORMATION

1. State	Application Number (to be assigned by Corps of Engineers)			
---	Div.	Dist.	Type	Sequence No.
---	---	---	---	---

2. Name of applicant and title of signing official

3. Mailing address of applicant

4. Name, address, telephone number and title of applicant's authorized agent for permit application coordination and correspondence.

NOTE TO APPLICANT: Refer to the pamphlet entitled "Permits for Work and Structures in and for Discharges or Deposits into Navigable Waters" before attempting to complete this form.

Required Information

- a. All information contained in this application will, upon request, be made available to the public for inspection and copying. A separate sheet entitled "Confidential Answers" must be used to set out information which is considered by the applicant to constitute trade secrets or commercial or financial information of a confidential nature. The information must clearly indicate the item number to which it applies. Confidential treatment can be considered only for that information for which a specific written request of confidentiality has been made on the attached sheet. However, in no event will identification of the contents and frequency of a discharge be recognized as confidential or privileged information.
- b. The applicant shall furnish such supplementary information as is required by the District Engineer in order to evaluate fully an application.
- c. If additional space is needed for a complete response to any item on this form, attach a sheet entitled "Additional Information." Indicate on that sheet the item numbers to which answers apply.
- d. Drawings required by items 20 and 21 should be attached to this application. Other papers which must be attached to this application include, if applicable, copies of a water quality certification or a written communication which describes water quality impact (see Item 22 and Item 10 of Section II below), the additional information sheet(s) in "c" above, and the confidential information sheet described in "a" above.

Fees

If any discharge or deposit is involved, an application fee of \$100 must be submitted with this application. An additional \$50 is required for each additional point of discharge or deposit.

Signature

- a. If a discharge is involved, an application submitted by a corporation must be signed by the principal executive officer of that corporation or by an official of the rank of corporate vice president or above who reports directly to such principal executive officer and who has been designated by the principal executive officer to make such applications on behalf of the corporation. In the case of a partnership or a sole proprietorship, the application must be signed by a general partner or the proprietor. Other signature requirements are discussed in the pamphlet.
- b. If no discharge is involved, an application may be signed by the applicant or his authorized agent.

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate.

Signature of Applicant

18 U.S.C. Section 1001 provides that:

Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

Acronym name of applicant

FOR CORPS OF ENGINEERS USE ONLY

Are discharge structures

Major? Minor? N/A?

Date received, form not complete

Date received, form complete

but without certificate

Date received, form complete

Date of Cert./Ltr.

--- day --- mo --- yr

Date sent to EPA, form not complete

Date sent to EPA, NOAA, D/I, AEC,

FPC in complete form

--- day --- mo --- yr

5. Date ____ - ____ - ____ mo day yr	(Office use only)														
6. Check type of application: a. Original <input type="checkbox"/> b. Revision <input type="checkbox"/>	7. Number of original application														
8. Name of facility where discharge or construction will occur. _____ _____															
9. Full mailing address of facility named in item 8 above. _____ _____ _____ _____															
10. Names and mailing addresses of all adjoining property owners whose property also adjoins the waterway. _____ _____ _____															
11. Check to indicate the nature of the proposed activity: a. Dredging <input type="checkbox"/> b. Construction <input type="checkbox"/> c. Construction with Discharge <input type="checkbox"/> b. Discharge only <input type="checkbox"/>															
12. If activity is temporary in nature, estimate its duration in months. _____															
If application is for a discharge:															
13. List intake sources															
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 60%;">Source</th> <th style="text-align: center; width: 40%;">Estimated Volume in Million Gallons Per day or Fraction Thereof</th> </tr> </thead> <tbody> <tr> <td>Municipal or private water supply system</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Surface water body</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Ground water</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Other</td> <td style="text-align: center;">_____</td> </tr> </tbody> </table>	Source	Estimated Volume in Million Gallons Per day or Fraction Thereof	Municipal or private water supply system	_____	Surface water body	_____	Ground water	_____	Other	_____					
Source	Estimated Volume in Million Gallons Per day or Fraction Thereof														
Municipal or private water supply system	_____														
Surface water body	_____														
Ground water	_____														
Other	_____														
14. Describe water usage within the plant															
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Cooling water	_____														
Boiler Feed water	_____														
Process water	_____														
Sanitary system*	_____														
Other	_____														
15. List volume of discharges or losses other than into navigable waters.															
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Municipal waste treatment system	_____														
Surface containment	_____														
Underground disposal	_____														
Waste Acceptance firms	_____														
Evaporation	_____														
Consumption	_____														
* Indicate number employees served per day _____															

If structures exist, or dredging, filling or other construction will occur, the precise location of the activity must be described.	(Office use only)								
a. Name the corporate boundaries within which the structures exist or the activity will occur.									
16. _____ State _____	17. _____ County _____								
18. _____ City or Town _____									
b. Name of waterway at the location of the activity									
19. _____									
20. Maps and sketches which show the location and character of each structure or activity, including any and all outfall devices, dispersive devices, and non-structural points of discharge, must be attached to this application.									
21. For construction or work in navigable waters for which a separate permit is sought under 33 U.S.C. 403, the character of each structure must be fully shown on detailed plans to be submitted with this application. Note on the drawings those structures for which separate discharge information (Section II of this form) has been submitted.									
22. List all approvals or denials granted by Federal, interstate, State or local agencies for any structures, construction, discharges or deposits described in this application.									
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; width: 35%;">Type of document</th> <th style="text-align: center; width: 15%;">Id. No.</th> <th style="text-align: center; width: 15%;">Date</th> <th style="text-align: center; width: 35%;">Issuing Agency</th> </tr> </thead> <tbody> <tr> <td style="height: 100px;"> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Type of document	Id. No.	Date	Issuing Agency				
Type of document	Id. No.	Date	Issuing Agency						
23. Check if facility existed or was lawfully under construction prior to April 3, 1970. <input type="checkbox"/>									
24. If dredging or filling will occur: State the type of materials involved, their volume in cubic yards, and the proposed method of measurement.									
25. Describe the proposed method of instrumentation which will be used to measure the volume of any solids which may be deposited and to determine its effect upon the waterway.									
26. State rates and periods of deposition described in Item 25.									

SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION			
1. Discharge described below is a. Present <input type="checkbox"/> b. Proposed new or changed <input type="checkbox"/>		2. Implementation schedule <input type="checkbox"/>	(Office use only)
Name of corporate boundaries within which the point of discharge is located. State _____ County _____ City or Town _____			6. Discharge Serial No. _____
3. _____		4. _____	5. _____
State the precise location of the point of discharge. 7. Latitude _____ Degrees; _____ Min; _____ Sec. 8. Longitude _____ Degrees; _____ Min; _____ Sec.		9. Name of waterway at the point of discharge. _____	
10. Has application for water quality certification or description of impact been made? If so, give date: Date _____ Check if certificate is attached to form <input type="checkbox"/> Name Issuing Agency _____ _____ _____ _____			
11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process). _____ _____ _____ _____ _____ _____ _____ _____			
12. Standard industrial classification number. _____ _____	13. Principal product. _____ _____	14. Amount of principal product produced per day. _____ _____	
15. Principal raw material. _____ _____	16. Amount of principal raw material consumed per day. _____ _____	17. Number of batch discharges per day. _____	
18. Average gallons per batch discharge. _____	19. Date discharge began. _____ _____ mo _____ day _____ yr	20. Date discharge will begin. _____ _____ mo _____ day _____ yr	
21. Describe waste abatement practices. _____ _____ _____ _____ _____ _____ _____			

22. PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE							
Intake		Discharge				(Office use only)	
Parameter and Code	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY) (OPERATING YEAR)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	Discharge Serial No.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Flow (Gallons per day) 00056							
pH 00400							
Temperature (Winter) (°F) 74028							
Temperature (Summer) (°F) 74027							

23. DISCHARGE CONTENTS								
PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
	Color 00080				Aluminum 01105			
Turbidity 00070			Antimony 01097			Selenium 01147		
Radioactivity 74050			Arsenic 01002			Silver 01077		
Hardness 00900			Beryllium 01012			Potassium 00937		
Solids 00500			Barium 01007			Sodium 00929		
Ammonia 00610			Boron 01022			Titanium 01152		
Organic Nitrogen 00605			Cadmium 01027			Tin 01102		
Nitrate 00620			Calcium 00916			Zinc 01092		
Nitrite 00615			Cobalt 01037			Algicides 74051		
Phosphorus 00665			Chromium 01034			Oil and Grease 00550		
Sulfate 00945			Copper 01042			Phenols 32730		
Sulfide 00745			Iron 01045			Surfactants 38260		
Sulfite 00740			Lead 01051			Chlorinated Hydrocarbons 74052		
Bromide 71870			Magnesium 00927			Pesticides 74053		
Chloride 00940			Manganese 01055			Fecal Streptococci Bacteria 74054		
Cyanide 00720			Mercury 71900			Coliform Bacteria 74056		
Fluoride 00951			Molybdenum 01062					

24. Have all known hazardous or potentially hazardous substances in your plant been inventoried?

Yes No

24b. If yes, have steps been taken to insure that there exists no possibility of any such known hazardous or potentially hazardous substance entering this discharge?

Yes No

25. Remarks.

The information above completes the basic reporting requirements which are required of all applicants. Those applicants whose discharge results from an activity included within any of the Standard Industrial Classification Code (SIC Code) categories listed below must complete Part A of this form as well.

CRITICAL INDUSTRIAL GROUPS

SIC 098	FISH HATCHERIES, FARMS, AND PRESERVES	SIC 285	PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS
SIC 10-14	DIVISION B - MINING	SIC 2871	FERTILIZERS
SIC 201	MEAT PRODUCTS	SIC 2879	AGRICULTURAL PESTICIDES, AND OTHER AGRICULTURAL CHEMICALS, NOT ELSEWHERE CLASSIFIED
SIC 202	DAIRY PRODUCTS	SIC 2891	ADHESIVES AND GELATIN
SIC 203	CANNED PRESERVED FRUITS, VEGETABLES (EXCEPT SEAFOODS, SIC 2031 AND 2036)	SIC 2892	EXPLOSIVES
SIC 2031, 2036	CANNED AND CURED FISH AND SEAFOODS; FRESH OR FROZEN PACKAGED FISH AND SEAFOODS	SIC 29	PETROLEUM REFINING AND RELATED INDUSTRIES
SIC 204	GRAIN MILL PRODUCTS	SIC 3011, 3069	TIRES AND INNER TUBES; FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED
SIC 206	SUGAR	SIC 3079	MISCELLANEOUS PLASTICS PRODUCTS
SIC 207	CONFECTIONARY AND RELATED PRODUCTS	SIC 311	LEATHER TANNING AND FINISHING
SIC 208	BEVERAGES	SIC 32	STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
SIC 209	MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS	SIC 331	BLAST FURNACES, STEEL WORKS, AND ROLLING AND FINISHING MILLS
SIC 22	TEXTILE MILL PRODUCTS	SIC 332	IRON AND STEEL FOUNDRIES
SIC 23	APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS	SIC 333, 334	PRIMARY SMELTING AND REFINING OF NON-FERROUS METALS; SECONDARY SMELTING AND REFINING OF NONFERROUS METALS
SIC 242	SAWMILLS AND PLANING MILLS	SIC 336	NONFERROUS FOUNDRIES
SIC 2432	VENEER AND PLYWOOD	SIC 347	COATING, ENGRAVING, AND ALLIED SERVICES
SIC 2491	WOOD PRESERVING	SIC 35	MACHINERY, EXCEPT ELECTRICAL
SIC 26	PAPER AND ALLIED PRODUCTS	SIC 36	ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES
SIC 281	INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS (EXCEPT SIC 2818)	SIC 37	TRANSPORTATION EQUIPMENT (EXCEPT SHIP BUILDING AND REPAIRING, SIC 3731)
SIC 2818	INDUSTRIAL ORGANIC CHEMICALS	SIC 3731	SHIP BUILDING AND REPAIRING
SIC 282	PLASTICS MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS	SIC 491	ELECTRIC COMPANIES AND SYSTEMS
SIC 283	DRUGS	SIC 493	COMBINATION COMPANIES AND SYSTEMS
SIC 284	SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS		

PART A											
(Note: Submission of Part A is required of all applicants whose processes are listed on page 3 above.)							(Office use only)				
							Discharge Serial No.				
INFORMATION REQUIRED OF SPECIFIED INDUSTRIES											
Intake	Discharge										
PARAMETER AND CODE	(DAILY AVG. CONCENTRATION) (1)	TREATED INTAKE WATER (DAILY AVG. CONCENTRATION) (2)	MAXIMUM CONCENTRATION PER PROCESS UNIT (3)	MAXIMUM POUNDS PER DAY (4)	DAILY AVG. CONCENTRATION PER DAY (5)	AVERAGE POUNDS PER DAY (6)	SAMPLE TYPE (7)	SAMPLE FREQUENCY (8)	METHOD OF ANALYSIS (9)	CONTINUOUS MONITORING (10)	(11)
ALKALINITY (as Ca CO ₃) 00410											
B.O.D. 5-DAY 00310											
CHEMICAL OXYGEN DEMAND (C.O.D.) 00340											
TOTAL SOLIDS 00500											
TOTAL DISSOLVED SOLIDS 70300											
TOTAL SUSPENDED SOLIDS 00530											
TOTAL VOLATILE SOLIDS 00505											
AMMONIA (as N) 00610											
KJELDAHL NITROGEN 00625											
NITRATE (as N) 00620											
PHOSPHORUS TOTAL (as P) 00665											

TABLE A
Guide for Completion of Part A

PARAMETER & UNITS	METHOD	REFERENCES			SIGNIFICANCE IN REPORTING DATA
		STANDARD METHODS 13TH ED. 1971	A.S.T.M. STANDARDS Pl. 23 1970	W.Q.O. METHODS 1971	
ALKALINITY AS Ca CO ₃ Mg/liter	ELECTROMETRIC TITRATION TECHNICON METHYL ORANGE METHOD	p. 370	p. 154	p. 6	X.
B.O.D. 5-DAY Mg/liter	MODIFIED WINKLER METHOD OR PROBE METHOD	p. 489	p. 712	p. 15	X.
CHEMICAL OXYGEN DEMAND (C.O.D.) Mg/liter	DICHROMATE REFLUX METHOD	p. 495	—	p. 17	X.
TOTAL SOLIDS Mg/liter	GRAVIMETRIC, 105° C. METHOD	p. 535	—	p. 280	X.
TOTAL DISSOLVED (FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 180° C.	p. 539	—	p. 275	X.
TOTAL SUSPENDED (NON-FILTERABLE) SOLIDS Mg/liter	GLASS FIBER FILTRATION METHOD, 103-105° C.	p. 537	—	p. 278	X.
TOTAL VOLATILE SOLIDS Mg/liter	GRAVIMETRIC METHOD 550° C.	p. 536	—	p. 282	X.
AMMONIA (as N) Mg/liter	DISTILLATION-NESSLERIZATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 453	—	p. 134	.XX
KJELDAHL NITROGEN Mg/liter	DIGESTION-DISTILLATION METHOD OR TECHNICON-DIGESTION & PHENOLATE METHOD	p. 469	—	p. 149	.XX
NITRATE (as N) Mg/liter	BRUCINE SULFATE METHOD OR TECHNICON-HYDRAZINE REDUCTION METHOD	p. 461	—	p. 170	.XX
TOTAL PHOSPHORUS (as P) Mg/liter	PERSULFATE DIGESTION & SINGLE REAGENT METHOD OR TECHNICON-MANUAL DIGESTION & SINGLE REAGENT OR STANNOUS CHLORIDE	p. 526	—	p. 235	.XX

Senator MUSKIE. So we are in part A of this form. Does every member of the committee have it? We ought to get a complete understanding of what is involved. This part A is what the steel industry says results in these requirements which they describe on page 3 of their memorandum.

What you have been saying is that part A does not impose that extensive a requirement.

Mr. CARROLL. That is correct, sir.

Part A is designed to in the initial instance tell us what the makeup of that effluent will be as far as their initial application. It is from the information provided here, much of which we feel is already available to the industry, that we will then determine in conjunction with them whether they require daily, weekly, monthly, or annual sampling.

Senator MUSKIE. The industry seems to be saying two things: (1) it does not have a measuring or sampling device at each outfall and intake at the present time; and (2) the application implies that where the industry does not have a sampling device it must provide one prior to July 1, is that an accurate statement?

Mr. CARROLL. I believe that is what they are saying; yes, sir.

Senator MUSKIE. Is that a correct interpretation of the application form?

Mr. CARROLL. No, sir; I don't think so. I don't think we require that they have that definitive a measurement at each outfall by July 1.

Senator MUSKIE. What is there in the application that relieves them of that onerous interpretation? I am using the word "onerous" in describing their reaction.

Mr. CARROLL. On page 2 of the form, in section 13, 14, and 15, we use the word "estimated." I believe that was added as a revision of this form when we had consultations with various industry groups.

Senator MUSKIE. Is it possible for them to estimate the composition of the effluent from an outfall when there is no sampling device? Is it possible for them to estimate that?

Mr. CARROLL. I think most of that they will already require and need to know as part of their normal processing.

For example, the source of their intake water and the amount of water required is a basic part of the steel process and therefore they must determine that before they can construct their plants in the first instance. It is rather general data.

Senator MUSKIE. Do you think they have that data with respect to these 11 parameters on page 4? Would they have all of those as a result of their operations up to now?

Mr. CARROLL. They may not in all cases nor do we insist that they must provide them on July 1.

General Groves indicates that in the course of instructions that were issued they refer to the good faith attempts of the various values and it should be representative sampling but it need not be finite sampling.

Senator MUSKIE. On page 5 of that form, there is the language that applicants whose discharge results from activity including any of the standard industrial classification, organic categories listed below must complete part A of this form as well.

Now what does that "must" mean?

Mr. CARROLL. That means that for those who are not included in that category they do not have to complete these pages at all. For those that are included, they must attempt to give us estimates of these 11 parameters of effluents.

Senator MUSKIE. Where is that language about estimates?

Mr. CARROLL. That is in the first part of the form that precedes part A.

Senator MUSKIE. That is on page 2?

Mr. CARROLL. In those cases where applications for discharge estimates may be used.

Senator MUSKIE. Again I don't find that.

General GROVES. Mr. Chairman, in the instructions for filling out part A perhaps you might find this useful. It reads, pages 4 and 5 of the form, the information required in part A is to be based on sampling that you believe will result in representative values of the contents of your activity's discharge. Good faith attempts to provide such representative values which inadvertently result in erroneous results will not be penalized.

Senator MUSKIE. That seems to apply in cases where there is sampling but the results are erroneous. In the case where there is no sampling at all, which is what they seem to be telling us on page 3 is the case, may they be penalized for providing no sampling at all?

General GROVES. Sir, our attitude in the corps, if we received an application that was unable to provide us with information at that time if the applicant was proceeding in a good faith attempt to get it we would accept it on that basis.

Senator MUSKIE. This proceeding in good faith excludes the necessity of providing the sampling device in those cases where there are no sampling devices? What does proceeding in good faith mean? Should they have ordered sampling devices?

General GROVES. I am sure we would accept that.

Senator MUSKIE. Then we have the sampling device that costs \$500 as against one they say costs \$50,000. Which device represents good faith?

Mr. CARROLL. Both may represent good faith or either.

Senator MUSKIE. How would they make a choice?

General GROVES. I think you get back to the question sir, which you asked earlier, which is what is the prudent course for the applicant to take now, should they meet the immediate requirement or should they try to look ahead.

Senator MUSKIE. What they seem to be saying is that this application on its face implies that we will be sampling at each outfall, there is nothing that seems to excuse them from that requirement, and there is nothing in what you have said today that seems to excuse them explicitly from that requirement. In other words, the sampling may be inadequate, may be of erroneous information, and on that you provide an escape for them. But if they are not sampling at all, then what this form seems to require is that they do something about establishing sampling devices; and that should be in motion and underway in order to establish good faith.

Then the next question is: How do they decide how thorough their sampling ought to be? If the answer to that question is going to result in a variation of \$500 to \$50,000 per outfall, it is a rather critical judgment for them to make.

In trying to make that judgment and be safe, what can they rely upon in guidelines that the agency has issued to do as much as is necessary but not more than is necessary? It is a rather critical judgment, if the spread is that wide.

Mr. CARROLL. Your point is very valid, Mr. Chairman, but I believe it is unduly anticipatory on the part of the industry. This form as submitted now, as I understand it, is sort of the first date base upon which the subsequent sampling and monitoring requirements will be based.

We are in the position that until we know the source and the frequency of change of those effluents, that we cannot set the monitoring standards. The industry may assume that they will be daily, but what we are trying to do is approach this with a minimum of requirements on these industries and say as a very basic minimum this is what we require, once, and once only, based on your historical data.

At that time we will then sit down with you and say these are the sorts and frequency of monitoring that is required.

Senator MUSKIE. May I say this: If the range is one of \$500 to \$50,000, is the industry safe in saying, well, we are not going to make a decision about sampling devices until we have had a chance to sit down with the agency and learn how extensive the sampling and monitoring is going to be? If they take that decision, are they safe in doing so? Or is there anything they can rely upon in your instructions that will assure them that they are safe in doing so?

Mr. CARROLL. I believe the instructions today are asking them to complete this first form.

Senator MUSKIE. It says they must provide; they must complete part A of this form. This on its face would seem to require that they sample every one of their outfalls or have taken steps to sample them.

Mr. CARROLL. Once.

Senator MUSKIE. The device must be bought. Are there disposable devices that can be used once? It seems to me that if you must have the device, you ought to know what it was going to be.

Mr. CARROLL. It does not require daily or online monitoring devices.

General GROVES. It will be a condition of the permit; this information as provided here is merely a sampling of the effluent.

Senator MUSKIE. How do they get the sample?

General GROVES. It could be a test sample which is analyzed, and this would be the basis for identifying what is present.

At that point, EPA would in concert with us arrive at the conditions of the permit, part of which would specify monitoring devices to be installed.

Mr. CARROLL. If I may go on, Mr. Chairman, I can make two other points here on their cost buildup.

This describes a number of parameters and the costs of measuring those parameters on a daily basis should they have to.

Now, we have proposed in part A, and subsequently in part B of this form estimated, 50 parameters. Those parameters in no case will apply across the board to any one industry.

You may have situations where if there is no arsenic or no mercury, they will just check off this form, and that is the end of that parameter.

Senator MUSKIE. Can they do that without an actual sampling?

Mr. CARROLL. Yes, sir; if there is no mercury or arsenic contained in their raw materials or leaking from their process. They just indicate that is not part of their process.

We estimate that 20 parameters will be the average for most industries. The highest of any industry is the steel industry where we estimate when we get these reports they will probably find that there are three lines of 15 parameters that need to be measured.

The industry estimates to take the sampling, it will cost them \$100,000 a day. Our estimate for the requirements of these first 11 parameters for each time they are monitored is \$120.

In part B for the additional 28 parameters that may be required, it will be an additional \$140, for a total of \$250 cost each time they monitor these effluents.

However, as I indicated earlier, we estimate that might be 12 times a year perhaps, rather than daily, for these 2,000 outfalls, and then you have an annual cost of \$6.2 million compared to the \$140 million estimated by the industry, a rather significant difference.

Senator MUSKIE. Do you make a distinction between sampling and monitoring?

Mr. CARROLL. No, sir; I was using the words interchangeably.

Senator MUSKIE. I want to ask one other question, and then I will yield to my colleagues.

It seems to me that if what you have in mind is ultimately setting the specificity of monitoring standards, that ought to be indicated in your instructions in some way so that industry will not achieve the expensive investment and the maximum monitoring system that might not ultimately be required.

As I sense what has been said here, they assume that they ought to be putting in a maximum monitoring system because it is going to be required from now on, but they believe that it is impossible to do it on such short notice.

If what you are suggesting to them is that the estimates could be simplified by test tube sampling of some kind, it might be useful to indicate that somewhere in the instructions.

Mr. TRAIN. Mr. Chairman, it seems to me that the application for permit as of July 1, the instructions for that application, in addition to all the public discussion and information that has been put out, should not suggest to them, or clearly does not suggest to them, that they are going to have to go to this kind of extreme monitoring by July 1, there is no indication of this in the application at all.

I think if they have any uncertainties, it is to the future, what are we ultimately going to have to do, and therefore what are we going to have to start planning for or should we start planning for now in terms of levels of investment and new capital equipment and operating equipment.

Now, there are uncertainties, in listening to the discussion here, as to just what is going to be expected. I would think that the proper course is for industry, both as an industry and individual companies,

should sit down with the agencies involved here and sort these problems out.

I think that is the normal approach. There are problems here and uncertainties, but I think they can be resolved, probably fairly speedily, by discussion. I certainly can't imagine that the steel industry should go off and spend \$100 million on new monitoring devices without even sitting down with EPA and discussing it with them.

Senator MUSKIE. Let me ask EPA a few questions.

Hasn't the industry asked you for advice on the points that they raise in this memo?

Mr. CARROLL. Not to my knowledge.

Senator MUSKIE. If they were to ask you—

Mr. CARROLL. They asked in this letter.

Senator MUSKIE. If they asked you, would you give them essentially the answers that you have given us here this morning?

Mr. CARROLL. Yes, sir; we would welcome that opportunity.

Senator MUSKIE. Three, how many permit applications are there likely to be?

Mr. CARROLL. From this industry?

Senator MUSKIE. Overall, if we want to give them the kind of counseling Mr. Russell is talking about. I would like to get some idea of how extensive a project this would be, and whether you have the manpower to provide it.

Mr. CARROLL. I think the main problem is with these roughly 40 critical industrial groups, we have met with a number of those. We have not met specifically with the iron and steel institute. A one time meeting with those various categories in a trade association would not be an insurmountable problem.

Senator MUSKIE. I yield to my colleagues.

Senator RANDOLPH. Perhaps I am in error but it seems to me that testimony before the subcommittee or in conference, maybe at the staff level, indicated that there had been one conference that lasted almost a day, am I in error on that?

Mr. CARROLL. With the iron and steel institute?

Senator RANDOLPH. No, with steel companies. I just want to clarify that.

Mr. CARROLL. I have some indications that they have had technical representatives at two of our conferences. I don't think they have had any meetings specifically with them on a policy basis. I could check that out specifically if you would like.

Senator RANDOLPH. I won't pursue that at the moment. I think it is going more deeply into the situation than you indicate, Mr. Chairman.

But I would want to be certain of my position on that matter.

Mr. Carroll, I don't want the chairman to be unduly alarmed because I am speaking for no one except myself at this time, as a member of this committee, but I think it is very important to realize that there is written in a penalty here, a penalty of up to \$10,000 as a fine or 5 years in jail; is that correct?

Mr. CARROLL. Yes.

Senator RANDOLPH. Is that a matter for the EPA or the Corps of Engineers or the Environmental Council or is that a matter for the Justice Department?

Mr. CARROLL. The actual enforcement of that would be a matter for the Justice Department.

Senator RANDOLPH. How is this arrived at?

General GROVES. Sir, that is a part of the law, this goes back to 1899.

Senator RANDOLPH. You mean 1899?

General GROVES. Yes, sir.

Mr. TRAIN. As I understand the penalty for false statements comes in with respect to knowing misrepresentation and false statements and I think this probably is the section that covers any misrepresentation in an official form of this sort.

It is set forth here on the permit application itself. It refers to 18 U.S.C., section 1001 and it states: "Whoever in any matter within the jurisdiction of any department or agency of the United States knowingly and wilfully falsifies, conceals or covers up by any trick, scheme or device, a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing the same to contain any false, fictitious, or fraudulent statement or entry shall be fined not more than \$10,000 or imprisoned not more than 5 years or both," certainly that does not cover a good faith statement.

Senator MUSKIE. Would the Senator yield?

Senator RANDOLPH. Yes.

Senator MUSKIE. If an applicant were to say in his permit application that he cannot supply part of this information because he does not have monitoring or sampling devices in all of his outfalls, what would be the response of the agency?

General GROVES. I am sure that we would have to be the first ones to face up to that question, sir, because we would receive the form.

As we read the form he could provide this information as required in part A merely by catch samples, for instance, he does not need the monitoring devices.

Senator MUSKIE. The guidelines do not say that.

General GROVES. Yes, sir.

Senator MUSKIE. That catch samples are sufficient?

General GROVES. If they are the best he has got and that is what he is doing, yes, sir.

Senator MUSKIE. Where does it say that?

General GROVES. I go back, sir, to the provision here in our instructions for part A and the first sentence, the information required in part A is to be based on sampling which you believe will result in representative values of the contents of your activity's discharge.

Now referring to page 4 of this form, which is the part that I think is troubling you, instructions spell out what these different columns are for.

In columns 8, 9, 10 and 11 sample type, frequency of analysis and continuous monitoring are to be used to describe the sample methods and the frequencies with which they are taken, and under that a catch sample would certainly be applicable as long as the applicant spelled out what he did.

In column 8 of instructions provides, in fact, for an average grab sample and a composite sample, as long as he says what he did and he did it we have a basis on which to proceed.

Senator MUSKIE. Does it require a continuing sample? In referring to the language, is it in this?

General GROVES. I am referring to page 20 of the instructions, yes, sir.

Senator MUSKIE. Is this it?

General GROVES. Yes, the one you have in your hand, sir, page 20.

If you look up here toward the top of the page it says column 8, enter sample type, enter one of the following and then it lists three types.

Senator MUSKIE. I see. So in part A, column 8, of the sample type on this form, it says enter one of the following: AVER for average grab sample, COMP for composite, and CONT for continued sample. That seems to say whatever the form of sample is providing, if it is accurately described you would accept it for the purpose of the application?

General GROVES. Yes, sir.

Senator MUSKIE. And then with respect to column 11, where the subject is continuous monitoring: REC if the parameter is continuously monitored but its value is recorded, MON if the parameter is continuously monitored but its value is not recorded, and ABS if the parameter is not continuously monitored?

General GROVES. Yes, sir.

Senator MUSKIE. I yield to my colleagues.

Senator BEALL. Is there a possibility that in each of the first seven items the word "per day" or "daily average" is used in each of those, do they relate to the last two and there may be some confusion between section 8, 9, 10, and 11 resulting from the words "per day" or "daily" being used in the first seven items?

General GROVES. No, sir, the instructions on page 19 relate to columns 1, 2, 3, and 4, and we are talking about volumes and in the description of the sample we are talking about methods.

Senator BEALL. You are talking about concentration in six.

General GROVES. Enter the average daily discharge value in millions of gallons.

Senator BEALL. And the industries in question have this, they monitor this as the normal course of events, do they?

General GROVES. Many of them do, sir, and where this information is not readily available to them, our district engineers have instructions, and they know that they have instructions, to help them fill out these forms.

Senator TUNNEY. I just have a question on your answer to the Senator's question, you said that the first six columns relate to volume and the last five, the first seven relate to volume and the last four relate to, did you say methods?

General GROVES. I may have misled you; one through seven relate to calculated volumes and weights and content of the effluent. The last four columns relate to the type of analysis performed, the method.

Senator BEALL. Is what the people are talking about on page 3, is this equipment connected with the measurement of anything required in one through seven, or is it all related to eight through 11 where they talk about spending \$100 million for installation?

Mr. CARROLL. Senator, I think they are talking about two different things. In page 3, they are talking about a monitor that may be re-

quired after the basic data is submitted. In this form, we are looking at these 11 parameters and is simply for basic data submitted to us initially so we can make an estimate with them as to the sort of monitoring later on required.

Senator TUNNEY. If you only take a catch sample, how can you fill out column 7, average tonnage per day?

Senator MUSKIE. You would have to have at least two to have an average.

Mr. CARROLL. There may be some of these cases which in their processing, as I indicated earlier, they will just check off that they have none whatsoever.

There may be some that they can measure this simply by the amount of raw material they purchase less what go into their product, and the rest of it is discharged as effluent.

Senator TUNNEY. So under those circumstances you would not need a sample?

Mr. CARROLL. Not a complex sample, no.

Senator TUNNEY. The industry doesn't know that.

Mr. CARROLL. I think we are getting that message.

Senator TUNNEY. I have a question that Senator Bayh's legislative assistant handed me and asked me to ask, if I could.

Senator MUSKIE. Yes, of course.

Senator TUNNEY. Presently, permits may be issued for the discharge of waste in navigable waters under the Refuse Act of 1899, United States Code 407. However, 33 United State Code 421, the law of 1910, permits all discharge into Lake Michigan off of Cook County, Ill., and Lake County, Ind. There is no provision for the issuance of permits under this section.

EPA, the Corps of Engineers have announced that pursuant to this law no permits can or will be issued to industries fronting on Lake Michigan in Cook or Lake Counties.

Industries thus situated are faced with a serious dilemma, either to reroute their effluent discharge at great cost into tributaries of Lake Michigan not subject to section 421, a discharge of which permits may be obtained, or to shut down their plants.

Eight major plants are affected, involving thousands of jobs in an area already depressed by hard unemployment.

In light of this and in light of the fact that the effluent presently being discharged into Lake Michigan is presently meeting applicable water quality standards, there are three questions.

One, is there any continued justification for this treatment of Cook County, Lake County?

Two, do you have any objection to, A, conforming section 221 to section 407 by including permits authorized under section 421 or, B, repeal of section 421?

Going back to question one, is there any continued justification for discriminatory treatment of Cook County, Lake County?

General GROVES. Well, sir, I can only reflect what the Corps of Engineers is doing. The release to which you refer, we are not truly a party to. Our instructions to our district engineers are to receive and to the limit of their ability process applications in those two counties, under section 13.

This whole matter is presently in the courts, and we look forward to a conventional resolution of it, but in the meantime we will process as best we can.

Senator TUNNEY. Does this mean that after July that those plants will have to close down if they can't get permits?

General GROVES. Sir, the one thing that may not be clear, anybody that is in violation of the 1899 act is in violation of it now, and July has no real bearing on the situation except that is the point at which we would require them to file an application to enter the program.

Senator TUNNEY. Apparently he is talking about the law of 1910 which prohibits all discharge even to Lake Michigan. Is there any objection to conforming section 421, which is the law of 1910, to section 407 by including permit authority under section 421, or repeal of section 421?

General GROVES. We don't see any objection to it; it certainly would resolve a very difficult problem.

Senator TUNNEY. To repeal section 421?

General GROVES. Of the 1910 law?

Senator TUNNEY. Yes, repeal of that section, or by having, I guess, language added to the section to amend it to conform to section 421 with section 407.

Mr. TRAIN. This is a highly complex question.

Senator TUNNEY. It was just handed to me. Can we submit this question, Mr. Chairman, to the witnesses?

Mr. TRAIN. I was going to suggest that maybe something in writing might be useful from your standpoint as well as from ours.

When I first heard of this 1910 statute some weeks back, there was considerable interest on the part of Great Lakes Senators in insisting on immediate enforcement of this old statute which in some ways surfaced in the courts.

Now, I don't know that we should hasten to say let's get rid of it. I think we ought to take a good look at this and submit a written answer.

Senator TUNNEY. Is Senator Bayh's assistant here? Could you type this up and make it available to the witnesses.

Senator MUSKIE. It is a perfectly appropriate question, and we ought to get an answer to it.

I would think that the agency would like to give it a little more consideration.

Senator MUSKIE. You have said this several times, General. It is true that the 1899 law has been on the books for a long time and that its requirements, whether explicit or implicit, therefore, have been part of the law but may not have been a visible part of the law for all of this time.

It is only recently that the 1899 law has been thought of as a way of controlling pollution. And even though that might have been its valid interpretation in 1899, I wish that it had been so interpreted and so clearly in 1899. We might have avoided a lot of these problems.

The fact is that it wasn't so interpreted. It isn't entirely valid, is it, to suggest the industries now be required to meet such standards with respect to pollution, that industries should have been expecting to meet such standards ever since the 1899 law was enacted?

General GROVES. Sir, it began to emerge in its present form about 1960. The pattern has been clear in the last several years.

Senator MUSKIE. I know; I understand. But a lot of industries that now are subject to that interpretation of the law were constructed 40 or 50 years ago and were not required to get a section 13 permit. Now they are required to do so.

I am not challenging the fact that they are now being required to do so. The point I am making is that they ought really to be charged with the failure to have done so 40 years ago when public policy itself didn't enforce this tool.

Do any others have questions on this specific problem?

Senator COOPER. I have a few.

Senator MUSKIE. Start with this and then go on to the broader question, John.

Senator COOPER. First, I would like to say I applaud the efforts of the President, the Council, and the Corps of Engineers in initiating this program. But I think there are some practical problems on which I would like to ask some questions.

First, after a quick look at the application forms, which we saw yesterday, I think there is a real question about the time limitation.

I have heard not only from the iron and steel industry, but from some small units of business saying they don't have the expertise to fill out the first form. They have had to hire technical advisers. I think if they want to do it correctly, that probably may be the case for many companies.

Looking at this application due 90 days later, I would say any business that had any sense would want that to be properly executed, and I think this may take some time.

I don't want to elaborate on the question of self incrimination. I don't think it could be settled by immunity. I can't think of any applicable legislation which would provide immunity in this case.

I don't think your section there is applicable. It goes to a violation of the statute relating to all regulations, as I understand it. If you falsify that, you are subject to a penalty. You don't expect these people to falsify them, you expect them to tell the truth, and I assume they will.

But in telling the truth, they fall under the original statute, and they are subject to fines, if they are in violation. I think you should give companies a proper opportunity to come into compliance.

Mr. Chairman, the general policy of the water quality acts that have been passed in recent years deal with the interstate waters. The efforts we have made go toward a State-Federal relationship, where the standards were first developed by the States, with review by the Federal Government.

Now this program is a totally Federal one. I wonder what effect that is going to have upon the States over a period of a few years.

Senator MUSKIE. I think that is a very good way to open the more general discussion that I envisioned. Maybe we can start the discussion by asking you to respond to that.

In the first place, let me ask this more specific question, John. Are permits going to be granted as a result of this application to each

of these discharges? And that will number in the tens of thousands, is that so?

Now, will that permit in the first instance simply license the continuation of discharges, or will it establish some higher level of performance from an environmental point of view? If it does, will it relate to a timetable? If that is so, what is the ultimate performance that you will seek to achieve with this permit program, and how does that relate to the water quality standards?

Mr. TRAIN. Speaking very generally the whole permit program is tied to the water quality program standards and is a mechanism designed to reach those standards. It is not something beyond or apart from the water quality standards, and certainly the giving of a permit is to be conditional, either the discharge does meet and does not impair water quality standards, or if it does it would be the case quite generally I suppose in the first instance, it must be tied to an approved implementation schedule for eventually meeting water quality standards.

So to that extent the grant of the permit will be conditional upon such implementation schedules.

Senator MUSKIE. Where, in considering this water pollution legislation, is the requirement for the implementation plan? How will that relate to the implementation schedule you just referred to with respect to the permit program? Would it be a difficult one? Would it be the same one?

Mr. TRAIN. If what you are mentioning is the possibility of specific implementation schedules written into law by the Congress—

Senator MUSKIE. It will be authorized by the law, required by the law, not written into the law? They will be required. In other words, both the administration and legislation by this committee are intended to focus upon the necessity for control of effluents.

We thought we had written effluent controls by implication into the law before. But that is not the way it has been interpreted. Now we want to be more specific, and the administration legislation proposals also are designed to make it clear that water quality standards must be implemented by the use of effluent control. The law we are writing, I am sure, will include a requirement for effluent control.

The permit is also an effluent control. How do we tie the two together?

Mr. TRAIN. The permit program would be tied to any effluent control in the legislation.

Senator MUSKIE. But you object to issuing these permits by the first of the year. Would the permit be issued as of the first of July? The applications must be filed by the first of July.

General GROVES. We anticipate they will begin to appear in final form after 3 or 4 months, it may take longer depending on the complexities of the problem.

Senator MUSKIE. Those permits will be conditioned by an implementation plan. This legislation may not be on the books by then.

Mr. TRAIN. This is correct and this is always going to be the case and it is understood that any permit granted is subject to later revision, if there is a change in implementation schedules or water quality standards.

Senator MUSKIE. Is there any point in our including any such provision in this legislation? What water quality standards would those permits be tied to, those that have now been approved for the States and the Water Quality Act of 1965, or some new water quality standards to be designed by the agencies pursuant to this permit program?

Mr. TRAIN. Well, the water quality standards are those prescribed by statute.

Senator MUSKIE. They have been developed by the States and approved by the Federal Government. I guess not all States have yet approved standards. In very few cases are they as thorough as any of us would like. In any case, they are on the books at the present time. They will be upgraded under present law and under the new law we hope to write. But if under the permit program the executive branch is now developing its own concept of what the water quality standards are to be and how the effluent ought to be geared to them, then aren't we engaging in a useless exercise in writing the law?

Mr. TRAIN. It does seem to me we are proceeding by administrative action under the Refuse Act combined with section 21-B to prescribe specific effluent standards which we have also requested authority for by statute.

I would suppose that there is no absolute necessity for Congress to act in providing that authority as we do believe that exists, and that is the way we are administering the Refuse Act.

So to that extent I would not say it is a useless act but probably not a necessary act.

Senator MUSKIE. Let me put it this way. These permits are going to be issued in the next 2 or 3 months. They are going to say to industry A, B, C and D, you can discharge according to this timetable only in accordance with the standards in this timetable.

But your effluent standards are not going to be geared to any law this Congress has passed because we have not passed it yet.

We haven't written it yet. If you are proceeding with some standards that you are going to set administratively—the effluent standards—is there any point in our writing law?

General GROVES. Sir, I believe that it would certainly serve a useful purpose because the conditions of the permit in addition to requiring a timetable, as appropriate, also provide for amendment in addition to the permit to meet conditions and standards in the law, and in addition to that the life of the permit is only for 5 years after which it would have to be reevaluated under what the standards are.

Senator MUSKIE. The water quality standards program is a standard setting program. Standards are set at the State level and then are reviewed and approved, or disapproved, at the Federal level.

Under the permit program you are going to set your own standards. According to your interpretation, there is nothing in the present law that directs the State to set effluent standards under the water quality provision.

We intended the law to cover effluent standards, but it has not been interpreted that way. At the present time, then, what you are going to do in the permit program is not covered by the law. There are no effluent standards set, so you are going to set them and initiate them in accordance with whatever standards you are developing. I don't know

what they are. They are not provided in the Refuse Act of 1899. There is nothing in that act which speaks about effluent standards or creates authority for establishing them. You are doing so by interpretation.

Now, you are going to set some conditions on permits which have to do with the amount of effluent that will be permitted and that will be related to somebody's interpretation of what the ultimate result ought to be.

That is a different process than the one we set up in 1965, which doesn't include effluent standards at all, but only water quality standards.

In the process of writing the new law—which we had hoped would come to grips with the effluent problem and more effectively—what is the point in it, if you are already putting into motion another program?

Mr. TRAIN. It would not necessarily be another program.

Senator MUSKIE. How are we to relate it, Russell?

Mr. TRAIN. We are exercising the authority under the general requirement of secondary standards and we are interpreting that to mean the effluent guidelines that are presently being developed.

I think probably for one thing it would be very useful to have the statutory authority to do this. I am sure we are going to be getting into cases in court.

It would be useful to have the authority.

Senator MUSKIE. You are suggesting that we scrap the present water quality standards program and simply give our imprimatur to this program you are developing administratively in order to make your authority clear. In other words, you are suggesting that we scrap this Federal program and substitute for it a Federal program which you are shaping administratively and which you would like us to approve.

Senator BOGGS. Right at this point, General, after the application is filed, what does the corps require of the applicant insofar as the State is concerned?

General GROVES. Sir, we apply three tests to these permit applications. The first is the matter of navigation and anchorage in which we make the determination of whether or not it is effective; the second relates to fish and wildlife in which case we seek the views of both the Department of Interior and the Department of Commerce.

The third test is that of water quality. Here we rely at the Federal level on EPA. The first input and the applicant must submit it with his application, his State certification that he is in compliance with the State water quality standards.

Senator BOGGS. He has to submit that by July 1, is that correct?

General GROVES. No, sir. We have a grandfather clause in the law which brought this about which gives them until April 3 of 1973 to produce State certification.

Senator BOGGS. He has to submit a certificate by 1973 that he is in compliance with the State Water Quality Act.

General GROVES. Correct.

Mr. TRAIN. May I comment on your question?

Senator MUSKIE. Let me throw another fact in.

Thirty-two States now have permit programs under the 1965 act. In your answer tell us what your relationship between those permits and the new permits will be, as well as the broader question.

Mr. TRAIN. I would like to ask Mr. Alm to comment on your earlier question.

Mr. ALM. Mr. Chairman, I guess I would like to comment briefly on what the Refuse Act program would accomplish and then what the new legislation would accomplish. The Refuse Act program is basically an amplification of the current water quality standards program; namely, the standards that most States require secondary treatment or its equivalent.

It has never been very well defined what this means. By providing effluent guidelines we have a format for defining what secondary treatment or its equivalent actually means to meet the current water quality standards, also the Refuse Act program provides a framework for State comments on each permit under 21-B of the Federal Water Pollution Control Act.

This is where we are now. The purpose of new legislation with effluent standards to deal with those very congested areas where we will need to make a very careful determination between discharges and actually meeting the water quality criteria.

As you know, Senator, that has not been done in the past. Recent studies have shown that, even with secondary treatment the water quality criteria as established will not be achieved.

So basically the Refuse Act program tied to the Federal Water Pollution Control Act provides the framework for a nationwide upgrading and the new legislation provides for a pinpointing of those areas where additional requirements will be needed beyond secondary treatment.

Senator MUSKIE. How can you put together a rational program where the quality standards are set by the States subject to Federal approval and yet how do you relate that to a permit program which is a Federal program, it is the effluents which determine what the water quality will be.

It doesn't make sense to me to have a permit program in a completely Federal program with the water quality standards a State-Federal program.

I have no objections to the deal we thought we have written into the 1965 act, a requirement that there be the establishment of a relationship between effluents and water quality, when administratively that was interpreted out.

You could have interpreted it in and done what you are talking about now. If you had interpreted the control of effluents into the water quality standards program you could have established that rationalization, chosen to go to the Refuse Act rule.

I am not challenging you but what I am asking is how do you make sense out of running these two things parallel? We start a permit program now which is Federal, you are going to set your own effluent guidelines, your own effluent standard, you are going to get it in motion in the last part of this year and we are going to write a law that gives control over effluents under the permits to be issued by States

under Federal policy which probably could not begin to get implemented until sometime next year or the first of the following year, how do you put the two together?

Mr. ALM. The current standards, as I mentioned before, require secondary treatment or its equivalent and the effluent guidelines—

Senator MUSKIE. But that is an administrative guideline.

Mr. ALM. That is right, but most of the States have agreed to that, to my understanding, to the secondary treatment.

Senator MUSKIE. If you want to sharpen it, you can do it under the Water Quality Standards Act.

Mr. ALM. That is right, but it is being done here through the Refuse Act program, you could have guidelines outside of the Refuse Act, that is true.

But we would establish and continue to have the use of the studies, the criteria to meet those, and you have section 21-B which requires that every Federal permit in the State water pollution agency must make a determination that the applicable facility will meet applicable water quality standards, so there is an interatcion between these two programs in the Federal Water Pollution Control Act and the Refuse Act.

The Refuse Act merely gives one part of the standards and that is the implementation plan regarding secondary treatment or its equivalent.

Senator MUSKIE. I have two questions: (1) Are you saying that these permits—the ones the general has told us would start flowing out in the next 2 or 3 months—are you saying that these must be processed through the States under section 21-B?

Mr. ALM. I will ask that of the administrative men.

General GROVES. Yes, sir.

Senator MUSKIE. What will this mean with respect to State permits, for instance the State of California permits? You develop proposed permits for the discharges in the State of California, and you submit those permits to the State of California for review, veto?

Mr. ALM. States could make a determination whether the facility was meeting water quality standards.

Senator MUSKIE. The State of California already has its own permits covering the same discharge.

Now, if your permit varies from the State's permit, do you anticipate then that the State of California would be in a position to insist upon its formulation?

Mr. ALM. It strikes me the permits should be identical because both of them are a determination that—

Senator MUSKIE. You are not seriously suggesting that if a State agency and a Federal agency, working independently, work on the same problem they will come up with the same answer?

You will have developed a permit, and the permit will be in the form that you have determined; before you submit it to the States.

Mr. ALM. No, Senator, excuse me. The applicant will submit the application to the corps and the corps presumably would send it to the State waiting for the State's advice.

General Groves can probably talk about the details.

Senator MUSKIE. What is there in the application to suggest the standards of performance that the Federal Government is contemplating requiring?

Mr. ALM. I am sorry, I didn't understand the question?

Senator MUSKIE. Maybe I ought to back up a little bit.

Have you already developed the standards of performance that discharges in different categories ought to meet? Have you already established effluent standards?

Mr. CARROLL. No, we have not; we are doing studies on those at the moment.

Senator MUSKIE. Are those effluent standards going to be subject to State review? They are not part of the developing process?

Mr. CARROLL. That is correct.

Senator BEALL. What is correct in response to the question.

Mr. CARROLL. That the State through its comment is not part of the developing of the standards. I think there is an administrative question that is separate and distinct from the substantive question here.

I hope that the administrative one is simplest so I will try to see if I can respond to that first.

There are a number of States which not only have their own permit programs in existence, they have very good permit programs in existence.

Senator MUSKIE. May I interrupt?

There is a luncheon set for this room at 12:30, and they are anxious to come in and set it up for that purpose.

Obviously we can't get into the full dimensions of this discussion in the few moments that are left.

We have another session scheduled for tomorrow morning at 10 o'clock. I think it might be helpful if you had overnight to consider the committee's concerns and if we could meet again at 10 o'clock tomorrow. I think it worth exploring further because this is a difficult problem that we face in writing the law. It has held us up.

We are not prejudging anything, but we have a lot of questions that we think you can answer before we proceed with writing the law.

Would it be convenient to meet with us at 10 in the morning again?

Mr. TRAIN. As I reported to Leon when he informed me of this meeting I am going to be out West tomorrow, I am leaving town this afternoon. I won't be back until Friday morning. I think Mr. Ruckelshaus will be here tomorrow.

Mr. CARROLL. He will be back tonight and he is scheduled to meet with the Joint Committee on Atomic Energy in the morning.

Senator MUSKIE. Well, you gentlemen will be available, won't you? That is fine, it is still helpful.

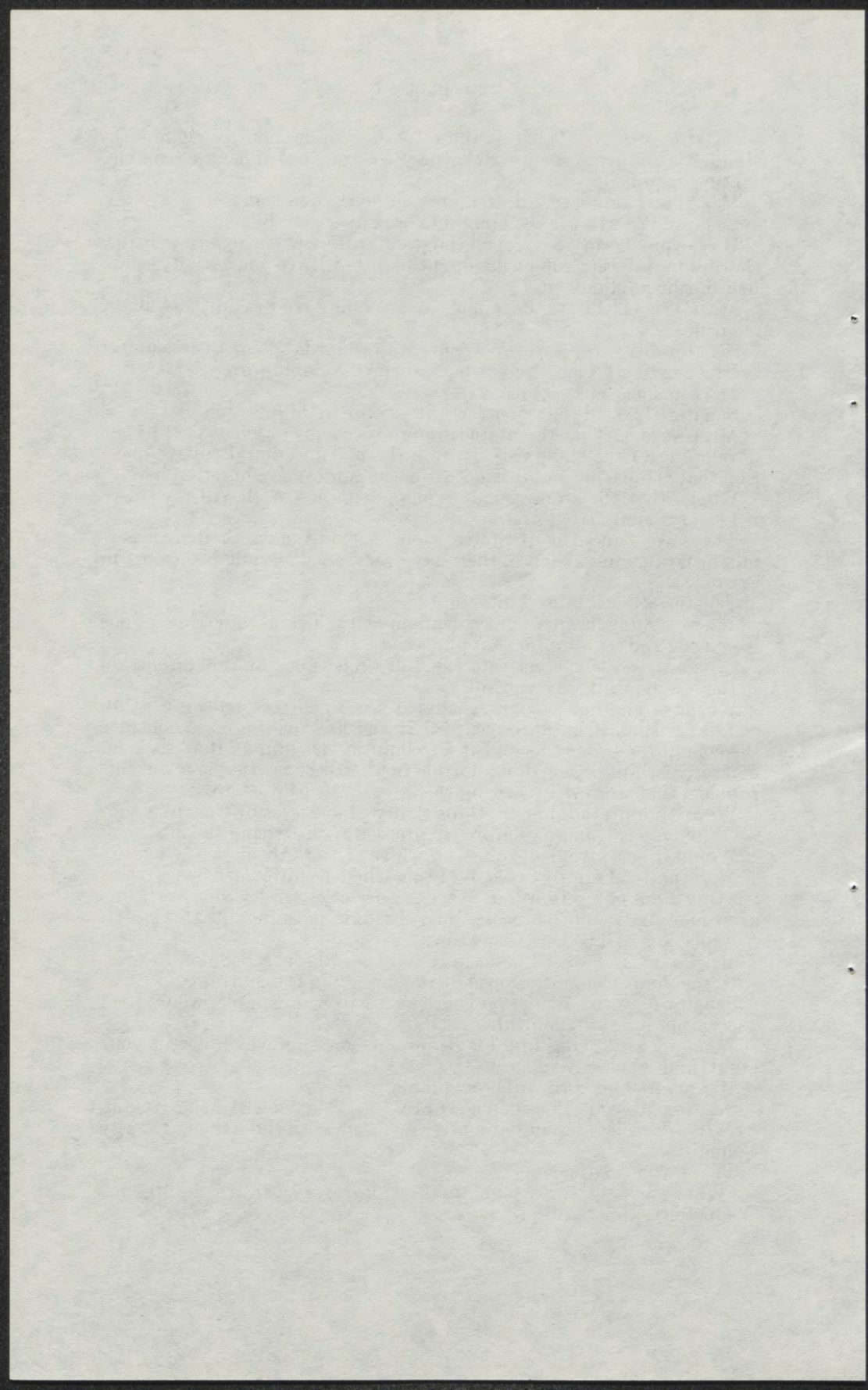
What we are trying to do is define the concepts which are in your minds and which are in ours.

Mr. TRAIN. Our staff will be available.

Senator MUSKIE. That is fine, if Mr. Ruckelshaus will come around, we will appreciate having him after he meets with the Atomic Energy Committee.

Thank you, gentlemen.

(Whereupon, at 12:05 p.m., the hearing recessed to resume 10 a.m., Wednesday, June 23, 1971.)



REFUSE ACT PERMIT PROGRAM

WEDNESDAY, JUNE 23, 1971

U.S. SENATE,
SUBCOMMITTEE ON AIR AND WATER POLLUTION
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D.C.

The subcommittee met at 10 a.m. pursuant to call, in room 4200, New Senate Office Building, Senator Edmund S. Muskie (chairman of the subcommittee) presiding.

Present: Senators Randolph, Muskie, Boggs, and Beall.

Senator MUSKIE. I wonder if we might begin.

I wonder if we might try to focus on the issues with a little more precision than we did yesterday. It started out as a rather informal discussion and then began to proceed around the issue.

I will have to leave for another committee sometime after 10:30. I know there are other members of this committee who have questions and who haven't had an opportunity to put these questions. I hope they will be here, and I hope they can get back from other committee hearings so that we can continue.

Now that we have begun this discussion, I want to complete it in as thorough a fashion as we can. Let me begin by reading from a memo that the staff prepared for us in March on this question:

As I see it, the subcommittee is confronted with a dilemma. The Administration Refuse Act Permit Program, which requires all industrial dischargers to obtain permits and meet effluent standards as a condition of continued operation, poses a number of serious questions relating to the consideration of the pending legislation.

Under both the Muskie bill and Administration bill, the States would be required to develop water quality standards for all of their waters. Those water quality standards, implementationwise, would include effluent limitations for each source of pollution and timetables for compliance. Also, the time schedule for the development, submission, and approval of implementation plans would be established by both bills.

Taken in context of the Federal Water Pollution Control effort, the subcommittee has no difficulty. However, it is expected that at least a year and perhaps 15 months would elapse from the date of enactment of a bill this year to the point at which time would start running on municipal and industrial sources of pollution to construct waste treatment facilities designed to meet the referred-to effluent limitations.

Assuming that the House and Senate agrees on a bill in September of this year—

And that now seems optimistic:

It would be January 1973 before the new program would be in effect and time would be running on those sources.

The Administration Refuse Act Permit Program requires that industrial waste dischargers apply for permit by July 1, 1971. Those permits would be issued on the basis of effluent guidelines established by EPA. The EPA effluent guidelines will become conditioned on discharge permits, and compliance schedules would be included.

Assuming that EPA and the Corps of Engineers are able to process the permit applications, establish the conditions, set compliance schedules, and issue the permit by January 1, 1972, all industrial waste dischargers in the country would be operating under compliance schedule at least one full year ahead of the effective date of any implementation plans approved as a result of the legislation the subcommittee is now considering.

Thus, by January 1, 1973, all industrial waste dischargers holding a Refuse Act permit and attempting to comply with applicable effluent limits will have to re-evaluate their programs to determine the extent to which the Refuse Act Permit condition meets the effluent limits established as a part of the plans for implementation of water quality standards.

Industry may wait for implementation plans before it does anything in order to avoid what may be unnecessary or ill-advised investment. Also, continued consideration of the present procedure with reliance on water quality standards and effluent limitations tailored to implement those standards would mean that there would be two water quality programs proceeding about one year apart, which would place unnecessary and unreasonable burdens on polluters.

Further, altering the Water Quality Program in a manner envisioned by either the Administration's bill or the Muskie bill may have to result in a diminution of the authority under the Refuse Act.

Senator MUSKIE. That, I think, is enough from the memorandum of last March to present the dilemma which the committee sees, and I think the discussion which we had yesterday tended to underline those points rather than eliminate them.

I have a number of questions that I think we might ask to try to highlight further the implications of what we are saying. Let me put the first one in this way: First, with respect to section 21(b) of the Water Quality Improvement Act of last year, the House-Senate conference agreement on section 21(b) limited EPA review authority over the certification procedures of the States to areas where downstream State water quality standards were involved, where no water quality standards were applicable, or where State or interstate agencies have no authority to issue certification.

Under the administration regulations for the Refuse Act program, EPA would have final authority over all water quality aspects related to a permit. In the absence of a statutory base in section 21(b), such final authority may be argued as resulting from implied authority in the Refuse Act or the inherent authority of the President to direct his agencies to carry out congressionally authorized functions.

However, what we would like to know is the basis for such final authority to veto a permit in the absence of authority under section 21, and whether a clear expression of the asserted authority in the Executive order and regulation should be confirmed by clear statutory authority, and, if so, why there was none recommended in the environmental message.

In other words, if we are to proceed with the permit program as it is now envisioned, is it necessary to clarify the statutory basis for the authority to do so from your point of view?

STATEMENT OF ROBERT W. FRI, DEPUTY ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY; ACCOMPANIED BY JOHN R. QUARLES, JR., ASSISTANT ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY; AND BRIG. GEN. RICHARD H. GROVES, U.S. ARMY CORPS OF ENGINEERS

Mr. FRI. Mr. Chairman, I am going to ask John Quarles to answer that. He is the fellow who has been most involved in the EPA in development of a permit program, even back prior to setting up of EPA. Let me simply respond in a general way to the dilemma that you proposed initially and to say that we are sensitive to that dilemma and especially to the timing factors that you cited; and, as I am sure was pointed out yesterday, our purpose in initiating the permit program was to enable us to move to enhance the water quality in this country as quickly as we could, and I think we will do that and that we understand the problems that it will cause, some downstream problems in terms of phasing in the new legislation that I think do need to be worked out. Now as to the specific question.

Mr. QUARLES. Senator, I think it would be helpful if this committee would propose to the Congress and if Congress would adopt new legislation covering precisely the question you identified. We ourselves are not entirely comfortable with the legislative foundation for the permit program, and, in regarding the permit program, it is important to recognize the prospective of the context within which that permit program was established.

None of us understood that the Refuse Act had the application to water quality matters that it recently has become recognized to have. Once that application was recognized, it became apparent that virtually every industry in this country is in violation of the Refuse Act.

It also became apparent that the Secretary of the Army, as a result of the Refuse Act, was in a position of having authority to grant or deny permits on such conditions as he might deem most suitable in the public interest.

The President, confronted with this situation, proposed a permit program as the best answer that could be devised under the existing factors, and I think that the permit program, to a very substantial extent, is a good answer which has many desirable attributes that we will explore in greater detail as we go along.

But we do agree that clarification of the authority is desirable and it would be helpful; because this is and has become ever more to be mainly a water quality program, it should be tied into the Federal Water Pollution Control Act as are the other legislative authorities on which the water quality program of the Federal Government are conducted.

Senator MUSKIE. I might say at this point that I am putting these questions and others that occur to me and to other members of the committee so that we can make a decision on whether we take the Refuse Act permit program as a base and build a whole new program or en-

large the water quality standards approach in another kind of development.

It seems to me that what we risk here is having two programs, neither of which is comprehensive enough to do the whole job; and yet two programs which could conflict with each other in important areas, and create confusion and dilution of the limited resources which this country has to deal with the problem.

We ought to make a decision legislatively as to which role to pursue, or whether it is possible to conform the two to each other. That is the purpose of these questions.

Mr. QUARLES. Between those two choices, we would vastly prefer the latter be adopted.

Senator MUSKIE. If it is possible to do that, that is a course we want to consider.

The second problem area that I would like to surface is this one: One of the principal criticisms of the section 21 (b) certification program is the claim that State certification and State water quality standards are inadequate.

I would like to get your view on this point. Are they inadequate? If so, what is the agency's view with respect to the capability of the States and certification process and how adequate can that certification be? If it is adequate, why is there a need for the Refuse Act permit program?

Let me make the point that at least 25 States now have programs which would make them eligible for 50 percent grants. This means that all receiving waters into which an eligible product was discharged must have enforceable water quality standards. In other words, with respect to those 25 States, they have been certified, by Federal authority, to have "enforceable water quality standards."

Now, if that certification was justified in the first instance, then it represents a judgment that those States at least have programs that are adequate to form a judgment on the performance of polluters with respect to the water quality standards that it is intended to achieve.

Is that, in fact, your judgment or your evaluation of the programs in those 25 States? With respect to the other 25 States, what is the current situation? Is it so bad that we ought to abandon the water quality standards, or should we press to bring those States also up to the capability that we deem essential?

Mr. QUARLES. Sir, I would like to draw a distinction, if I might, between certification of a State as having enforceable water quality standards and whether the entire State apparatus is adequate.

Adequacy is a relative term. We are dealing with an extremely complex problem, and we want to move forward as best we can. The State programs that have been certified for 50 percent grants that you just referred to are those that have passed a measure of achievement on the road toward having the best water quality program that man can devise. I certainly don't think that they or we would say that those programs are, in all respects, adequate.

Senator MUSKIE. Should we give up on these States?

Mr. QUARLES. By no means, in our judgment. We believe that the State programs and the framework of water quality standards is the only way that we are eventually going to get a satisfactory handle on this problem.

Senator MUSKIE. How do we persuade the States to evoke their scarce resources to the water quality problem if we take out of their control the regulation of the effluent sources which are at the heart of the problem? If both programs go forward, we say to them, "You set the standards and the use that you want to achieve, but we are going to control the discharges, and that may or may not conform to the water quality standards that you achieve."

Now, what incentive is there in this kind of a situation for the States to upgrade their capabilities to achieve what you want? Do you ask them to set the measure for the result they want, which may or may not have any relevance to the effluent standards that you set under the permit program? In any case, the control, the leverage, for the heart of the problem is not in State hands or in Federal hands.

California has already indicated that if the permit program goes forward, it may very well decide to abandon its water quality efforts. The Governor of the State of Washington has indicated a similar concern.

Is it realistic to ask the States to take that aspect of the responsibility while the Federal Government holds the lever of real control over the discharges?

Mr. QUARLES. We do not understand the permit program as taking away from the States all authority of setting the effluent controls. We have made a strong and persistent effort to relate the permit program established under the Refuse Act in the closest possible way to the water quality standards.

The program provides for the State authorities to make the initial review of every application and to make their determinations as to what degrees of treatment or other controls or conditions should be set forth in the permit. These comments or certifications by the States subsequently will be reviewed by the Environmental Protection Agency, and that agency will have authority to override State determinations.

However, we have stated clearly that it is our intention and our policy—and in terms of gearing up our manpower and our instructions and all else, we have followed through on this—to make maximum use of the State capabilities and to work as closely as possible with them.

We have discussed this problem with Kerry Mulligan and others from the State of California. We are working with them to try and get a close relationship between our program and theirs. And this will be done to the maximum extent possible in all States.

But I don't mean to say that there is not a problem here. It is one that we have recognized and are addressing ourselves to.

But the important point is that the initial and ultimately the firing line responsibility for working over these applications will be conducted at the State level.

Senator MUSKIE. You are undertaking, in connection with the applications for permits, to establish your own information base, is that not so?

Mr. QUARLES. It is true in a sense, yes. We are going to obtain information essentially for the first time about the discharges made by various companies into the navigable waters. This information will become available to the Federal authorities and to the public. Hereto-

fore, in most instances, it has been available only to the State authorities.

Senator MUSKIE. This information base is being developed, as I understand yesterday's discussion, out of the applications. Are you asking the States to supplement that information in any way?

Mr. QUARLES. We will be receiving the bulk of the information from the applications; that is correct. That information, of course, obviously will be available to the State at the same time it is available to Federal authorities.

Senator MUSKIE. That is something different from using the States to enlarge or enhance the information base for the Federal Government. Making this available to the States is something different. What I am trying to get at is this: How comprehensive and thorough is the information base which you are assembling for the purpose of issuing the permits and setting the conditions? That is critical, it seems to me, to the result in terms of water quality.

As I understand yesterday's discussion, your information base is going to be that information which is deduced on the applications for permits. Is that correct?

Mr. QUARLES. I didn't quite finish my answer to your earlier question sir. I meant to add to it that we will, in numerous individual instances, ask State officials for whatever additional information they may have, so that I think it would be quite erroneous for the record to suggest that we would not be obtaining information from the States.

Senator MUSKIE. Have the States been requested as yet to provide information as to the nature of these effluent discharges?

Mr. QUARLES. The States have been advised, as individual applications come in and we work on them, that we will be working with the States and will, in many instances, ask them for information about those individual applications.

The problem has not really arisen yet. We haven't started it yet because the applications have not come in yet. They are just beginning to come in at this time.

Senator MUSKIE. What is the time frame for the States to respond to your request for information? Have you worked out forms which conform to the application forms so that you are in a position to check whatever information you get from the State against the information in the applications? How formal or how complete is the process of getting information from the States to supplement the information you get on applications?

I have in mind the deadline that you have set, next January 1, 1972, for issuing permits. Isn't this going to be an enormous administrative task?

Mr. QUARLES. Senator, I am not aware we have set a deadline of January 1 for issuing all permits. We have indicated that we hope permits will be in the process of being issued as of January 1. Permit applications for most industries are not due until July 1. Once those applications are received, they then will be processed initially by the States.

The States will take a reasonable period of time to complete their review. Under section 21(b), if the States take more than a year, it

is presumed that the State has waived its right to make a certification; but the general expectation is that 6 months would be taken by the States for their review, following which there would be some further review by the Federal authorities, and I doubt if permits in any substantial numbers will be issued until early 1972.

Senator MUSKIE. You have never had a date of January 1, 1972, is that right?

Mr. QUARLES. No, sir.

Senator MUSKIE. It seems to be apparent from yesterday's discussion that the information in many instances is going to be inadequate because you give a wide range of choices as to the quality of that information in your instructions. In any case, the information as contained in the applications will then be processed through the States before you take any action on it?

Mr. QUARLES. That is correct.

Senator MUSKIE. What timetables have you established for the States to respond? Just the year?

Mr. QUARLES. As a general working rule, we are hopeful that the States will complete their review and turn their comments on certification to use within a 6-month timeframe.

Senator MUSKIE. Would you establish that?

Mr. QUARLES. The district engineers have authority under their rules to specify what is to be a reasonable period of time as to any particular application for which certification is required under section 21(b), and this includes things other than these permits that would be involved under the Refuse Act.

The district engineers have been instructed as a general matter to use a 6-month timeframe. To some extent, however, this is undoubtedly going to be a matter that will evolve as the process goes forward and some experience is perceived as to how quickly these permits can in fact be processed in an intelligent manner.

Senator MUSKIE. It seemed to me implicit in yesterday's discussion that if the application form on its face indicates that the information provided is inadequate, that there will then be consultation between the agency and the industry to improve on the information, and you may impose additional requirements. That could be time-consuming.

Will that process be underway at the same time that the State is considering the application, or will you first insure that you have maximum information before you submit the application to the State?

Mr. QUARLES. We will not wait for anything before we submit the application to the State, Senator. The application forms will be received in the first instance by the district engineer. He will immediately send a copy of the application to the State. At that same time, he will send a copy to the Environmental Protection Agency and he will keep a copy in his files.

He will also have copies available for other interested parties and, concluding, he will distribute copies to the Department of Interior, Fish and Wildlife Service, and National Oceanographic and Atmospheric Administration, so that the copies of the initial application will be given some rather wide circulation.

Actual work on those applications, however, will not begin at the Federal level until the State has completed its work and submitted comments to us.

Senator MUSKIE. Now, let me get at that for a moment. If an application comes in which is inadequate on its face, you will submit it to the State, and you will do nothing about approaching the industrial dischargers on additional information until you have received the application back from the State with its comments.

Is this a correct statement of the proceeding?

Mr. QUARLES. That is substantially correct.

Senator MUSKIE. If the State, when it receives this application, has the capability to do this job, it will also know that the application is inadequate on its face and, presumably, will try to supplement it by whatever information it has on file.

But if that information is also inadequate, which it may be in States which do not have a permit program, then is it your assumption that the State would proceed to enlarge the information base in order to improve its own capability for passing judgment upon the application for a permit?

Mr. QUARLES. That is our view.

Senator, may I possibly correct one thing I said? When you refer to the application being deficient on its face, that could cover a variety of situations. If certain important questions have not been answered at all, or if there is some other glaring incompleteness in the application, the district engineer would very likely know that and he might return the application for complete preparation, and I am assuming in your questioning, however, that you are thinking of cases where answers have been given but the answers are clearly insufficient so that a person with water quality expertise can recognize that more information will be required to act on the application. That type of judgment would be made by either the State water quality people or ultimately the Federal water quality people.

Senator MUSKIE. What I had in mind were possibilities that emerged in yesterday's discussion: (1) Because of the absence of any monitoring device on an outfall, an industry might have no information at all with respect to the contents of the effluent and might say so on its application; or, (2) the information available might be based on an inadequate sample.

The form authorizes a grab sample, for example. In my judgment, a grab sample in almost all instances would be inadequate to suggest in any very thorough way what the actual condition is on a day-to-day basis of operation. A grab sample estimate might be erroneous.

In other ways, the information may be clearly not as complete or adequate as it ought to be if we are to issue not only a permit but also impose a condition that have some relevance to water quality that we hope to achieve from this process. What I am inquiring about is whether the Federal Government will be undertaking to enlarge the information base while the application is in the possession of the State agency or whether the Federal Government will wait until the State agency has finished whatever it wants to do to enlarge the information before it proceeds.

Now, as I understand what you have said to me now, the Federal Government will simply stay in suspension until the State has completed its work. Then, when the application comes back from the State with its comments, if the information basis is still inadequate, the Federal Government will seek to enlarge it.

Now, if in the process of enlarging it the Federal Government gets information that would have been useful to the State, does the process then revert to the State?

Mr. QUARLES. What we are trying to develop is the closest possible working relationships between the State people and the Federal people. In a couple of instances, Alaska and Idaho are two that I know of that I was just informed of recently, we have made arrangements to have an employee of the Environmental Protection Agency physically located within the offices of the State Water Quality Agency. We are exploring the prospects for doing this in a wide number of other States, so that we hope to have the best possible cooperation that can be obtained.

Now, in this process, undoubtedly there will be a variety of individual relationships that will vary from State to State and any generality is likely to not apply to every instance, but the general process is as you described it.

We would anticipate certainly that whenever additional information is obtained after a State had formally completed its review, that our employees would discuss this with the State employees so that there would be the opportunity for the combined judgment to be brought to bear on the problem. If there is a difference of opinion, then our employees are under instructions that they are to ultimately come to their own judgment on what should be required, but in arriving at that judgment they are to consult with the State employees so that they have the opportunity for cross-fertilization.

Senator MUSKIE. What troubles me about this procedure is not so much that the evaluation of information is divided and shared, but that the gathering of the essential information is divided and shared.

It seems to me that it ought to be possible to fix in one place the gathering of the essential data. You can have this thing swinging back and forth like a ping pong ball. The Federal Government has one set of facts which it identifies as essential in its application; the States operating under their own guidelines or their own assumptions as to what is essential will have another one. Each will have a different set of forms to submit to the industry involved to get the information which it regards as essential. You are going to spin a lot of wheels in the process of gathering the essential data.

I don't see that it is necessary to divide that in such a way as appears to be the case.

I think that is a product of the fact that we are trying to conform a Federal permit program to a basic State responsibility for setting water quality standards. If we are going to have any Federal program, why don't we just complete the information gathering at the Federal level, complete it, and then ask the State's judgment as to what the conditions are to be and how the information relates to the water quality standards that the State thinks are essential?

I would think that industry would be confused if they get one set of papers from the Federal Government soliciting data, another set of papers from the State government soliciting data, and then some time passes before the two sets of data are conformed so that both State agency and Federal agency are forming judgments on the basis of the same facts.

Is that a fair evaluation of what you have been telling me?

Mr. QUARLES. I don't think that is entirely correct, Mr. Chairman. There is an element of what you have said, certainly, in the picture, but to keep it in perspective, we must remember that the basic objective of both the State and the Federal people in working on this permit program will be to obtain a full and complete answer to the application form and that will start them off together on the same track.

Industry, also, can see that track and begin to work on it.

The basic problem that confronts us at this time is that there has not been an adequate collection of evidence as to what discharges are being made into the water. Today some companies don't even know where all of their outfalls are located. Outfalls are from time to time discovered and it is not easy or is sometimes even impossible to determine who owns the outfall.

If you ride up a river by a major industrial facility, you may see 20 or 30 or 40 outfalls from a single plant.

Senator MUSKIE. May I interrupt for a moment?

Granted that, and nobody challenges that, obviously, because that is the fact. The problem that troubles me is this: We want that information. But you are going to begin the process with this application, and it is clear that the information you get is not going to be complete and it is not going to be adequate. Yet you are going to suspend the data-gathering function at the Federal level until you crank the States into the act.

Now, the States are going to have to maintain their own staffs to pursue this data-gathering function, in order to check yours, and so on.

I see no reason for division of authority here. If you are going to have a Federal permit, why doesn't the Federal Government begin and complete the data-gathering function until all of the facts are assembled. Then, if you want the States to make an input on what they ought to require of industry on the basis of those facts, that is a division of the policymaking function that I guess you could make a case for.

But, in any case, should not the data-gathering function be concentrated in one place instead of dividing it in such a way that it imposes unnecessary burdens upon State resources and State personnel and State programs?

Why should they be going back and forth in the development of data?

Mr. QUARLES. Congress might make a judgment that this would be a better way to set up the program, to have the Federal authorities solely responsible for gathering the data.

Senator MUSKIE. But you are not going to give us a chance to do that because you are proceeding with the program.

Mr. QUARLES. We are proceeding with the program that is based on trying to relate it to the existing structure of the Federal-State partnership established under the Federal Water Pollution Control Act and that structure places in the State the primary firing line responsibility for dealing with polluters, gathering information as to water quality conditions in the States, and prescribing levels of treatment that should be required.

The Federal role is a backup role and we are trying to be more vigorous in pursuing our own responsibilities but not distort them into a fundamentally different level of responsibility.

Senator MUSKIE. But, you see, you are cranking into the present program something that isn't there. You are cranking into it a Federal permit program under the Refuse Act that isn't in the Water Quality Act.

If you are going to crank it in—and whether it is advisable to do so is a judgment the committee is trying to equip itself to make—if you are going to do it, it seems to me that you ought to do it in terms of the Refuse Act of 1899. Whatever authority you think that gives to the Federal Government to try to crank it into the water quality standards program in terms of gathering data, I think creates more confusion than it solves. That is a judgment for you to make.

But if you are going to go ahead with the program now in terms that you have described, then you have taken any decision out of our hands with respect to a division of the data-gathering responsibility as it bears on the Federal permit program.

The States have no responsibility under the Water Quality Standards Act with respect to Federal permits, none at all; and you are trying to create one. By trying to create one, I think you create confusion rather than a solid base for your Federal permit program.

Senator BOGGS (presiding). It is difficult to proceed, gentlemen, without our distinguished chairman. He is very able, as you well know, and he has a very good insight on these matters. But I do think there are some things which we can get onto the record.

The permit will have a phased timetable, is that correct, General?

General GROVES. Yes, sir.

Senator BOGGS. Who is going to follow that through: the State, the Corps of Engineers, or EPA? Who inspects that?

Mr. QUARLES. I think the answer is all three will, to some extent. The prime responsibility really rests on the States to follow up on compliance. The Environmental Protection Agency is adding to its staff and will be making a more and rigid effort to followup on compliance.

The Corps of Engineers has a substantial resource of manpower who are patrolling the waters. They will undoubtedly discover violations.

Even the Coast Guard will, in some cases, provide information on compliance.

Citizens, I am sure, will also provide information.

So that the information as to nonperformance may come from a variety of sources. The legal followup would tend to be focused in either the State enforcement authorities or enforcement by Environmental Protection Agency utilizing the Department of Justice where actual litigation will be involved.

Senator BOGGS. When the permit is issued, will the requirement section spell out results or methods and procedures? What would be required, General, just the results desired?

Let me tell you why I am asking the question. I understand that in the Delaware River Basin, for example, there would be over 3,000 applicants. Some of them are large, but many, many will be medium- or small-size companies. There is a case that was pointed out to me last year. It involves a tomato processing factory. The tomato juice, or whatever is left over, becomes a little acidic. They were trying to cope with that situation and they spent a lot of money trying this and that. But they never got anything that was really satisfactory.

What would you do in a case like that? You would never be able to hire enough manpower to inspect and supervise the three different processes that they tried. What would you do in a case like that?

General GROVES. In the case of a permit for an activity like that, and it is true for all permits, the corps receives its input as relates to water quality standards and attaining water quality standards is an objective from EPA, so we would look to them for the advice that might be specified in terms of standards.

It might be specified in terms of corrective measures.

Senator BOGGS. But that would be a Federal responsibility of the EPA, rather than a State responsibility?

Mr. QUARLES. Senator, let me take a moment and—

Senator BOGGS. This is an area where confusion exists, and we are getting questions about it every day.

Mr. QUARLES. I think it might be helpful if I tried to give a little background on water quality standards.

Under the 1965 act, every State was directed to develop water quality standards. Those standards generally consisted of three elements: classification of uses, criteria, and implementation plans.

Generally speaking, the implementation plans in every case simply require that all industrial polluters have secondary treatment or its equivalent. That requirement is not consistent with the establishment of classification of uses and criteria because, in order to be consistent with the first two parts of the water quality standards, the implementation plan requirement would have to reflect what the criteria in the water body are and also what other polluters are discharging into that body of water.

However, in a shorthand effort to put something into the implementation plan, the States uniformly established a requirement that all polluters put in secondary treatment or its equivalent. This is a generalized umbrella requirement.

As a practical matter, the way this works out is that each industry seeking to comply with the standards submits to the State agency a plan of what the industry intends to install in the way of treatment facilities and receives some form of clearance from the State agency.

The industry then proceeds with installation.

In the permit program, we recognize that there will be no capability either at the State level or Federal level to review in detail the countless thousands of applications that will be received.

In the vast majority of cases in number, we will receive the application and, on being satisfied as to its general completeness, will issue a permit containing conditions that require the permittee to live up to the requirements of applicable water quality standards. This means, therefore, that for the vast majority of companies or plants involved, the permit program will be directly and almost exclusively reinforcing of the existing water quality standards.

The companies will remain obligated to go through the same process of coming in to the State water quality agencies with their plans for the same specified level of treatment and receive the same clearance, and they will be free to go forward.

The permit program will add a number of things that will make the whole process much tighter. It will add interim achievement dates

where those don't exist. It will add requirements for monitoring and it will give all of the public a much clearer understanding of the discharges that are involved. It also will begin to provide the data base that will make possible more sophisticated judgments as to precisely what level of treatment is going to be required if the water quality ultimately is to be brought to the standards specified in the criteria.

This process, however, is not one that is in any way capable of being completed in 6 months or a year or 2 years. It will take a very long period of time before it can be achieved.

In the meantime, the Environmental Protection Agency will be selecting the more important applications, a small minority of plants discharging the vast majority of pollution.

If you go to the Buffalo River, there are basically five plants that are causing that river to be grossly polluted.

In other places around the country, the situation is similar. In order to achieve important improvement in water quality in most polluted areas in the country, we feel we can make a very big impact by looking closely at the levels of treatment called for in that small number of plants. We will do that in conjunction with the State officials and in those cases specify in full detail what levels of treatment will be required.

So that, in answer to the question you asked a moment ago as to whether the permits will specify performance standards or simply a more general type of requirement, the answer is mixed.

In the case of a majority in number, the permits will simply specify a general type of standard. In the case of a minority in number, but, hopefully, a majority in pollution, the permits will specify in greater detail than has been previously specified what actual performance requirements must be met by treatment facilities when they are installed.

Senator BOGGS. Thank you, Mr. Quarles, that is very good.

Senator?

Senator BEALL. On that line, I am a little confused. As I read that permit yesterday, the application goes to the State and the State must certify to EPA that the discharger has met State standards, is that correct?

In other words, he certifies to you that he meets the State standards?

Mr. QUARLES. He certifies that the discharge will not result in a violation of State standards.

I was going to say, I would like to emphasize the difference between "has met" and "will meet."

Senator BEALL. That is not what bothers me. Suppose it comes back to you and the State says he has not, therefore you presumably won't issue a permit, is that correct?

Mr. QUARLES. I have to give you a little bit of an answer to that one in more detail because the term "water quality standards" is loosely used by people who may have in mind the criteria or may have in mind the implementation plan requirements.

Typically, a polluter in any case that we are concerned about is discharging wastes that do violate existing criteria. In that case, we might nonetheless grant a permit but the permit would require treatment.

On the other hand, if the applicant were substantially in violation of the requirements that have been in existence for installing waste removal facilities, then we would deny the permit.

Senator BEALL. The thrust of my question is this: If a State says, "We don't want you to certify this man because he hasn't yet met our standard," will you not have a dual standard across the country, because don't standards differ across the country?

And one State, by saying this discharge does not meet the standards, might not give him a permit, and another State might say, "He has met our standards" and go ahead and issue the permit. So might you not have multiplicity of standards across the country?

Mr. QUARLES. That is a distinct possibility. Right now that is the condition we have. The 50 different States have significantly varying stringency of requirements and there is that multiplicity of standards.

Senator BEALL. What bothers me, though, is here you have a Federal enforcement policy program and when you have a program, it seems to me the standards should be the same across the country because it is a Federal program. How do you get over this hurdle by not having—you really don't have a Federal program.

Mr. QUARLES. I think the dilemma has been with us for some time. On the one hand, people feel that there should be uniformity of requirements around the country because industry may be located anywhere and it is not fair to give a competitor a disadvantage. On the other hand, there is a feeling that each State should have some say in how strict it wants to make water quality standards and what balance it wants to strike between water quality production and industrial development.

So those two clearly conflicting objectives have been in the picture for a long while. There is nonetheless a Federal-State partnership which provides some room for local variation and, on the other hand, some Federal involvement that creates an element of consistency across the country.

Senator BEALL. Under the existing law there has been a Federal-State partnership and I believe there should be a partnership on this with a lot of emphasis on the State. But it seems to me under the Refuse Act there is no legal foundation for Federal-State partnership and, if someone is going to be in violation, he can't appeal to the State. He has to appeal to Federal Government because the State in this case is a superfluous entity.

If I was a discharger and I was having difficulty with my permit, certainly under the Refuse Act I wouldn't go to the State agency. I would go to the Federal agency. Isn't that logical?

Mr. QUARLES. I think it is logical.

Senator BEALL. So then the State becomes a useless instrument in this whole effort except to the extent that you want to use them.

Mr. QUARLES. I don't think it would become a useless instrument.

Senator BEALL. It would seem so, wouldn't it? What would compel the State? Let's use Maryland as an example. Maryland has a permit system. Whose permits are going to take precedence here? Every polluter is going to have to get two—a discharger having to get two permits, one from the Federal Government and one from the State—which supersedes?

Mr. QUARLES. The discharger would obviously have to comply with the more stringent permit.

In any case, where the State has recommended denial of the Federal permit, no Federal permit would be issued.

Senator BEALL. Why should the State of Maryland continue its permit system if a discharger is going to have to get two permits?

Mr. QUARLES. I think that in a year or two or three ahead, assuming that the Federal permit system remains in effect or some comparable form of Federal permit system remains in effect, States may reevaluate the need for having separate permit systems. However, I would like to emphasize that the focus can be improperly placed on whether or not you have a permit system.

The real question in every single case is what level of treatment is going to be required for this particular plant. Once that decision is made, issuance or denial of permit is a routine matter. The hard negotiating deliberation, investigation, analysis, is all related to what should the particular plant be required to achieve in the way of treatment?

I believe that once we zero in on that issue, it will be possible for States to either modify their permit structures to conform with the Federal Government's or for the Federal Government to work in some ways to make State-by-State adjustments in the Federal requirements, as we are doing, so that the purely housekeeping mechanics of obtaining information and issuing permits could be reduced to a very tolerable level.

Senator BEALL. Well, I recognize the fact that this is a housekeeping procedure, but it seems to me that the big difficulty we have these days is striving for the kind of standard or reaching the standard that we ought to consider to be desirable. As long as you have multiplicity of standards, you will of necessity have a dual permit system, I would assume, and if you want to move away from multiplicity of standards, you inevitably move to Federal standards and Federal permit system at which point the States would be inclined to feel they might as well get out of the pollution business and they are now paying 50 percent of the cost of helping to meet the standards, so aren't they going to be inclined to say eventually sometime down the road, "If the Federal Government is going to set all of the standards, you go ahead and pay all of the bills"?

Is that a logical conclusion to come to?

Mr. QUARLES. Senator, I do not believe it will work out that way.

Senator BEALL. Why?

Mr. QUARLES. The key point is that we have to reach agreement on what requirements will be imposed as the treatment. Right now I think that all of the focus on permits is hiding, focused on the harder problems of identifying those levels of treatment. The 1965 Water Quality Standards Act laid a foundation under which States have classified different bodies of water for different uses and it has been the total assumption, at both State and Federal levels, that the levels of treatment required of individual plants would vary from water body to water body in order to achieve the water quality designated for particular areas.

On the Houston Ship Channel, or Calumet River, higher degrees of treatment will be required than in other locations which do not

have the same concentration of industrial discharges on one body of water. It might be possible to completely abandon that approach and simply provide that there should be one level of treatment all over the country.

You could specify secondary treatment or you could specify best available technology or you could specify complete recycling or some level of treatment right across the country and be arbitrary about it.

The problem with doing that is that there is an underlying rationale for doing it the way it has been done. That is, that it is extremely expensive to install pollution control equipment and the need for it does, in fact, vary, depending upon the water body and the dischargers who are discharging into that water body.

As long as the system is based on that premise, there will be more than 50 different standards. There will be really a separate standard for every body of water in the country and there will have to be a custom tailoring of any standards or guidelines or criteria or whatever you might call the rules of thumb for what can be achieved in a particular industry to fit the local situation.

The Federal role in the framework as it has existed has been one of looking over the shoulder of the States and evaluating their general performance as the States themselves grapple with these problems. That role is a useful role. It helps to have a national spotlight focused on a particular problem. It has to achieve a general uniformity from State to State. It helps a particular Governor to know that other Governors are also going to have to impose stringent requirements on industry in their States, but it does not mean that we go to the other extreme of wiping out the State programs or eliminating their roles.

Their roles are extremely important and are roles which we want to improve on, but by no means replace.

Senator BEALL. I am glad to hear you say that, but it seems to me, though, when you make the Federal Government—when the discharger has to enter his appeal with the Federal Government, the Federal enforcement authority rather with State enforcement authority, then the State enforcement authority, I would think, would have a feeling of frustration and their own willingness or desire and anxiousness to cope with this problem would be diminished as time went on, because they would feel they don't have the authority to carry out their programs.

Mr. QUARLES. If the Federal Government would interject itself into every single application around the country and become the active participant in negotiations with the industry, I think the result you have just described might occur. It is not our intention to do that. We don't have the manpower to do that and I am quite sure that it will not happen that way.

What the Federal Government can and will do is to participate in a limited number of these that will tend to set the sights higher and set out general precedents which other applications can be conformed to by the State officials.

Senator BOGGS. Thank you, Senator Beall.

General Groves, could you tell us how long it takes to process an application under section 10?

General GROVES. Sir, it varies depending on the level of controversy. Most of our projects—most of our permit applications and we process now about 8,000 a year, almost all of them are noncontroversial in nature. They are capable of being resolved at the district level. Those take in the order of 3 to 4 months.

And in the event there is controversy, in the event a Federal agency nonconcur, then we go through a process which may take much longer. In fact, in many cases the permits are never issued.

Senator BOGGS. In the particular case we are discussing, the Corps of Engineers is the final authority on the issuing of a permit and any requirements imposed with the permit, isn't that true?

General GROVES. Yes, sir.

Senator BOGGS. For example, if fish and wildlife considerations ultimately enter into consideration of a permit, the corps would take advice from the Interior Department, I presume?

General GROVES. Either Interior or Commerce. There are three considerations, sir, three basic considerations, anchorage and navigation in which the corps' determination is internal and binding upon the corps. Fish and wildlife considerations, we seek the advice and give it very careful consideration as we receive it from Interior and Commerce.

In the matter of water quality standards, at the Federal level, we seek and are bound by the advice we receive from EPA, although in the general policy which we set forth in our regulations, we say that:

Although the Refuse Act vests in the Secretary of the Army authority to determine whether or not a permit should or should not issue, it is recognized that responsibility for water quality improvement lies primarily with the States.

And this is the fundamental policy which governs our whole program and it is the policy which we follow up to the extent that we can control the various elements of it.

Senator BOGGS. Mr. Jorling, minority counsel for the committee, points out that, while the Refuse Act vests in the Secretary of the Army authority to determine whether or not a permit should be issued, it is recognized that responsibility for water quality improvement rests primarily with the States or, in particular instances, with appropriate interstate agencies or river commissions.

General GROVES. That is correct, sir.

Senator BOGGS. When you get into river basins, we have the example of the Delaware River Basin Commission, which has been moving along fairly well in recent years. Jim Wright, their executive director, is coming down tomorrow to acquaint me with their problem in relation to the permit system.

Have you had any meetings with them on this subject?

General GROVES. Yes, sir; we have.

Senator BOGGS. So you are acquainted with their problems. I promised to see him tomorrow. Maybe members of the staff and someone from the corps and EPA might be around to join us.

He tells me, for example, that the 3,000 applicants in the Delaware River Basin face a terrific duplication of effort in everything that is going to be involved in the permit program. I think his contention is that this ought to be delegated to the basin or to the States.

Do you have any comments on a possible delegation to the States or river basins of this permit system. The committee is trying to find out how to integrate this permit system into the legislation we are developing.

Mr. QUARLES. I would be glad to comment on that. I understand some consideration has been given to the language that might provide for the Environmental Protection Agency to at some time in the future and perhaps on a State-by-State basis evaluate the State programs and conclude that the State might take over responsibility for issuing permits.

We don't have fundamental objections to that approach. Something of that sort might well be an avenue that is worth pursuing.

In the meantime, we are trying to face today's problems which are quite substantial and we will be pursuing that approach to a substantial extent by working on an informal basis with States, making our own judgments as to the adequency of the State review process, and tempering our determinations of how closely to look into the commission after it has been approved by the States by our conclusions as to how much the State program can be relied upon.

It should be pointed out, though, that at this point in time a blanket delegation of responsibility to the States would probably be equivalent to simply abandoning the Federal permit program.

I started out as a doubter on this permit program and I have become a believer because I believe there are very substantial benefits that can be obtained by working through the Federal permit program.

Most States now have permit programs. Almost every river basin or bay or lake on which we hold an enforcement conference is held where there are permit programs and almost every serious polluter that we deal with has got a valid State permit. The State permits have been issued in some instances partly as a revenue-raising matter.

The real fact is that, if we are going to win the battle against the water pollution, we have got to go through the process of finding out what the discharges are that each company is making and deciding what level of treatment that company has got to go to.

That is not easy and it has not been done and the permit program is a very effective mechanism for forcing the companies to come forward with the information on which judgments can be made and for enabling State and Federal people to work their way through the problems of making those judgments and begin to specify the levels of treatment that will be required.

Senator BOGGS. Mr. Billings, do you have a question?

Mr. BILLINGS. Let me ask a hypothetical question. What would happen, in your opinion, if a State acted to refuse to certify all permit applications on the basis that they had a permit program and that their permit program imposed effluent requirements on each of these polluters, so it said, "Therefore, we are not going to certify and we are formally notifying you of our refusal."

Would the Justice Department be required to go in and act to take criminal action against each of those dischargers for discharging without a Federal permit?

Mr. QUARLES. Certainly that would not be the result. I am certain the Justice Department would not be sent in to prosecute everyone. I think we would have to cross that bridge when we came to it and I would be most hopeful we would not come to it.

Mr. BILLINGS. I think this is a very definite possibility.

Mr. QUARLES. The State has got a role to play and we would give every encouragement to the State to go ahead and perform that role. A possibility is that if the State refused to participate at all so that the State would be deemed to have waived its right to certify or comment on a 21(b), then the whole burden would fall on the Federal Government to make the review and provide recommendation as to whether or not the permit should be granted or, if granted, what conditions should be contained in the permit.

Mr. BILLINGS. I am thinking of the situation in which the State complies with 21(b) and acts to refuse to certify any permit that you send to the State under the regulation.

Mr. QUARLES. You mean the State, in effect, recommends denial of every permit?

Mr. BILLINGS. That is right, and notifies you that it will not certify.

Mr. QUARLES. I am not sure what your response to that would be. I think that is quite an unlikely possibility and if it should come to pass, I am sure that we would go to work to try to encourage the State to change its position.

Senator BOGGS. Do you have a question, Mr. Jorling?

Mr. JORLING. I would like to clarify for the record one point and at least the intent. You described it very much as one of involving Federal-State relationship with implicit—and correct me if it is not implicit—feeling that where a State has a good permit program, wherever one agrees, let's assume for a moment that everyone agrees that a State permit is referenced to achieve water quality standards. There is no way under the act that EPA can assure State or industry that the Refuse Act permit will be identifiable to the State permit because of the independent review of supposedly fish and wildlife considerations by two other departments of the Government and residual authority of the Corps of Engineers to impose conditions at variance with those that are imposed by EPA, so no matter what EPA does with the States in working out agreements on effluent requirements, the terms of the Refuse Act permit program preclude that possibility from happening.

No one can have that assurance in advance that if a good State program with a permit in existence that is referenced to achievement of water quality, that EPA agrees with, cannot have assurance that the permit issued from the Federal Government will not be identical with that permit.

Mr. QUARLES. I think I would have to agree with that.

Senator BOGGS. General, will the corps have to place a lot of personnel on this permit program?

General GROVES. Sir, we have been authorized to increase our field authorizations by 200 spaces for this particular purpose. We are also funded accordingly. We feel at the present time this is adequate.

Senator BOGGS. I realize that EPA is still in the process of developing to meet its overall responsibilities, but I wonder whether you could

make any comment on your requirements for additional personnel to develop the permit program, Mr. Quarles.

Mr. QUARLES. We have allotted 150 spaces, which were made available to our regional people for filling a few weeks back for this program as the first installment of a larger group of employees, who would be hired or directed to work on this program. That larger number is still to some extent, I believe, in the process of review, but would be in excess of 400, so that we anticipate that there will be at least 400 employees of the Environmental Protection Agency working just on permit programs.

Senator BOGGS. I have been advised that the House cut your appropriation request for standards and enforcement by about \$2 million. Will that affect this particular program?

Mr. QUARLES. There might be some effect. I am not sure exactly what the effect would be, but I do not think that the effect would be of major dimension.

Senator BOGGS. Senator Beall, do you have any questions at the moment?

Senator BEALL. No.

Senator BOGGS. Actually, it seems to me that to avoid lawsuits and a long delay that this committee must integrate the permit system in our overall legislation. Have you made any recommendations on whether we should or should not, and, if we do integrate it, in what manner?

Mr. QUARLES. We have not submitted any recommendations on this subject. We are aware of the desirability of clarifying the legislative foundation for the permit program. It was established to meet an immediate need and was established on the basis of providing the maximum tie-in to the existing framework under the Federal Water Control Act. A closer tie-in and clearer underpinning would be desirable, at least in my judgment.

Senator BOGGS. Did you have a comment, General?

General GROVES. No, sir, just with respect to the corps' responsibilities here, we have made no recommendations, first of all. We feel that we have adequate authority to administer the program under the Refuse Act.

Senator BOGGS. Mr. Billings has one more question. I think it might be helpful, Senator Beall, to take a 5-minute break. I would like Senator Muskie to be here.

Mr. BILLINGS. I wanted to pursue one point. This is a matter of housekeeping. Subsection (h) of the proposed permit document indicates that all information data provided by an applicant on nature and frequency of discharge shall be made available to the public without restriction.

You also indicate here that there will be a considerable period of time between the submission of this information and when a permit is granted.

Mr. QUARLES. That is correct.

Mr. BILLINGS. From my recollection of some of the earlier discussions of this particular law, there is provision for citizens to request the Attorney General to take action to enforce it. I would assume that the information basis provided here would be the basis for such a citizen demand.

My question is: (a) Are we creating self-incrimination situations? (b) If we aren't, does the Attorney General, in essence, agree by going along with this to not enforce the Refuse Act during the period prior to the granting of the permit? (c) If in the interim period we enact a citizen suit provision, do we expose all of the people who provided information here to an action under the revised water pollution law?

Mr. QUARLES. With regard to the first part of your question concerning self-incrimination, that is both a constitutional or legal question and also a policy question. As to the legal constitutional question, we have concluded that there would not be any violation of the rights against self-incrimination. This is, I think, reasonably clear on the face of certain court decisions on the subject.

As to policy matters, I feel that there is no problem there either, because the information which we are calling on the company to provide is information which in our judgment the public has a right to know. If a company is discharging wastes into waters of the United States, I think that it is in no way improper for the company to be called upon to make known to everyone just what those wastes are.

As to the second part of your question, I do not think that the Attorney General is in any way committed to bringing suit against everyone who turns in information that shows that the company is making discharges which are not authorized by virtue of a permit he possessed.

We have stated that we would not seek to enforce the Refuse Act against everyone who is in violation, but would use it as a tool to fight pollution in those cases where companies are not doing what they have been requested to do under the existing water quality requirements.

Finally, as a third part of your question regarding the application of a law and citizen suits that might be passed, there again I think that that law presumably would or at least should relate to the water quality standards, and implementation standards requirements in those water quality standards, where the relevance of a lack of a permit would be only marginally important, if at all.

The general question that is of concern is whether the information which is disclosed by industries on their applications will be immediately used in prosecution of those industries. It is not our intention to follow that course and I doubt if it will work out that way.

Under existing law, the authority does remain with the Attorney General and U.S. attorneys to decline to bring suits and we will not recommend suits, and I believe they will not bring suits except where there are other factors in the picture that indicate a suit should be brought.

Senator BOGGS. On that point, Mr. Quarles, Senator Cooper has raised several questions. If you have a written opinion on that point, could you make it available to our record.

Chairman MUSKIE, we are glad you could return.

Senator MUSKIE (presiding). What have you learned?

Senator BOGGS. We have explored various questions. The witnesses have been very helpful.

Senator MUSKIE. I don't want to plow ground that has been plowed, so if I do ask any questions that have already been covered, just say so.

I take it that industries which do not discharge directly into navigable waters, which discharge into municipal sewers, would not be covered by the permit program? Am I correct in that understanding?

Mr. QUARLES. That is correct.

Senator MUSKIE. Aren't we setting up a different standard of treatment for industries in the same categories? If we are, should we consider eliminating that distinction by appropriate legislation?

Mr. QUARLES. That distinction already existed under the water quality standards and the Federal Water Pollution Control Act well before the permit program was established. Those standards and that whole framework of law applied to those who are discharging into bodies of water, interstate or intrastate.

Senator MUSKIE. Wait a minute now. The dischargers into municipal sewers ultimately return to the water wastes which are subject to water quality standards. Are you saying that those kinds of discharges are not subject to the Water Quality Standards Act?

Mr. QUARLES. There is a very important distinction in the way that they are subject, sir. The companies who discharge directly into interstate waters may themselves be subject to a requirement under the implementation plan to put in certain treatment facilities, whereas companies which discharge into a municipal system are only subject to whatever requirements for present treatment the municipality may impose.

Senator MUSKIE. I am talking about discharge not into municipal waste treatment plants, but discharges into municipal sewers which are not treated.

Mr. QUARLES. Are you thinking of municipal sewers which do not lead to municipal waste treatment plants?

Senator MUSKIE. I was going to get to the waste treatment plant next.

Mr. QUARLES. You are thinking of storm drains?

Senator MUSKIE. There are cities that have separate storm sewers and municipal and domestic waste sewers. As I understand the permit program, if industries do not discharge directly into waterways, they are not covered by the permit program, even though they discharge into municipal sewers which themselves discharge in the waterways. Is that correct?

Mr. QUARLES. I am sorry, I did not understand your question initially. That is not entirely correct.

In the event that an industry discharges into some system of underground pipes which simply leads directly to the river, then that industry would be regarded as subject to the permit program. Where we have drawn the line is between that type of case and the larger number of cases where industries discharge into a general municipal sewage system which does lead into a treatment plant.

Senator MUSKIE. Apparently my staff had a different concept of it, and I am trying to clarify that point. Let me read the law. It is the law that is the basis for the confusion, if there is confusion.

Section 13 says: "It shall not be lawful to throw or discharge" and so on "any refuse matter of any kind or description whatever other than that flowing from streets and sewers passing therefrom in a liquid state into any navigable water."

I guess that language may be subject to interpretations. If industrial discharges will enter those sewers, under that language they would not be subject to the permit authority?

Mr. QUARLES. Senator, I think that the law itself is not clear on this point and this is one of the reasons that we would be receptive to having some new law written that would clarify exactly the boundaries of what is subject to the permit program. Some of these issues undoubtedly are going to be resolved by the courts as individual cases are brought which test out the boundaries.

In the meantime, we have had to make some judgments as to what we would apply and we have drawn the line between sanitary sewer and the storm drain. In the case of the sanitary sewer, which is part of the general municipal system for collecting domestic and other wastes and carrying those to a treatment plant where they would be treated to the extent of the capacity of that plant and subsequently discharged into the river, we have stated that the permit program would not be applicable.

But in the case where there might be a drain that carries those wastes directly from the industry right into the navigable waters without ever going to a treatment plant, we have stated that the permit program would be applicable. We recognize that while that is an easy distinction to state, it may be a very difficult distinction to apply.

Senator MUSKIE. I want to get into that in a moment. You are interpreting the law as allowing it to cover with the permit program industries which discharge directly into waterways by way of municipal sewer systems as well as industries which discharge through their own outfalls into navigable waters.

That is the way you are interpreting the law?

Mr. QUARLES. That is correct to the extent I just indicated.

Senator MUSKIE. And you are interpreting it as being subject to your authority.

Mr. QUARLES. Senator, with regard to this, I might point out that in the case of *United States v. Republic Steel Corp.*, decided in 1960, the Supreme Court held that the exemption in the act of matter flowing from streets and sewers and passing therefrom in a liquid state did not cover industrial discharges which result in shoaling. This was part of the basis for our making the judgment we did.

Senator MUSKIE. The Standard Oil case in 1966, that is a four-line description. If you can expand on that, it would be useful. The court held—the word “refuse” includes all foreign substances or pollutants apart from those flowing from streets and sewers passing therefrom into a liquid state into the waterways.

You don't think that language restricts you from applying the permit program to industries which discharge into such sewers?

Mr. QUARLES. That is correct.

Senator MUSKIE. Then let me get on to the next question, which has to do with municipal waste treatment. I want to put it in a broader way than we have been discussing. There are many communities for which municipal waste treatment works are being constructed or are required to be constructed pursuant to an implementation plan. The best water quality management program for many of these areas would require joint industrial-municipal use of these facilities.

Under the Refuse Act permit program, there is no way to accomplish this objective. Any permit issued would have the effect of requir-

ing the industry to treat independently and thereby preclude joint treatment.

We are talking about industries that do not now discharge in the municipal waste treatment systems, industries which are now subject to permit authority as you interpret it. If it should be the decision of the water quality management people at the State and local level that the interest of the community can be best served by constructing joint treatment facilities, then the question we put is: Is it possible for them to proceed to implement that judgment, if the permit program is in effect and if that industry is subject to a permit program?

Mr. QUARLES. Yes, sir; it certainly would be possible for that to be done. I think the question as you initially set it forth reflected a misunderstanding of what we intend to be done under the permit program.

Each permit will specify some requirements for the polluter to meet, but there can be a wide variation in specifying that those requirements should be. And there certainly is a flexibility in the system so that when the responsible officials determine that the best approach would be a joint municipal-industrial facility, then that could be the requirement placed in the permit.

Senator MUSKIE. It is going to be your objective, as I understand it, to set effluent standards which are the equivalent of secondary treatment. That is to be the standard, am I correct?

Mr. QUARLES. I think maybe you should develop your question a little bit more.

Senator MUSKIE. The Water Quality Standards Act undertakes to establish water quality standards that are related to the uses which the States and localities decide ought to be served by the waterways or water resources of an area or of a city. The objective is, of course, to achieve secondary treatment. This is the guideline, I gather, that the agency has issued.

This does not exclude the possibility of higher level of treatment under the law, at least, if the State and community decide that a higher level of treatment is required by the uses which are a necessity.

But in any case, secondary treatment is a sort of standard that runs through under the guidelines. As I understand what you are doing in order to conform your program to the water quality standards program, you are seeking to establish effluent standards that are related to some determination as to what secondary treatment of industrial effluents may be.

Mr. QUARLES. That is one of the objectives of the program that we are going through now studying 20 basic industries and attempting to come up with some guidelines or guidance on establishment of effluent requirements.

We had some discussion in your absence of the establishment of the water quality standards and implementation plan requirements, but I think it is well worth pursuing this fully because it is a subject on which so much depends and also on which there is widespread misunderstanding, I believe. The water quality standards now throughout the States generally do specify secondary treatment or its equivalent in the implementation plan. Why it came to pass that that is the case, I am not entirely sure.

My guess is that it was done at the point when people threw up their hands and said, "It is too tough for us to make decisions on just what is required on this particular body of water and that body of water," and so forth. There needs to be a great deal more progress made in being specific as to just what the requirements are.

Industry doesn't know and nobody else does either just what they are being asked to put in, and in every case, in order for an industry to have a target to shoot for, there does need to be some sort of specification of the effluent. We are trying to put ourselves in a better position to specify what the effluent should be, but we do not intend to adopt or issue on any wholesale flat across-the-board basis a set of effluent rules that would simply specify what the equivalent of secondary water treatment would be and then that be applied irrespective of local conditions.

Senator MUSKIE. Now, I would like to identify what I think are the key policy decision areas which confront us as we try to conform your permit program with whatever legislation this committee develops.

First of all, to move toward a further development of the Water Quality Standards Act or further development of the permit system, we need an information base. The first question that faces us is what procedures do we establish for creating that information or data base? Who has responsibility for it? What procedures are to be established for the buildings? What are the timetables?

The objective, it seems to me, ought to be to establish as simple and direct procedures as possible to insure assembling the essential data as quickly as possible, to focus responsibility on establishment, and to minimize confusion and duplication of effort for industry or for Government. It seems to me that is the first problem we face.

Second, we have the question of timetables for the assembling of information, for filing of forms to present that information to the appropriate Government agencies, and for meeting of performance standards.

Since we have a timetable problem with respect to both permits and the water quality standards program, it seems to me that we ought to focus upon conforming the two if it is possible.

Third, we have the question of the water quality result that we hope will flow from whatever program we adopt. It seems to me that is puzzling at this point as to whether the two programs will conform in this respect, whether they represent duplication of effort, and so on.

Going back to the second point, timetables, it is not clear to me yet—and maybe it could be made clear by further discussion with you this morning—whether the administration or agencies have in mind a very specific timetable for the development of implementation plans, for the establishment of those plans, and for meeting performance requirements.

Under the administration bill and my bill, we have a timetable. I indicated earlier that this would begin to run about January 1, 1973. It is not clear at this point how the permit program relates to that timetable. I think it ought to be made clear. If we need legislation to make it clear, we ought to have legislation to make it clear.

Finally, there is the question of monitoring, which is related also to the data-gathering and certain technology. Monitoring is essential

if we are to identify the dimensions of the problem in terms of parameters that you have set out in your application forms and in terms of the data-gathering function which would have to be performed by the State under the water quality standards program.

You are going to need those same monitoring devices after you have the performance requirements. It seems to me we ought to get at the problem of tying the two together in some way that makes sense in terms of minimizing the cost of industry, in terms of strengthening our data base for establishing performance requirements, and in terms of effectively and efficiently monitoring the results at the ends of the line. I am unclear as to whether we have done that or whether that is going to be achieved under the established procedures.

These are the areas that it seems to me require some work. Then there is a fundamental question—and I don't have a present judgment on it—as to whether we can, in fact, put together a workable program which involves a Federal permit program, and really whether it is still clear that it is a Federal program, that the relationship is 1 to 1 between the Federal Government and the dischargers.

It seems to me we face a difficult problem, and we ought to make the decision as to whether we should move ahead now with a Federal program of water quality improvement, reducing the State participation simply to one of advisory inputs and review judgments.

It seems to me that fundamental question confronts us and we ought to answer it if we are to make this simple, direct and nonconfusing, and if we are to achieve the results we want in a minimum of time and spinning of wheels and duplication of effort and wasted resources. It seems to me we have to answer this fundamental question.

I don't have a present judgment on it. I could be sold on the idea of going along with the principal responsibility at the Federal level. But we are being asked here to put together legislation which will give everybody a decent period of time to begin to achieve results, 5 years if possible. In other words, we are being asked to lay down a program and policies that everybody will understand so that we can begin for a period of 5 years to get results rather than shift gears, change policies, and so on.

If we are going to do that, it ought to be simple. It ought to be clear and direct, and responsibility ought to be clearly fixed with a minimum of waste. That is sort of a rambling, Senate filibuster-like statement, but I would be interested in having you respond to it.

Mr. QUARLES. I made some notes as you spoke, and I will try to cover several of the points that you raised.

With regard to establishing procedures for obtaining an information base, we certainly would be in agreement as to the desirability of having these simple and direct. We have, I think, made a start in that direction. I don't say that it can't be improved upon.

I am pleased that you mentioned that first because we are very clearly under the impression that this is one of the first needs. A lot more data must be gathered and I think that the permit program that has been announced and established, if it has achieved nothing else, has made a valuable contribution to water quality control simply in focusing everyone's attention on data that must be gathered and in

beginning to establish the general recognition that such data should be gathered and should be made available.

The only point I would add to what you have said on that point is simply that once the data is gathered, it should be made available to all—to the State regulatory authorities, to Federal regulatory authorities and to the public.

With regard to your second point concerning timetables and the need to obtain some conformity on the subjects of timetables, there, too, I think, we are in agreement with the objective.

The bills which you and the President prepared on this subject do focus on the framework of water quality standards as a framework and that is the right way to proceed.

What the permit program is going to do is give you an enormous shove down the road toward having the raw material with which to meet the objectives that may be set forth in any legislation. There needs to be more staff, more expertise, more data, more negotiations between individual companies, between Federal and State employees, and more cooperation between Federal and State employees.

All of these things are being galvanized by the permit program and we do not have clear and specific timetables for achievement within the permit program. We don't have a deadline by which we hope that all permits will be granted.

We established a program on the basis of setting a beginning date with a hope that we would then move forward as rapidly as we could so that there is no completion timetable in a permit program that will be any hindrance to setting other types of timetables in the statutory coverage of the water quality standards system.

With regard to the issue of whether the results conform, the results between the permit program and the results under the structure of water quality standards, I would strongly suggest to you, Senator Muskie, that the results do conform.

In both cases, what we are trying to do is not only reach the ultimate general objective of cleaner water, but also trying to focus on individual cases and determining what must this polluter do to clean up his wastes.

We will never have success in the overall struggle unless we can find answers to that question and throughout both the permit program and our general water quality efforts, we are getting more of a focus on that question.

Our permit program people, for example, are going to be operating in the same regional groupings with other enforcement people and in both instances they are working on questions of what should this particular discharger be required to do. So that that result, I think, is the result that the water quality standards should produce and the permit program is simply one means to reaching that end.

The issue of monitoring is one which the permit program also, I believe, will make a major contribution to, but certainly it is also a subject on which there could be some real benefit obtained from having greater clarification in the statutory foundation for it.

Then, finally, on the question of whether there should be a Federal permit program at all, I would suggest this. There has to be some sort of a direct relationship between the Federal authority and the pol-

luters. If the Federal agency is going to fulfill the role that it has had right along, we have been in a position of being responsible for general overview of various State programs without having an opportunity to get at the facts. In the efforts by our enforcement people to determine whether individual polluters are fulfilling their obligations, it is most cumbersome and difficult for the Federal authorities to find out what the people are doing, both with regard to the polluter himself and also with regard to negotiations by the State. There has to be some form of a direct Federal relationship but it does not need to be a one-to-one relationship that excludes the State. The State people can have the general responsibility as they have had for the mass of contacts with dischargers, but with a system which provides the Federal authorities opportunity to get directly to the people and discuss the questions with them.

If you have a system that results in establishment by States of effluent controls, subject to Federal review, as I believe your bill proposes and the administration bill proposes, then the Federal authorities are going to have to review those determinations of what will be required of individual dischargers.

Once they make that determination and decide to approve it, they have essentially done what is required in the permit issuance process. Whether you have a permit issued at that point almost becomes immaterial. If you do have a Federal permit program, it provides a good mechanism for carrying out the activities which you otherwise would be wanting to carry out under the type of structure that I believe both you and the President have proposed.

So we would definitely vote for having a Federal permit program on water quality matters, whatever your other deliberations might result in.

Senator MUSKIE. I guess the point I am making, and I don't make very clearly, is that in effect the authority over discharges is the only meaningful authority. If you make that a Federal authority, what is the sense in having the State role, other than input of information, or advisory opinion, or some review judgment that we might develop for them?

If the only meaningful authority is at the Federal level, why should we impose upon the States responsibilities under a new water quality act for gathering data, for monitoring effluents, for issuing effluent permits, for monitoring results? Why should we impose upon the States responsibility that means assembly of personnel, spending State funds, confusing administration, imposing duplicate requirements upon industry? If we decide that the meaningful authority—and the only authority that counts for anything—is the authority that can turn off an effluent, that authority is going to be Federal. If it isn't, the rest of it is meaningless.

Why shouldn't we structure a completely Federal program with administrative responsibilities that will impose authority across the board to monitor effluents, to set water quality standards, to get this to local land use planning and so on. And if meaningful authority is the authority to turn off emissions or effluents, then it seems to me it ought to be a Federal program.

I commend to your attention, if you haven't read it, the provisions of the Clean Air Act of last year, section 110, which gets at the ques-

tion of Federal relationship to the State authority to control emissions as well as ambient air quality standards.

I will read from subsection (f) of the implementation plan provisions:

The plan must provide (1) necessary assurances that the state will have adequate personnel, funding, and authority to carry out such implementation plan; (2) requirements for installation of equipment by owners or operators of stationary sources to monitor emissions from such sources; (3) periodic reports on nature and amounts of such emissions; (4) that such reports shall be correlated by State agencies with emission limitation or standards established pursuant to this Act.

And so on.

Now, this is the kind of thing that we would envision writing into this water pollution legislation.

Why impose responsibilities like that upon a State if in the permit program we are in effect asserting meaningful authority at the Federal level? Does it make any sense?

Senator RANDOLPH. Mr. Chairman, may I, for the record, subscribe to what you have been saying. I don't classify it as a rambling statement as you seem to indicate. I think it goes to the very heart of this problem and I would believe that the gentlemen who sit with us today cannot fail to subscribe, as I have, to what has been said here. We are all attempting to do this job in a way that will, as you say, give ample notice and yet let those people who are involved in industry know that we are not trying to ease their burden. We are trying to have a rapport and understanding with them, a certain amount of cushion of time with them. We are attempting to do it through, not a hydra-headed operation within the structure of Government, but a definite pattern that they know they must follow and an agency to which they are accountable. Just where that finally rests I think you perhaps are not even certain—are you?

Senator MUSKIE. No, I am not.

Senator RANDOLPH. But there is a responsibility for us in the drafting of this legislation to be sure that we move strongly but that we do it in a way that will keep confusion out of it and misunderstanding.

I do feel that these meetings, General Groves, are helpful, and you are not in any sense asked to come and counsel with us as if we were carping critics, but only in an attempt to find areas in which we can proceed to go to do this job.

Thank you, Mr. Chairman.

Senator MUSKIE. May I make another point?

We are considering a Federal program, a national program, and I think we must consider it.

If you gentlemen feel strongly that the permit authority ought to be at the Federal level without any delegation, we have no option but to consider a total Federal program. We have to take into account the administrative problems that imposes and the personnel problems that imposes.

When we enacted the legislation last year, for example, it was clear to us that in order to implement what was in here, we had to have a substantial increase in personnel and appropriations to fund it. And so, before we reported it out of committee, we sent it downtown and asked the administration, the agency, and the Budget Bureau to give

us a hard figure as to what it would require in personnel and funding to implement this Act. We got detailed figures on it. We put them in our report. We reported them to the Senate. We called them to the attention of the Appropriations Committee and we said:

There is no point in passing this Act if you can't, and if you are not prepared, to put up the money and provide personnel necessary to implement it.

Even with those precautions, the budget submitted to the Congress this year provides only a fraction of the additional personnel and money that the administration itself told us was necessary.

These weren't figures that we dreamed up as necessary to do justice to the act.

Now, I am not bound to any concept. This committee in its deliberations has always indicated almost a 100 percent flexibility in putting together any idea, so that we put together a working program. I am willing to consider a total Federal authority.

I think you gentlemen in response to questions and discussions we have had here have to come back to us with specific recommendations as to how to make this a total Federal program.

If we opt for a development of the water quality standards program and relationship with Federal, State and local government then we need specific recommendations to tie the permit program into it. Or if we try to create some hybrid, we need some recommendations to refine what it shall be.

To follow any one of these three courses, we need more definition and some more legislative recommendations, but I think we owe it to ourselves and to the country and to those who will be subject to the law to put together a simple and clearcut and direct a program as we can. I am for being tough. I am for getting at the root of it, and there is no question that effluent discharges are at the root of the problem.

Let's get together and refine one of these three concepts. I don't expect that in this exchange we can develop all of it. I would hope that you might consider what we have said and form some judgments; then come back to us with some recommendations that would be helpful to us in pursuing one of these three courses.

Is there anything further that you would like to say?

Will you do that, then? We want something that works.

Senator COOPER. Mr. Chairman.

Senator MUSKIE. Senator Cooper.

Senator COOPER. On February 23, 1970 this subcommittee held a hearing dealing with resource recovery. There was inadvertently omitted from the record of that hearing a portion of the report of the President's Materials Policy Commission, known as the Paley Commission of 1952. I am referring specifically to chapter 10 of volume I concerning water pollution.

Because of the committee's work this year on major water pollution legislation, I believe it would be of great value to the members of this committee if this chapter of the Paley Commission report were made part of the permanent record. Therefore, Mr. Chairman, I ask permission to place this material in the record.

Senator MUSKIE. Without objection it is so ordered.

The material referred to follows:

FEBRUARY 18, 1971.

HON. JOHN SHERMAN COOPER,
U.S. Senate,
Washington, D.C.

DEAR JOHN: I had occasion recently to read over the extremely informative transcript of a hearing held on February 23, 1970, by the Subcommittee on Air and Water Pollution of the Committee on Public Works. The subject of the hearing was the proposal of yourself, Senator Boggs and others to create a National Commission on Materials Policy, a proposal which I understand has been adopted and now awaits implementation.

One of those who participated in this hearing was Mr. Hans Landsberg, a colleague of mine at Resources for the Future, Inc. In the course of your questioning of Mr. Landsberg, you asked if the President's Materials Policy Commission (the so-called Paley Commission of 1952) had concerned itself with "... this question of the effect of growth upon the environment?"

Mr. Landsberg's reply was to the effect that this subject didn't exist in 1952 "because the environment was able to absorb what was being released to it." However, in the course of making this point, which in general I believe is correct, Mr. Landsberg stated that he had searched, "the subject index of the five volumes of the Paley Commission's report . . . for the word 'pollution' and found that there was one single page citation—a reference to the Federal Water Pollution Act of 1948."

This particular statement did not accord with my recollection of the concern we felt at the time about the water pollution problem or of the amount of attention we devoted to it in our report.

When I checked the indices of the five volumes of the report and the Summary of Volume I, I found, in volumes I, V and the Summary, no less than thirteen separate entries for water pollution and related questions. In Chapter 10 of Volume I there is a good page and a half devoted to various aspects of the water pollution problem including such statements as:

"The United States has reached the point where the costs imposed on its economy by using streams and rivers as open sewers may exceed the apparent savings . . . Valuable wild life and recreational assets are destroyed, public health is menaced. . ."

"Clearly it will pay the Nation to do more than it is now doing."

"One possible device is a Federal tax on industrial operations that result in pollution of navigable waters and interstate streams. . ."

"The Commission hopes that the greatest practicable emphasis will be given to research into recovery of salable materials from waste. . ."

At the same time, we pointed out that the expenditure of "billions of dollars" in public and private investment would be required if even the . . . modest objectives of keeping up with the rising pollution load from growing cities and expanding industries and somewhat reducing the present level of water pollution. . ." were to be reached.

I'm enclosing for reference a copy of Chapter 10, Volume I.

I would appreciate it if you could, for the record, make this information available to your Committee colleagues.

I hope everything goes well with you and that we will have the opportunity to get together before too long.

My very best regards.

Sincerely,

BILL.

MR. WILLIAM S. PALEY,
New York, N.Y.

MARCH 2, 1971.

DEAR BILL: I was glad to receive your letter of February 19 clarifying the record of the "Paley Commission's concern with water pollution.

It was my impression that your Commission had been substantially concerned about the effect of waste materials upon the environment and it was this recollection that prompted my question to Mr. Landsberg to which you refer in your letter.

I have always considered the Paley Commission Report as an extremely important survey and analysis and I refer to it often. I hope the Materials Policy Commission authorized in the Resources Recovery Act will be as productive and I urge you to give the new Commission the benefit of your experience and knowledge in this area.

Although the hearing record, including the colloquy between myself and Mr. Landsberg, is closed I will certainly clarify the record during the hearings which the Committee has scheduled on water pollution beginning on March 15. I will make your letter to me and the copy of Chapter 10 of the Paley Commission's Report available to all members of the Committee and ask for its inclusion as a part of that record.

The pace of Senate business continually increases and there is no expectation of any relief. I, too, hope we will have the opportunity to get together soon, and as a catalyst perhaps you may wish to testify on the pending water pollution legislation. If so, please let me know.

Yours sincerely,

JOHN SHERMAN COOPER.

CHAPTER 10 SUPPLYING INDUSTRY WITH WATER

Modern industry needs water in vast quantities. It uses water for steam generation, for washing, cooling and conveying, and as an actual ingredient of manufactured products. Not counting the stream flow used mechanically to generate hydroelectric power, industries in the United States in 1950 used about 120 billion tons of water—almost 50 times the weight of all other industrial materials. This took a flow of about 80 billion gallons a day—8 times as much as in 1900. The expectation is that by 1975, industry may require $2\frac{1}{2}$ times as much—200 billion gallons a day.

Until recently, water for industry was taken for granted in most parts of the country except for the arid West. Such complacency can prevail no longer. Water requirements are rising steadily, for industrial use and other purposes. In many areas supplies of suitable water are diminishing. The Nation already has a serious industrial water problem and belatedly is coming to recognize it as such. During the Second World War, plans for building at least 300 industrial or military establishments had to be abandoned or modified because of inadequate water supply. Many areas of the country are feeling the pinch either because ground water reserves are being exhausted, or because surface and ground waters are polluted. There can be no question that more will feel the pinch in the next 25 years, and that it will grow sharper. By 1975, access to good water may become the most important factor in deciding where to locate industries.

A considerable body of general water policy has been built up, but the problems of industrial water have been neglected, and until recently have received little attention even from industrial organizations. Federal interest in water has encompassed progressively navigation, flood control, irrigation, hydroelectric power, soil conservation, and pollution abatement. Except for the latter, none of the policy bears directly on the use of water as an industrial material; and even pollution has rarely been approached from the standpoint of industry.

This Commission is encouraged by the constructive work done recently by the President's Water Resources Policy Commission in analyzing the whole question of water and in pointing ways toward more effective programs. Members of that body have urged that the present Commission examine further the subject of water as a material of industry.

This Report seeks to supplement, rather than parallel, the Report of the Water Resources Policy Commission. It accepts the main lines of that Commission's analysis and findings, does not discuss navigation, flood control, or water used for hydroelectric power, and considers domestic and irrigation uses of water only in relation to the total water problem. The findings of this Report are confined to general conclusions designed to help identify and attack the practical difficulties of increasing the supply of water for industry.

MEASURING INDUSTRY'S PROBLEM

There is no such thing as a problem of industrial water separate from other water problems. All water comes from the same natural sources; industrial and nonindustrial uses usually are competitive. The size of industry's water problem

in the future will depend on the demands of other users as well as on the needs for industrial purposes alone. Nearly always, fundamental solution of an industrial problem, or any other water problem, hinges on development and allocation of total supplies.

For all uses in 1950 about 170 billion gallons per day of fresh water and 15 billion gallons of salt water were withdrawn in the United States. By 1975, 350 billion gallons, predominantly fresh water, may be required daily. More than 80 percent of the increase will be for the estimated rise in industrial activity. A study of industrial water problems prepared for the Commission estimated existing and future water requirements, as given in table I.

TABLE I.—ESTIMATED TOTAL WITHDRAWALS AND REQUIREMENTS FOR WATER, 1950 AND 1975

	Estimated withdrawals, 1950		Estimated requirements, 1975		Increase 1950-75	
	Billion gallons per day	Percent of total	Billion gallons per day	Percent of total	Billion gallons per day	Percent increase
Municipal and rural ¹	17	9	25	7	8	50
Direct industrial.....	2 80	43	215	62	135	170
Irrigation.....	88	48	110	31	22	25
Total.....	185	100	350	100	165	90

¹ Roughly half of total municipal supplies are used industrially.

² Includes an estimated 15,000,000,000 gallons per day of salt water used in industry for cooling.

About 40 percent of present water withdrawals are evaporated, transpired, or consumed in their use—over three-quarters of this reduction occurring in Western irrigation. But estimates of water withdrawals include a large amount of reuse. Most of the water withdrawn by cities and industries is returned to streams or ground, and if not too polluted or heated can be reused. Reliable estimates of how much water actually is reused are not available. Neither are data on recirculation of water by industrial plants, although a survey of more than 3,000 plants indicated that more than half did not recirculate any water and another quarter recirculated less than half the water they withdrew. Industries could meet a large part of 1975 requirements through recirculation, and those along the seacoast could use sea water for some purposes. But even if all these possibilities of more efficient utilization are realized, supplying industrial water in 1975 still will constitute a major problem. Rough estimates of the total use of industrial water in 1950 show that:

About 44 percent was taken by steam-electric generating plants, primarily for the condenser cooling. Withdrawals for this purpose are expected to more than triple in 25 years.

About 16 percent by the steel industry which probably will show a slower growth in water use.

About 9 percent for petroleum refining which is expected to increase rapidly.

Five percent for production of wood pulp and paper, expected to increase rapidly.

Water use by other industries is likely to follow approximately the general trend of industrial growth.

Probably three-fourths of all industrial water is used for cooling. In most instances, quality requirements for this purpose are relatively low. The next largest volume of water used by industry is for washing, grading, and waste disposal. Much of this water can be of medium or low quality.

On the other hand, a proportionately small but rapidly growing requirement is for water having almost no contained organic matter, minerals, acids, or gases. The trend toward synthetic materials and the growth of chemical industries is expanding the requirements for such pure water. Ground water in many instances can meet this demand in its natural state, but surface water nearly always must be treated. In 1950 about 80 percent of all water withdrawals, and 90 percent of industrial withdrawals, were from surface water. But the use of groundwater tripled between 1935 and 1950, a rise that greatly exceeded the rate

of increase in total use and fore-shadowed future difficulties in obtaining sufficient water of high purity.

Not many years ago when water of suitable quality was easy to obtain in most parts of the country costs of collecting and transporting water were usually small. Often it could be drawn from a nearby stream or river. Purification was seldom thought of. So long as supplies were large the amounts of water used were a negligible item in costs of plant operation. Nowadays in many areas water must be brought from considerable distances, or pumped from deep wells. When nearby supplies are used, extensive purification treatment often is necessary. Water costs are becoming a more important item in industrial production costs.

Precise figures still are lacking on any broad basis, but it has been estimated that for the Nation as a whole, costs of industrial water may average between 4 and 5 cents per 1,000 gallons. Variations in cost among industries and localities are wide. In Baltimore water for steelmaking is reclaimed at about 2 cents a 1,000 gallons. Costs of a proposed program reclaiming waste municipal water in Los Angeles to make it fit for irrigation or industrial use have been estimated at between 5 and 10 cents per 1,000 gallons.

SUPPLY PROBLEM VARIES BY AREAS

Although current and 1975 requirements for industrial water can be estimated for the country as a whole, the practical problems of supplying the required quantity and quality are regional rather than national. An excess of water in one region rarely can help make up a deficit in another.

Most areas in the arid West and some in the humid East, especially in the manufacturing belt, are reaching the limit of pure water supplies. Probably none of the 10 largest water-using States,* with the possible exception of Texas, could double the withdrawal of good quality water without heavy cost. A few States already are hard-pressed: Arizona, an extreme example, gets 60 percent of its water supply from over-pumped wells.

On the other hand, probably half the States could at least double present withdrawals at relatively low cost, and a few States could increase them 10 or 20 times. The most promising areas are upper New England, the Southeast, and the Columbia River Valley. Probably two-thirds of the potential supply that can be cheaply developed is in the area south of the Ohio and Potomac River Basins and east of southeastern Kansas and eastern Texas.

Variations in supply

Precipitation varies from 120 inches annually along the Pacific Northwest coast, and 60 inches in southeastern areas, to less than 5 inches in parts of the arid Southwest. Annual run-off—a better measure of the water really available—varies even more widely. It is more than half the precipitation in some humid areas but less than 5 percent of the scanty rainfall of some arid areas.

From the Great Plains to the Pacific Coast, and in some smaller areas, consistent scantiness of precipitation sharply limits the total supply. Even if the greater part of the available water could be earmarked for industrial use, few large plants could locate in the areas without using far less water than now.

Irregularity of rainfall is another limiting factor. The annual cycle in some localities causes swings pronounced enough to affect industrial operations. Even more troublesome to industry are the longer range fluctuations in rainfall that have affected some water supplies.

Persistent lowering of water tables in nearly all populous areas and even in sparsely settled areas of low rainfall has aggravated problems of both total supply and quality. In the Chicago area where water once gushed from artesian wells, heavy pumping has lowered the water table to as much as 500 feet below the surface only short distances from Lake Michigan. In the High Plains of west Texas, an average of 1.4 billion gallons a day was pumped from wells during 1950—a drain on ground water about 30 times the estimated rate of replenishment.

Depletion of ground water makes stream flow smaller in dry seasons and adds to the cost of pumping ground water. It invites inflow of pollution from both

* California, New York, Idaho, Illinois, Ohio, Colorado, Pennsylvania, Texas, Michigan, and Montana.

natural and man-made sources. Salt water is encroaching on ground water supplies along the Atlantic, Gulf and Pacific coasts as well as in some inland areas. Southwest of Los Angeles salt water is moving inland in rates up to 300 feet per year. Once the fresh water supply is contaminated, many decades may be required to restore it.

Even where water is plentiful, some serious shortages have developed because the supply is not fit to use. Gross uncleanness and saltiness are chief reasons, but not the only ones. Each industry has its own list of requirements in quality. Paper manufacturers need water that is clear and low in manganese and iron. Water containing aluminum tends to lower the quality of photographic film. Iron-bearing water is not adapted for dyeing and bleaching. "Hard" water leaves heavy scale deposits and necessitates excessive use of detergents.

Considerable natural pollution occurs when surface or underground fresh water comes in contact with minerals that are easily dissolved or suspended. But man-made pollution causes much of the extreme degradation of supply: sewage and food processing wastes, for example, and concentrations of acids or alkalis from mines or industrial plants.

Pollution of water supplies is characteristic of nearly all heavily inhabited watersheds, but is most serious in the manufacturing belt from Chicago and St. Louis and eastward to the Atlantic Coast. Pollution of the Ohio River became so objectionable that Congress, by special resolution, gave the affected States authority in 1936 to form an interstate compact to deal with the problem.

Withdrawals of water for cooling purposes are so heavy in some areas that river water sometimes becomes too hot to act as an effective cooling agent and increases pollution because some forms of waste matter dissolve more readily in warm water.

The United States has reached the point where the costs imposed on its economy by using streams and rivers as open sewers may exceed the apparent savings.

Many down-stream communities are forced to pay large sums to purify water or to develop alternative supplies, sometimes from distant sources. Valuable wildlife and recreational assets are destroyed, public health is menaced. Industries that require relatively clean water are discouraged from locating along heavily polluted rivers even though good plant sites, labor supply, and other attractions exist. Some plants whose water supplies have deteriorated have moved to other localities rather than incur the high costs of purification.

WAYS OF INCREASING SUPPLY

There are four general ways of overcoming scarcities of suitable industrial water.

Total usable supply in an area may be increased. This can be done mainly by levelling out supplies throughout the year so that great volumes of destructive flood water do not rush unused to the sea during some seasons, while in others the stream flow drops below requirements. These wide swings in supply can be reduced by such water-retarding devices as storage reservoirs and vegetative cover on watersheds. Recently interest has grown in increasing supplies of water by artificially induced rain. Ultimately, this could be significant although considerable time would be required for further research on results and development of economically feasible techniques. Purely local shortages may be relieved by piping water from elsewhere; although this usually is a high-cost operation, it already has had considerable application.

Quality of a water may be improved through treating water just before use, or by removing or reducing sources of contamination. Some progress has been made recently toward economical methods of removing minerals from sea water. This approach holds promise, but development of large-scale, low-cost methods will, at best, take time.

Industrial users of water may cut consumption or modify requirements. Many plants can change production techniques so as to use less water or lower grade water, can install recirculation facilities, or install corrosion-resistant equipment to permit use of contaminated water for some operations.

In many areas available water can be better apportioned among different types of users. When total supply is low, the quantity available can be assigned on a priority basis to those uses that promote the greatest economic returns. In some

situations, for example, it may be more advantageous to the area and to the Nation to provide less water for irrigation and more for industry.

When the main problem concerns quality, scarce higher grades of water can be channelled only to those who need them, and more abundant lower grades to consumers with less exacting requirements. Municipalities, and most industries with their own water systems, do not ordinarily separate water according to quality. The advantages would have to be weighed against the capital costs of multiple distribution. In Chicago, for example, many plants could forego the cheaper but high-quality ground water they now use in tremendous amounts and shift to Lake Michigan water. In some areas, notably Baltimore and Los Angeles, even treated sewage water has been used profitably for some industrial purposes.

GUIDES TO FEDERAL ACTION

The decentralized problem of industrial water supplies calls for decentralized measures. Most of the responsibility rests with industry itself, and with local and State governments and interstate agencies. The Federal Government, however, can make a considerable contribution, principally through supporting others' efforts, but also through better management of its own projects.

Five principles to follow

The Commission believes that the following basic principles should be followed in shaping national policies and executing national programs for use of water resources:

Planning and developing water resources must comprehend all aspects of the collection, conservation, and use. The growing needs of industry can be met best if its requirements are treated as one of the major objectives of water policy, in each area and for the whole Nation, together with flood control, navigation, generation of power, land reclamation, and other essential lines of activity. Each major project, whatever its primary function, should be a truly multipurpose installation designed with an eye to present and prospective needs for water for all competing uses.

The varied and complex problems of water can be attacked best by integrated action in each major drainage basin, under a general national policy for use of water resources. This Commission agrees with the President's Water Resources Policy Commission that "Congress should direct the responsible Federal agencies to submit new proposals for water resources development to Congress only in the form of basin programs which deal with entire basins as units and which take into account all relevant purposes in water and land development." In carrying out these proposals, it is most important that adequate consideration be given to industry's needs for water.

Highest economic use must be made of scarce supplies. Most Federal water development projects, except those of the Tennessee Valley Authority, are in the West. Much of that region is arid, and inadequacy of total supplies is a pressing problem. Once provision has been made for household water, the question often arises of whether to use water for irrigation or industry. Irrigation, given high priority in the past, has contributed to the economic development of the Western States, but the need is increasing for weighing the economic justification for irrigation against that of industrial use of the same water, and to compare the alternate public and private costs with public and private benefits for a given outlay.

Benefits must exceed costs. In general, public assistance in making water available is justified only if the benefits are widely dispersed and give promise of being greater than public and private costs. It is difficult to make dollar estimates for some benefits of water development—for example, improved health conditions, and the gains in forestalling long-range tendencies toward soil erosion and deterioration of the water supply. Yet account should be taken of these benefits as well as those to which money values can be ascribed more easily.

Known beneficiaries should help pay for improvements. The identifiable direct beneficiaries should contribute to the costs of a public water project in accordance with the benefits they receive. Assume that a Federal project undertaken primarily for flood control provides reservoir storage capacity for municipal and industrial water: supplies from the reservoir should be sold to cities and industries at rates that cover the cost. The Commission believes that such payments by users in each region will help bring about maximum gains from water programs.

Arcas for Federal action

The Federal Government can contribute to improving and increasing water supplies in three main areas: through research, tighter planning of programs, and cooperation in efforts to control and reduce pollution.

Basic Studies and Technological Research. Several Federal agencies study such basic components of the water supply as rainfall, run-off, percolation, infiltration, stream flow, ground water supplies, flood levels, and quality. These studies are of great value to industry as well as to public projects. They should be continued on a scale commensurate with growing requirements for data.

Without sufficient information there will be no adequate basis for judgments on the highest uses of water resources or on the relationship of estimated costs to benefits.

The basic data should be made available to business concerns on a wide scale, and could be particularly useful in helping industries determine where new plants should be located, or in developing new sources of water.

Integration of Federal Programs. Although much responsibility lies with local authorities of the various river basins, national coordination is also necessary.

Federal agencies working on segments of water problems need to make sure that the work of each is consistent with long-range national and regional interests. Duplication of effort, variation in emphasis and bureaucratic competition among Federal water resource agencies have resulted in programs that are in some aspects unbalanced and wasteful. Programs that emphasize a single phase of water development can prove costly in the long run by overlooking the other needs and opportunities. The sound development of water resources calls for a multiple-purpose program of each river basin development along lines that will best promote economic development and best meet the essential needs—both current and potential—of various types of water users in each basin.

This Commission finds merit in the majority recommendation of the Commission on Organization of the Executive Branch of the Government (Hoover Commission), endorsed by the President's Water Resources Policy Commission, for a Federal board of review that can appraise the costs and benefits of proposed Federal development projects from a comprehensive national viewpoint.

Abatement of Pollution. Activities of the Federal Government in holding down water pollution, although secondary to local efforts, have become increasingly important. Even more important, industry has begun to see the need for pollution control in its own interest as well as for public welfare.

The Commission recognizes that complete abatement of pollution is not an attainable goal. Little can be done to reduce natural pollution from minerals and underground sources, or from the run-off of city streets, barnyards, pastures, fields, and other areas. Moreover, there are practical economic and technical limits to reduction of pollution from industrial and domestic wastes. Complete treatment of all wastes would require so tremendous an investment that it never has been seriously proposed.

Even the more modest objectives of keeping up with the rising pollution load from growing cities and expanding industries, and of somewhat reducing the present level of water pollution, would call for private and public investments running into billions of dollars. In 1951 the Public Health Service estimated that over a 10-year period a moderate abatement program designed to keep the situation from growing worse and to achieve some improvement in average quality of water would require investment of between 9 and 12 billion dollars (at 1950 price levels) in construction and modernization of municipal and industrial treatment plants. The actual cost of any program decided upon would, of course, depend on how clean the Nation wanted its streams and rivers to be—what kinds of uses it wanted the water fit for. Clearly it will pay the Nation to do more than it is now doing.

This Commission is convinced that industrial pollution can be significantly reduced only by the cooperation of industry and Government; it also believes that to the greatest practicable extent, private sources of pollution should be eliminated at private expense. Industry already has made a beginning.

Costs of treating wastes often can be partly, sometimes wholly, offset by recovery of salable wastes. One steel company built a plant to recover ore from blast-furnace flue dust that was being dumped into the river. The treatment plant cost \$516,000; in its first year it returned to cost of its operation, plus \$581,000. However, the practice of recovering byproducts from waste still is not widespread in many industries. Recovery of wastes is still rarer among cities,

although an increasing number sell sewage sludge as fertilizer.* Returns from salvaged waste are usually moderate, but they reduce costs.

The Commission is impressed by the progress made, but it is convinced that ordinary market incentives will not accomplish enough pollution abatement fast enough. It believes there is need for a general strengthening of antipollution measures, including State controls, but also a need for flexibility. Situations differ not only among industries and among river basins, but also among different points along a single river.

Nearly every State has some legislation for regulating stream pollution, but standards and enforcement range from good to inadequate. Some streams have been cleaned up, but for the country as a whole pollution worsens each year.

Pollution Control Act

The Water Pollution Control Act of 1948 (62 Stat. 1155, 63 Stat. 380) has provided the beginnings of a program of Federal cooperation with States and interstate bodies. It authorizes the Surgeon General of the Health Service, in cooperation with other interested agencies and bodies, to prepare comprehensive programs for interstate streams and underground waters; and at the request of State or interstate agencies to research specific problems. It declares to be a public nuisance any pollution of interstate waters which endangers health or welfare of persons in a State other than the one in which the discharge originates. In such cases, it provides for administrative hearings and court action if the State in which the pollution originates gives consent. It grants congressional sanction to interstate compacts on pollution abatement, and provides loans and grants to State, interstate, and city antipollution agencies.

In general, the act embodies the principle that the main role of the Federal Government is to stimulate, suggest, and assist. Even in the limited area in which the National Government is authorized to compel abatement. Federal enforcement is designed as a supplement to local enforcement.

The act prescribes time-consuming preliminaries to Federal court action, apparently to encourage local agencies either to seek enforcement in local tribunals or to cooperate with Federal authorities in working out administrative solutions. The Commission believes this is a sound approach. Readier access to Federal courts might bring quicker results but might discourage initiative and responsibility of affected localities.

For possible future action

It is still too early to appraise the effectiveness of the enforcement provisions of the Water Pollution Control Act; thus it would be premature to consider major changes. But it is by no means certain that the present enforcement provisions will work well enough to bring the pollution situation under control.

This Commission believes that alternative measures must be taken if at the end of a sufficient testing period—say 5 years—progress in pollution abatement has been clearly inadequate. One possible device is a Federal tax on industrial operations that result in pollution of navigable waters and interstate streams. Such a tax could be designed to fortify local enforcement efforts and still leave development and execution of abatement programs in the hands of local authorities. It would give industry a dollar-and-cents incentive to undertake antipollution measures. Serious thought should be given now to this and other possibilities for future action. In the interest of industry, and indeed of the whole Nation, surface water must become cleaner and not more contaminated.

One minor, but troublesome, aspect of industrial pollution calls for immediate action. There are some sources of industrial pollution that have no owners upon whom responsibility may be fastened—abandoned mines, for example. Inquiry into the extent and seriousness of pollution from abandoned mines and other industrial sources without responsible owners is a suitable subject for joint investigation by Federal and local agencies as authorized by the Water Pollution Act. Abatement measures could be recommended and carried out by the appropriate agency or agencies, and if authority for taking adequate steps is found to be lacking, State and Federal legislative authorization could be sought.

*For these and other examples see: The President's Water Resources Policy Commission. *A Water Policy for the American People*, vol. I.

The role of the Federal Government in supplementing local enforcement of antipollution measures is not small, but limited in practice to industrial pollution. Under the terms of the Water Pollution Control Act, Federal participation in the campaign against municipal pollution consists of (a) its own surveys, studies, and research; (b) support of similar work through grants to States and interstate agencies; and (c) financial assistance in constructing certain abatement projects through loans and through grants for engineering studies.

Legislative choices

The present act authorizes maximum appropriations of \$2 million for carrying out all other provisions of the act except loans and grants. During the past 3 years actual appropriations have ranged between 60 and 70 percent of authorization, although all could have been used.

The annual maximum authorization for Federal grants to States and interstate agencies to support their own surveys, studies and research is \$1 million. During the past 3 years appropriations have about equalled full authorization.

Two other annual authorizations relate to construction of antipollution projects by States, municipalities, and interstate agencies—\$22.5 million for construction loans and \$1 million for grants in support of engineering studies and plans for construction. No appropriations for loans have been made. Appropriations totalling \$950,000 have been made for grants, but nondefense cutbacks withheld funds.

All authorizations for appropriations to carry out provisions of the Water Pollution Control Act expire on June 30, 1953. This Commission is convinced that Federal assistance in the campaign against water pollution should be continued and should be carried on within the present framework.

As to the provisions of the present act, the Commission has no doubts of the effectiveness of Federal research, surveys, and studies, and of grants to assist State and interstate agencies.

These authorizations should be continued. The Commission hopes that the greatest practicable emphasis will be given to research into recovery of salable materials from waste—a line of work that could substantially reduce the net cost of operating antipollution installations.

As to loans for construction and grants for construction plans, the Commission recognizes the need for more construction of pollution abatement projects, but it notes that these provisions of the act have not been applied. Not only has Congress failed to appropriate funds, but there is a question whether municipal governments would have found them of much practical use since the act limits each to one-third of cost with a ceiling of \$250,000.

These provisions should be thoroughly reexamined by Congress, and its consideration should include inquiry into the desirability of extending construction loans and grants to private industries as well as municipalities.

Senator MUSKIE. The hearings are now adjourned.

(Whereupon, at 12:20 p.m., the subcommittee recessed, subject to call of the Chair.)

The Commission has been authorized to conduct a study of the various factors which enter into the determination of the value of property for taxation purposes. It is requested that you advise the Commission of any information which you may have regarding the subject.

The Commission is particularly interested in the methods of valuation used by taxpayers and in the reasons for such methods. It is also interested in the methods of valuation used by appraisers and assessors. It is requested that you advise the Commission of any information which you may have regarding the subject.

The Commission is also interested in the methods of valuation used by courts in cases involving the valuation of property for taxation purposes. It is requested that you advise the Commission of any information which you may have regarding the subject.

The Commission is also interested in the methods of valuation used by the various States and Territories. It is requested that you advise the Commission of any information which you may have regarding the subject.

The Commission is also interested in the methods of valuation used by the various Federal agencies. It is requested that you advise the Commission of any information which you may have regarding the subject.

The Commission is also interested in the methods of valuation used by the various State and Federal courts. It is requested that you advise the Commission of any information which you may have regarding the subject.

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APPENDIX

THE REFUSE ACT PERMIT PROGRAM AND SUPPORTING REGULATIONS AND MATERIALS

RIVER AND HARBOR ACT OF 1899

(Sections 9-20)

CHAP. 425.—An Act Making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes.

* * * * *
SEC. 9. That it shall not be lawful to construct or commence the construction of any bridge, dam, dike, or causeway over or in any port, roadstead, haven, harbor, canal, navigable river, or other navigable water of the United States until the consent of Congress to the building of such structures shall have been obtained and until the plans for the same shall have been submitted to and approved by the Chief of Engineers and by the Secretary of War: *Provided*, That such structures may be built under authority of the legislature of a State across rivers and other waterways the navigable portions of which lie wholly within the limits of a single State, provided the location and plans thereof are submitted to and approved by the Chief of Engineers and by the Secretary of War before construction is commenced: *And provided further*, That when plans for any bridge or other structure have been approved by the Chief of Engineers and by the Secretary of War, it shall not be lawful to deviate from such plans either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Chief of Engineers and of the Secretary of War.

SEC. 10. That the creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is hereby prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, polphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of War; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of War prior to beginning the same.

SEC. 11. That where it is made manifest to the Secretary of War that the establishment of harbor lines is essential to the preservation and protection of harbors he may, and is hereby, authorized to cause such lines to be established, beyond which no piers, wharves, bulkheads, or other works shall be extended or deposits made, except under such regulations as may be prescribed from time to time by him: *Provided*, That whenever the Secretary of War grants to any person or persons permission to extend piers, wharves, bulkheads, or other works, or to make deposits in any tidal harbor or river of the United States beyond any harbor lines established under authority of the United States, he shall cause to be ascertained the amount of tide water displaced by any such structure or by any such deposits, and he shall, if he deem it necessary, require the parties to whom the permission is given to make compensation for such displacement either by excavating in some part of the harbor, including tidewater channels between

high and low water marks, to such an extent as to create a basin for as much tide water as may be displaced by such structure or by such deposits, or in any other mode that may be satisfactory to him.

SEC. 12. That every person and every corporation that shall violate any of the provisions of sections nine, ten, and eleven of this Act, or any rule or regulation made by the Secretary of War in pursuance of the provisions of the said section fourteen, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding twenty-five hundred dollars nor less than five hundred dollars, or by imprisonment (in the case of a natural person) not exceeding one year, or by both such punishments, in the discretion of the court. And further, the removal of any structures or parts of structures erected in violation of the provisions of the said sections may be enforced by the injunction of any circuit court exercising jurisdiction in any district in which such structures may exist, and proper proceedings to this end may be instituted under the direction of the Attorney-General of the United States.

SEC. 13. That it shall not be lawful to throw, discharge, or deposit, or cause, suffer, or procure to be thrown, discharged, or deposited either from or out of any ship, barge, or other floating craft of any kind, or from the shore, wharf, manufacturing establishment, or mill of any kind, any refuse matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state, into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water; and it shall not be lawful to deposit, or cause, suffer, or procure to be deposited material of any kind in any place on the bank of any navigable water, or on the bank of any tributary of any navigable water, where the same shall be liable to be washed into such navigable water, either by ordinary or high tides, or by storms or floods, or otherwise, whereby navigation shall or may be impeded or obstructed: *Provided*, That nothing herein contained shall extent to, apply to, or prohibit the operations in connection with the improvement of navigable waters or construction of public works, considered necessary and proper by the United States officers supervising such improvement or public work: *And provided further*, That the Secretary of War, whenever in the judgment of the Chief of Engineers anchorage and navigation will not be injured thereby, may permit the deposit of any material above mentioned in navigable waters, within limits to be defined and under conditions to be prescribed by him, provided application is made to him prior to depositing such material; and whenever any permit is so granted the conditions thereof shall be strictly complied with, and any violation thereof shall be unlawful.

SEC. 14. That it shall not be lawful for any person or persons to take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, obstruct by fastening vessels thereto or otherwise, or in any manner whatever impair the usefulness of any sea wall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the United States, or any piece of plant, floating or otherwise, used in the construction of such work under the control of the United States, in whole or in part, for the preservation and improvement of any of its navigable waters or to prevent floods, or as boundary marks, tide gauges, surveying stations, buoys, or other established marks, nor remove for ballast or other purposes any stone or other material composing such works: *Provided*, That the Secretary of War may, on the recommendation of the Chief of Engineers, grant permission for the temporary occupation or use of any of the aforementioned public works when in his judgment such occupation or use will not be injurious to the public interest.

SEC. 15. That it shall not be lawful to tie up or anchor vessels or other craft in navigable channels in such a manner as to prevent or obstruct the passage of other vessels or craft; or to voluntarily or carelessly sink, or permit or cause to be sunk, vessels or other craft in navigable channels; or to float loose timber and logs, or to float what is known as sack rafts of timber and logs in streams or channels actually navigated by steamboats in such manners as to obstruct, impede, or endanger navigation. And whenever a vessel, raft, or other craft is wrecked and sunk in a navigable channel, accidentally or otherwise, it shall be the duty of the owner of such sunken craft to immediately mark it with a buoy or beacon during the day and a lighted lantern at night, and to maintain such marks until the sunken craft is removed or abandoned, and the neglect or failure of the said owner so to do shall be unlawful; and it shall be the duty of the owner of such sunken craft to commence the immediate removal of the same,

and prosecute such removal diligently, and failure to do so shall be considered as an abandonment of such craft, and subject to same to removal by the United States as hereinafter provided for.

SEC. 16. That every person and every corporation that shall violate, or that shall knowingly aid, abet, authorize, or instigate a violation of the provisions of sections thirteen, fourteen, and fifteen of this Act shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding twenty-five hundred dollars nor less than five hundred dollars, or by imprisonment (in the case of a natural person) for not less than thirty days nor more than one year, or by both such fine and imprisonment, in the discretion of the court, one-half of said fine to be paid to the person or persons giving information which shall lead to conviction. And any and every master, pilot, and engineer, or person or persons acting in such capacity, respectively, on board of any boat or vessel who shall knowingly engage in towing any scow, boat, or vessel loaded with any material specified in section thirteen of this Act to any point or place of deposit or discharge in any harbor or navigable water, elsewhere than within the limits defined and permitted by the Secretary of War, or who shall willfully injure or destroy any work of the United States contemplated in section fourteen of this Act, or who shall willfully obstruct the channel of any waterway in the manner contemplated in section fifteen of this Act, shall be deemed guilty of a violation of this Act, and shall upon conviction be punished as hereinbefore provided in this section, and shall also have his license revoked or suspended for a term to be fixed by the judge before whom tried and convicted. And any boat, vessel, scow, raft, or other craft used or employed in violating any of the provisions of sections thirteen, fourteen, and fifteen of this Act shall be liable for the pecuniary penalties specified in this section, and in addition thereto for the amount of the damages done by said boat, vessel, scow, raft, or other craft, which latter sum shall be placed to the credit of the appropriation for the improvement of the harbor or waterway in which the damage occurred, and said boat, vessel, scow, raft, or other craft may be proceeded against summarily by way of libel in any district court of the United States having jurisdiction thereof.

SEC. 17. That the Department of Justice shall conduct the legal proceedings necessary to enforce the foregoing provisions of sections nine to sixteen, inclusive, of this Act; and it shall be the duty of district attorneys of the United States to vigorously prosecute all offenders against the same whenever requested to do so by the Secretary of War or by any of the officials hereinafter designated, and it shall furthermore be the duty of said district attorneys to report to the Attorney-General of the United States the action taken by him against offenders so reported, and a transcript of such reports shall be transmitted to the Secretary of War by the Attorney-General; and for the better enforcement of the said provisions and to facilitate the detection and bringing to punishment of such offenders, the officers and agents of the United States in charge of river and harbor improvements, and the assistant engineers and inspectors employed under them by authority of the Secretary of War, and the United States collectors of customs and other revenue officers, shall have power and authority to swear out process and to arrest and take into custody, with or without process, any person or persons who may commit any of the acts or offenses prohibited by the aforesaid sections of this Act, or who may violate any of the provisions of the same: *Provided*, That no person shall be arrested without process for any offense not committed in the presence of some one of the aforesaid officials: *And provided further*, That whenever any arrest is made under the provisions of this Act, the person so arrested shall be brought forthwith before a commissioner, judge, or court of the United States for examination of the offenses alleged against him; and such commissioner, judge, or court shall proceed in respect thereto as authorized by law in case of crimes against the United States.

SEC. 18. That whenever the Secretary of War shall have good reason to believe that any railroad or other bridge now constructed, or which may hereafter be constructed, over any of the navigable waterways of the United States is an unreasonable obstruction to the free navigation of such waters on account of insufficient height width, of span, or otherwise, or where there is difficulty in passing the draw opening or the draw span of such bridge by rafts, steamboats, or other water craft, it shall be the duty of the said Secretary, first giving the parties reasonable opportunity to be heard, to give notice to the persons or corporations owning or controlling such bridge so to alter the same as to render navigation through or under it reasonably free, easy, and unobstructed; and in

giving such notice he shall specify the changes recommended by the Chief of Engineers that are required to be made, and shall prescribe in each case a reasonable time in which to make them. If at the end of such time the alteration has not been made, the Secretary of War shall forthwith notify the United States district attorney for the district in which such bridge is situated, to the end that the criminal proceedings hereinafter mentioned may be taken. If the persons, corporation, or association owning or controlling any railroad or other bridge shall, after receiving notice to that effect, as hereinbefore required, from the Secretary of War, and within the time prescribed by him willfully fail or refuse to remove the same or to comply with the lawful order of the Secretary of War in the premises, such persons, corporation, or association shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding five thousand dollars, and every month such persons, corporation, or association shall remain in default in respect to the removal or alteration of such bridge shall be deemed a new offense, and subject the persons, corporation, or association so offending to the penalties above prescribed: *Provided*, That in any case arising under the provisions of this section an appeal or writ of error may be taken from the district courts or from the existing circuit courts direct to the Supreme Court either by the United States or by the defendants.

SEC. 19. That whenever the navigation of any river, lake, harbor, sound, bay, canal, or other navigable waters of the United States shall be obstructed or endangered by any sunken vessel, boat, water craft, raft, or other similar obstruction, and such obstruction has existed for a longer period than thirty days, or whenever the abandonment of such obstruction can be legally established in a less space of time, the sunken vessel, boat, water craft, raft, or other obstruction shall be subject to be broken up, removed, sold, or otherwise disposed of by the Secretary of War at his discretion, without liability for any damage to the owners of the same: *Provided*, That in his discretion, the Secretary of War may cause reasonable notice of such obstruction of not less than thirty days, unless the legal abandonment of the obstruction can be established in a less time, to be given by publication, addressed "To whom it may concern," in a newspaper published nearest to the locality of the obstruction, requiring the removal thereof: *And provided also*, That the Secretary of War may, in his discretion, at or after the time of giving such notice, cause sealed proposals to be solicited by public advertisement, giving reasonable notice of not less than ten days, for the removal of such obstruction as soon as possible after the expiration of the above specified thirty days' notice, in case it has not in the meantime been so removed, these proposals and contracts, at his discretion, to be conditioned that such vessel, boat, water craft, raft, or other obstruction, and all cargo and property contained therein, shall become the property of the contractor, and the contract shall be awarded to the bidder making the proposition most advantageous to the United States: *Provided*, That such bidder shall give satisfactory security to execute the work: *Provided further*, That any money received from the sale of any such wreck, or from any contractor for the removal of wrecks, under this paragraph shall be covered into the Treasury of the United States.

SEC. 20. That under emergency, in the case of any vessel, boat, water craft, or raft, or other similar obstruction, sinking or grounding, or being unnecessarily delayed in any Government canal or lock, or in any navigable waters mentioned in section nineteen, in such manner as to stop, seriously interfere with, or specially endanger navigation, in the opinion of the Secretary of War, or any agent of the United States to whom the Secretary may delegate proper authority, the Secretary of War or any such agent shall have the right to take immediate possession of such boat, vessel, or other water craft, or raft, so far as to remove or to destroy it and to clear immediately the canal, lock, or navigable waters aforesaid of the obstruction thereby caused, using his best judgment to prevent any unnecessary injury; and no one shall interfere with or prevent such removal or destruction: *Provided*, That the officer or agent charged with the removal or destruction of an obstruction under this section may in his discretion give notice in writing to the owners of any such obstruction requiring them to remove it: *And provided further*, That the expense of removing any such obstruction as aforesaid shall be a charge against such craft and cargo; and if the owners thereof fail or refuse to reimburse the United States for such expense within thirty days after notification, then the officer or agent aforesaid may sell the craft or cargo, or any part thereof that may not have been destroyed in removal, and the proceeds of such sale shall be covered into the Treasury of the United States.

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

CHAPTER II—CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY

PART 209—ADMINISTRATIVE PROCEDURE

Permits for Discharges or Deposits Into Navigable Waters

On December 31, 1970, notice of proposed rule making was published in the FEDERAL REGISTER (35 F.R. 20005) which set forth the text of regulations proposed as § 209.131 relating to the policy, practice and procedure in connection with applications for permits authorizing discharges or deposits into navigable waters of the United States or into any tributary from which discharged matter shall float or be washed into a navigable water (33 U.S.C. 407).

Pursuant to the above notice, a number of comments have been received from interested persons, and due consideration has been given to all relevant matter presented. In light of the preceding, a number of revisions have been made in the rules as proposed.

In accordance with the statement in the notice of proposed rule making, § 209.131, as set forth below, is hereby adopted effective on publication (4-7-71).

§ 209.131 *Permits for discharges or deposits into navigable waters.*

(a) *Purpose and scope.* This section prescribes the policy, practice, and procedure to be followed by all Corps of Engineers installations and activities in connection with applications for permits authorizing discharges or deposits into navigable waters of the United States or into any tributary from which discharged or deposited matter shall float or be washed into a navigable water.

(b) *Law and Executive order authorizing permits.* (1) Section 13 of the Act approved March 3, 1899 (33 U.S.C. 407), hereafter referred to as the "Refuse Act," provides in part that it is unlawful "to throw, discharge, or deposit, or cause, suffer, or procure to be thrown, discharged, or deposited either from or out of any ship, barge, or other floating craft of any kind, or from the shore, wharf, manufacturing establishment, or mill of any kind, any refuse matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state, into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water; and it shall not be lawful to deposit, or cause, suffer, or procure to be deposited material of any kind in any place on the bank of any navigable water, or on the bank of any tributary of any navigable water, where the same shall be liable to be washed into such navigable water * * * whereby navigation shall or may be impeded or obstructed: *Provided*, That nothing herein contained shall extend to, apply to, or prohibit the operations in connection with the improvement of navigable waters or construction of public works, considered necessary and proper by the U.S. officers supervising such improvement or public work; *And provided further*, That the Secretary of the Army, whenever in the judgment of the Chief of Engineers anchorage and navigation will not be injured thereby, may permit the deposit of any material above-mentioned in navigable waters, within limits to be defined and under conditions to be prescribed by him, provided application is made to him prior to depositing such material; and whenever any permit is so granted the conditions thereof shall be strictly complied with, and any violation thereof shall be unlawful."

(2) Executive Order No. 11574 (dated December 23, 1970) directs the implementation of a permit program under the authority of the Refuse Act and provides for the cooperation of affected Federal agencies in the administration of the program.

(c) *Related legislation.* (1) Section 21(b) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.), (see particularly the Water Quality Improvement Act of 1970, Public Law 91-224, 84 Stat. 108), reflects the concern of the Congress with maintenance of applicable water quality standards and, subject to certain exceptions, requires any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities which may result in a discharge into the navigable waters

of the United States to provide an appropriate certification that there is reasonable assurance that such activity will be conducted in a manner which will not violate applicable water quality standards.

(2) The concern of the Congress with the need to encourage the productive and enjoyable harmony between man and his environment and the need to promote efforts which will prevent or eliminate damage to the environment was manifested in the enactment of the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347). Section 102 of that Act directs that:

"To the fullest extent possible: (1) The policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act, and (2) all agencies of the Federal Government shall—

* * * * *

"(B) Identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by title II of this Act, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical consideration * * *"

(3) The concern of Congress with the quality of the aquatic environment as it affects the conservation, improvement and enjoyment of fish and wildlife resources is indicated in the Fish and Wildlife Act of 1956 (16 U.S.C. 742a et seq.), the Migratory Marine Game-Fish Act (16 U.S.C. 760c-760g) and the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c). The latter Act provides in part that:

"[W]henver the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license, such department or agency first shall consult with the U.S. Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State wherein the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources * * *. (16 U.S.C. 662(a))"

(See also Reorganization Plan No. 4 of 1970 which transferred certain functions from the Secretary of the Interior to the Secretary of Commerce.) As provided in paragraph (d) (6) of this section, advice as to the impact which a proposed discharge or deposit may or is likely to have on fish and wildlife resources, is to be solicited from the appropriate Regional Coordinator or Field Representative of the Department of the Interior and the appropriate Regional Director of the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce.

(4) As amended, the Act of June 29, 1888 (33 U.S.C. 441 et seq.) authorizes Corps of Engineers' officers supervising the harbors of New York, Hampton Roads, and Baltimore to enforce provisions making unlawful unauthorized discharges or deposits. Section 421 of Title 33 of the United States Code makes unlawful certain discharges or deposits into Lake Michigan.

(d) *General policy.* (1) The Refuse Act is considered to apply to all direct and indirect discharges or deposits (except those flowing from streets and sewers and passing therefrom in a liquid state) by any person, firm or other entity, including discharges or deposits from municipal, State, or Federal facilities or installations, into a navigable waterway or tributary or into a waste treatment system from which the same will flow into a navigable waterway or tributary. Discharges or deposits of water at a temperature different from that of the navigable waterway or tributary into which the same will flow are considered to be discharges or deposits to which the Refuse Act is applicable.

(2) The Refuse Act Permit Program is applicable to all discharges or deposits identified in subparagraph (1) of this paragraph except that the permit program is not applicable to:

(i) Discharges or deposits into a municipal or other public sewage treatment system:

(ii) Discharges or deposits from a municipal or other public sewage treatment system:

(iii) Discharges or deposits of storm water runoff flowing from public or private streets;

(iv) Discharges or deposits into a waste treatment system. (This exception does not apply to discharges or deposits from such a waste treatment system into a navigable waterway or tributary. Thus, for example, the operator (including, if applicable, agencies or instrumentalities of the Federal, State, or local governments) of a waste treatment system which receives industrial discharges and is not tied in with a municipal or other public sewage treatment system must apply for and receive a permit if the system discharges or deposits into a navigable waterway or tributary.)

(v) Discharges or deposits which are placed on the banks of a navigable waterway or tributary where the same shall be liable to be washed into such navigable water either by ordinary or high tides, or by storms or floods whereby navigation shall or may be impeded or obstructed; (This exception does not apply to discharges or deposits placed on banks which, because of gravity or the slope of the ground on which the discharge or deposit is placed, will flow into a navigable waterway or tributary. Such discharges or deposits will require a permit under the Refuse Act Permit Program.)

(vi) Discharges or deposits from ships or other watercraft into a navigable waterway or tributary.

The foregoing exceptions from the permit program shall not be deemed to affect the applicability of the Refuse Act itself to such discharges or deposits unless such discharges or deposits fall within the statutory exception for "that flowing from the streets and sewers and passing therefrom in a liquid state." In addition to these exceptions, the Refuse Act Permit Program is not applicable to public or private dredging or filling which shall continue to be subject to the permit program instituted pursuant to 33 U.S.C. 403.

(3) Except as provided for in subparagraph (2) of this paragraph, all persons, firms, or other entities wishing to discharge or deposit into waters covered by the Refuse Act must apply to the District Engineer in charge of the District where the proposed discharge or deposit is to occur for a permit under the Refuse Act Permit Program. Permits covering discharges from facilities which are now in existence but which were not in existence or lawfully under construction prior to April 3, 1970, but be applied for as soon as possible following the publication of this section in the FEDERAL REGISTER, but in no event later than July 1, 1971. All other persons, firms, or other entities wishing to discharge or deposit into waters covered by the Refuse Act are obligated to apply for a permit prior to July 1, 1971, except that persons, firms, or other entities wishing to commence discharges or deposits into waters covered by the Refuse Act on or after November 1, 1971, must file a completed application for a permit no less than 120 days in advance of the date on which it is desired to commence discharges or deposits.

(4) All discharges or deposits to which the Refuse Act is applicable (see subparagraph (1) of this paragraph) are unlawful unless authorized by an appropriate permit issued under the authority of the Secretary of the Army. The fact that official objection may not have been raised with respect to past or continuing discharges or deposits does not constitute authority to discharge or deposit or to continue to discharge or deposit in the absence of an appropriate permit. Any such discharges or deposits not authorized by an appropriate permit may result in the institution of legal proceedings in appropriate cases for violation of the provisions of the Refuse Act. Similarly, the mere filing of an application requesting permission to discharge or deposit into navigable waters or tributaries thereof will not preclude legal action in appropriate cases for Refuse Act violations. The institution of either a civil or criminal action by the Department of Justice under the Refuse Act will not preclude the acceptance or continued processing of a permit application. Where a civil action to restrain a discharge or deposit which is the subject of the permit application that has been filed, and that action is disposed of other than by the dismissal of the case by the court, any permit which is issued shall include any requirements embodied in the resolution of the case.

(5) The decision as to whether or on what conditions a permit authorizing a deposit which is the subject of the permit issued under the Refuse Act will be based on an evaluation of the impact which the discharge or deposit may have on (i) anchorage and navigation, (ii) applicable water quality standards and related water quality considerations, including environmental values reflected in water quality standards, and (iii) fish and wildlife values are not reflected in or adequately protected by applicable water quality standards, if any.

(6) Recognizing that, at the Federal level, responsibility for the protection of fish and wildlife resources lies primarily with the Department of the Interior and with the National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce, the appropriate Regional Director of the National Marine Fisheries Service of NOAA and the appropriate Regional Coordinator or Field Representative of the Department of the Interior will advise the appropriate District Engineer and the appropriate regional Representative of EPA of the impact if any, which a proposed discharge or deposit may or is likely to have on fish and wildlife resources and will, in appropriate cases, recommend conditions considered necessary to afford reasonable protection to such resources.

(7) Although the Refuse Act vests in the Secretary of the Army authority to determine whether or not a permit should or should not issue, it is recognized that responsibility for water quality improvement lies primarily with the States or, in particular instances, with appropriate interstate agencies or river basin commissions, and, at the Federal level, with the Environmental Protection Agency (EPA). Accordingly, EPA shall advise the Corps with respect to the meaning, content and application of water quality standards applicable to a proposed discharge or deposit and as to the impact which the proposed discharge or deposit may or is likely to have on applicable water quality standards and related water quality considerations, including environmental values reflected in water quality standards. Specifically, the Regional Representative of EPA will, as appropriate, identify and advise the District Engineer with respect to the following:

- (i) The meaning and content of applicable water quality standards;
- (ii) The application of water quality standards to the proposed discharge or deposit, including the likely impact of the proposed discharge or deposit on such water quality standards and related water quality considerations;
- (iii) The permit conditions required to comply with applicable water quality standards;
- (iv) The permit conditions required to carry out the purposes of the Federal Water Pollution Control Act where water quality standards are not applicable in whole or in part;
- (v) The protection afforded fish and wildlife resources by water quality standards, if any;
- (vi) The interstate water quality effect of the proposed discharge or deposit;
- (vii) The recommended duration of a permit.

Regional Representatives will also provide District Engineers with a recommendation as to whether or not the permit applied for should or should not issue and the basis for that recommendation.

(8) Recognizing the expertise of EPA in matters related to water quality, District Engineers shall, except as provided in subparagraph (10) of this paragraph, accept such findings, determinations and interpretations as the Regional Representative of EPA may make respecting the applicability of water quality standards (including compliance with those standards in particular circumstances) and related water quality considerations, and shall deny a permit application in accordance with the recommendation of a Regional Representative if that recommendation is supported by a finding that the proposed discharge or deposit will not be consistent with applicable water quality standards or related water quality considerations.

(9) If the Regional Representative of EPA finds that the proposed discharge or deposit will meet applicable water quality standards or that a permit can be conditioned so as to ensure compliance with applicable water quality standards, District Engineers shall accept the finding and shall include in any permit issued such conditions as the Regional Representative may have recommended respecting water quality standards and related water quality considerations. In any case the District Engineer may deny the requested permit if it appears that anchorage and navigation will be injured or that the proposed discharge or deposit will have a significant and unreasonable adverse impact on fish and wildlife resources.

(10) In any case where the District Engineer and the Regional Representative of EPA differ with respect to applicable water quality standards or related water quality considerations and are unable to reconcile their views as to whether or not a permit should be issued, or the terms and conditions of a permit, the District Engineer shall promptly forward the matter through channels

to the Secretary of the Army to provide the Secretary with the opportunity to consult with the Administrator of EPA. Such consultation shall take place within 30 days of the date on which the Secretary receives the file from the District Engineer or within such additional period of time as the Secretary and the Administrator may agree upon. Following such consultation, the Secretary shall accept the findings, determinations, and interpretations of the Administrator as to water quality standards and related water quality considerations, shall direct that the permit be denied if the Administrator found or determined that the proposed discharge or deposit would violate applicable water quality standards, and shall otherwise give careful consideration to the recommendations of the Administrator before forwarding the case to the District Engineer with instructions as to its disposition.

(11) No permit will be issued:

Federal Water Pollution Control Act, as amended, is required to obtain a State or other appropriate certification that the discharge or deposit will not violate applicable water quality standards and such certification was denied;

(ii) For discharges or deposits of harmful quantities of oil, as defined pursuant to section 11 of the Federal Water Pollution Control Act;

(iii) If its issuance would be inconsistent with any finding, or determination, or interpretation of the Administrator pertaining to applicable water quality standards and related water quality considerations;

(iv) For materials designated as hazardous substances under regulations to be promulgated by the Administrator of EPA under section 12 of the Federal Water Pollution Control Act, as amended, except with the approval of the Administrator;

(v) If the proposed discharge or deposit will contain a toxic or other substance (other than materials designated as hazardous under regulations to be promulgated by the Administrator of EPA under section 12 of the Federal Water Pollution Control Act, as amended) and if, on the advice of the Regional Representative of EPA, it appears that a permit cannot be conditioned to ensure that the proposed discharge or deposit will not pose any significant risk to health or safety. District Engineers are precluded from issuing permits in such cases. The listing is not intended to identify all of the cases or circumstances in which the denial of a permit may be appropriate.

(e) *Authority to issue permits.* The Refuse Act provides that, "the Secretary of the Army, whenever in the judgment of the Chief of Engineers anchorage and navigation will not be injured thereby, may permit the deposit of any material * * * in navigable waters, within limits to be defined and under conditions to be prescribed by him * * *." The Chief of Engineers, in the exercise of his judgment under the Act, has made the general determination that anchorage and navigation will not be injured when the discharge or deposit permitted will cause no significant displacement of water or reduction in the navigable capacity of a waterway. Except as otherwise provided in this section, the Secretary of the Army has authorized the Chief of Engineers and his authorized representatives to issue permits allowing discharges or deposits into navigable waters or tributaries thereof, if evaluation leads to the conclusion that (1) as determined by the Chief of Engineers, anchorage and navigation will not be injured thereby, and (2) issuance of a permit will not be inconsistent with the policy guidance prescribed in paragraph (d) of this section. Accordingly, within these limitations, District Engineers are authorized, except in cases which are to be referred to higher authority for decision (see paragraphs (d) (10) and (i) (7) of this section), to issue permits or to deny permit applications for discharges or deposits covered by the Refuse Act Permit Program.

(f) *Relationship to other corps permits.* (1) Operators of facilities constructed in navigable waters under a valid construction or other permit issued pursuant to section 10 or pursuant to sections 10 (33 U.S.C. 403) and 13 (33 U.S.C. 407) of the Rivers and Harbors Act approved March 3, 1899, must apply for and receive a new permit under the Refuse Act Permit Program in order to lawfully discharge into or place deposits in a navigable waterway or tributary.

(2) Any person wishing to undertake work in navigable waters which may also result in a discharge or deposit into such navigable waters or tributaries thereof must apply for a permit under section 403 for such work and for a permit under section 407 to cover and proposed discharge or deposit. However, if

the work proposed to be undertaken in navigable waters is limited to the construction of a minor outfall structure (one which will not involve any significant amount of work, either construction or dredging and filling, in the navigable waterway) from which the proposed discharge or deposit will flow, District Engineers may in their discretion issue a single permit under this regulation (ER 1145-2-321). If a single permit is issued authorizing both work in navigable waters and a discharge or deposit, the permit should cite both sections 403 and 407 as authority for its issuance.

(g) *Information required with an application.* (1) An applicant for a permit involving a discharge or deposit into a navigable waterway or tributary thereof must file the required application form(s) with the District Engineer. A plant, facility, or other establishment which has multiple outlets from which discharges or deposits may flow may use a single application form to apply for a permit covering all proposed discharges or deposit(s): *Provided, however,* That the discharge or deposit from each outlet shall be separately described and the outlet specifically identified. The form will also require information which will fully identify the character of the discharge(s) or deposit(s) and describe the monitoring devices and procedures which will be used to gather information and maintain records on discharges and deposits. Such information shall include, but need not be limited to, data pertaining to chemical content, water temperature differentials, toxins, sewage, amount and frequency of discharge or deposit and the type and quantity of solids involved, if any. If the discharge(s) or deposit(s) will include solids of any type, applicants will be required to (i) identify the proposed method of instrumentation to determine the effect of the deposit of solids on the waterway, and (ii) either assume responsibility for the periodic removal of such solids by dredging or agree to reimburse the United States for costs associated with such dredging.

(2) An application submitted by a corporation must be signed by the principal executive officer of that corporation or by an official of the rank of corporate vice president or above who reports directly to such principal executive officer and who has been designated by the principal executive officer to make such applications on behalf of the corporation. In the case of a partnership or a sole proprietorship, the application must be signed by a general partner or the proprietor. Each application must contain a certification by the person signing the application that he is familiar with the information provided and that to the best of his knowledge and belief such information is complete and accurate. Attention is directed to the provisions of 18 U.S.C. 1001 which provides for possible fines and imprisonment in the case of false statements.

(3) A fee of one hundred dollars (\$100) will be charged in connection with each application for a permit under the Refuse Act Permit Program which involves no more than one outlet from which a discharge or deposit will flow. If there is more than one outlet from which a discharge or deposit will flow, an additional fifty dollars (\$50) will be charged for each additional outlet. Such fee shall be used to help defray the cost of administering the program. Agencies or instrumentalities of Federal, State, or local governments will not be required to pay any fee in connection with the filing of an application for a permit required under the Refuse Act Permit Program. This fee structure will be reviewed from time to time as experience with the program is developed.

(h) *State certification.* (1) Section 21(b)(1) of the Federal Water Pollution Control Act, as amended, provides that "Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters of the United States, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that there is reasonable assurance, as determined by the State or interstate agency that such activity will be conducted in a manner which will not violate applicable water quality standards * * *. No license or permit shall be granted until the certification required by this section has been obtained or has been waived * * *." i.e., "if the [certifying agency] * * * fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed 1 year) after receipt of such request * * *." Six months shall generally be considered to be a reasonable period of time. If, however, special

circumstances identified by either the District Engineer or the Regional Representative of EPA require that action on a permit application under the Refuse Act be taken within a more limited period of time, the District Engineer shall determine a reasonable lesser period of time, advise the Regional Representative and the certifying agency of the need for action by a particular date and that, if certification is not received by the date established, it will be considered that the requirement for certification has been waived. Similarly, if it appears that circumstances may reasonably require a period of time longer than 6 months, the District Engineer may afford the certifying agency up to 1 year to provide the required certification before determining that a waiver has occurred. District Engineers shall check with the certifying agency at the end of the allotted period of time before determining that a waiver has occurred. Sections 21 (b) (7) and (b) (8) of the Federal Water Pollution Control Act, as amended, identify circumstances in which permits of limited duration may issue without the certification required by section 21 (b) (1). See paragraph (n) of this section.

(2) Except as provided in subparagraph (3) of this paragraph, discharges or deposits into navigable waters require certification pursuant to 21 (b) (1). District Engineers will accept but will not fully process a permit application until the applicant has provided the required certification. If the application is not accompanied by the required certification the applicant shall (i) provide the appropriate certifying agency with a completed copy of the application form required to be filed by paragraph (g) (1) of this section, and (ii) file a copy of the certification application with the District Engineer. These steps will enable the District Engineer to determine if the certification required is being waived by inaction on the part of the certifying authority.

(3) In cases involving a discharge or deposit into a nonnavigable tributary, certification pursuant to 21 (b) is not required. In cases involving a discharge or deposit into a navigable waterway from a facility which existed or was lawfully under construction prior to April 3, 1970, certification is not required until April 3, 1973. In either case, it will be the policy of the Corps of Engineers not to fully process a permit application until the applicant or the State has provided a written communication from the State describing the impact of the proposed discharge or deposit and indicating the views of the State on the desirability of granting a permit. If such a written communication is not provided within a reasonable period of time this requirement shall be waived. Six months shall generally be considered to be a reasonable period of time. If, however, special circumstances identified by either the District Engineer or the Regional Representative of EPA require that action on a permit application be taken within a more limited period of time, the District Engineer shall determine a lesser reasonable period of time, advise the Regional Representative and the appropriate State agency that the written communication should be received by a particular date and that, if it is not received by the date established, action may be taken on the permit application without the written communication. Similarly, if it appears that circumstances may reasonably require a period of time longer than 6 months, the District Engineer may afford the State up to 1 year to provide the written communication before determining that a waiver has occurred. District Engineers shall check with the State at the end of the allotted period of time before determining that a waiver has occurred.

(4) As provided in subsection 21 (b) (6) of the Federal Water Pollution Control Act, as amended, agencies or instrumentalities of the Federal Government will not be required to apply to the State or other certifying agency for a certification relating to the proposed discharge or deposit. Similarly, agencies or instrumentalities of the Federal Government will not be required to apply for the written communication described in subparagraph (3) of this paragraph.

(i) *Processing of permit applications.* (1) When an application for a permit is received, care should be taken to assure that the applicant has provided all of the information required by the application form and by this section. Copies of applications received and all other information received relating thereto will be promptly forwarded by the District Engineer to the Regional Representative of EPA for subsequent transmittal to the appropriate certifying or commenting agency.

(2) When all of the required information has been provided, including the required certification or written communication discussed in paragraph (h) of this section, the applicant shall be advised that his application is in order and that it will be processed as expeditiously as possible.

(3) When the application is found to be in order the District Engineer shall promptly forward a complete copy of the application or such additional information as has not already been furnished to the Regional Representative of EPA. Copies of the completed application should also be furnished to the appropriate Regional Director of the National Marine Fisheries Service of NOAA and to the appropriate Regional Coordinator of Field Representative of the Department of the Interior and, in cases involving a facility which has or will require a license from the Federal Power Commission (FPC) or the Atomic Energy Commission (AEC), to the FPC or the AEC. The Regional Representative of EPA will be asked to review the application and to (i) advise the District Engineer within 30 days whether the proposed discharge of deposit may affect the quality of waters of another State (as required by section 21(b)(2) of the Federal Water Pollution Control Act, as amended), and (ii) provide the other information identified in paragraph (d)(7) of this section within 45 days. If, however, additional time beyond said 45 days (or any extension thereof) is required to respond, the Regional Representative shall notify the District Engineer and shall advise him as to the additional period of time which will be required to provide such information. In cases where a Regional Representative does not provide such information and advice to a District Engineer within the time period specified herein (including any extensions of time required by the Regional Representative) the written advice furnished by a State or other certifying authority shall be considered by the District Engineer to be the advice of the Regional Representative, provided, however, that if the State or other certifying authority has waived its opportunity to certify or to otherwise comment on the permit application, the District Engineer may not take action on the permit application in the absence of an expression of views by the Regional Representative of EPA. In the event that the Regional Representative determines that the proposed discharge or deposit may affect the quality of the waters of another State and that other State determines that the proposed discharge will affect the quality of its waters so as to violate water quality standards, objects to the issuance of a permit, and requests a public hearing, the matter should be reported to the Chief of Engineers, Attention: ENGGC-K.

(4) When copies of the permit application are furnished to the representatives of EPA, NOAA and Interior, a public notice, as described in paragraph (j) of this section, will be posted in post offices and other public places in the vicinity of the site of the proposed discharge or deposit. A copy of the public notice shall also be sent to the applicant, to State, county, or municipal authorities, to the heads of State agencies having responsibility for water quality improvement and wildlife resources, and to the Chief of Engineers, Attention: ENGCW-ON. In addition, copies of the public notice shall be sent to all other parties known to be interested in the application, including navigation interests, adjacent property owners and conservation organizations. However, if, in the judgment of the District Engineer, sending individual notice to all other parties known to be interested in the application is considered to be impracticable because of the number of individual mailings that would be required, the public notice shall be published for 5 consecutive days in the local newspaper. If the local newspaper is not a daily, the public notice should be published in the local newspaper and for 5 consecutive days in a newspaper of general circulation in the area where the proposed discharge or deposit is to occur. If the notice is published in the newspaper(s), the applicant shall reimburse the District Engineer for the costs of publication.

(5) Water quality certifications pursuant to section 21(b) of the Federal Water Pollution Control Act, the comments of all governmental agencies on a permit application, and all information and data provided by an applicant or a permittee identifying the nature and frequency of a discharge or deposit shall be available for examination by the public in the Office of the District Engineer. All other information or data which may be submitted by an applicant in connection with a permit application or which may be furnished by a permittee in connection with required periodic reports shall also be available to the public unless the applicant or permittee specifically identifies and is able to demonstrate to the satisfaction of the Secretary of the Army or his authorized representative that the disclosure of such information or data to the general public would divulge methods or processes entitled to protection as trade secrets.

(6) If notice of the permit application evokes substantial public interest a public hearing may be held. Policy with respect to the holding and conduct of public hearings is discussed in paragraph (k) of this section.

(7) District Engineers may, consistent with the policy guidance contained in paragraph (d) of this section, and, after considering all of the information developed with respect to the permit application, including written or oral information presented in response to a public notice or at a public hearing, issue a permit with or without conditions or deny it, provided, however, that if a District Engineer determines that issuance of a permit with or without condition is appropriate but there is objection to the issuance of the proposed permit by the Regional Representative of EPA on grounds related to water quality, the matter must be forwarded to higher authority for resolution by the Secretary and the Administrator as provided for in paragraph (d)(10) of this section. If the Regional Representative of EPA does not object to the issuance of a permit and the District Engineer determines that issuance of a permit with or without conditions is appropriate but there is continuing objection to the issuance of a permit by either the Regional Coordinator or Field Representative of the Department of the Interior or the Regional Director of the National Marine Fisheries Service of NOAA on the grounds that the discharge or deposit will have a significant and unreasonable adverse impact on fish and wildlife resources, the District Engineer shall not proceed with the issuance of a permit if, immediately upon receipt of notice from the District Engineer that he intends to issue a permit such Regional Coordinator, Field Representative or Regional Director indicates to the District Engineer in writing that he wishes to bring his concerns to the attention of higher officials in Washington. In such cases, the proposed permit may be issued at the expiration of 30 days from the date of receipt of the letter from the Regional Coordinator, Field Representative or Regional Director unless, prior to that time, as a result of consultations in Washington, it is directed that the matter be forwarded to higher authority for resolution by the Secretary of the Army, the Administrator of EPA and, as appropriate, the Secretary of Commerce or the Secretary of Interior. Thereafter, a permit will be issued only pursuant to and in accordance with instructions from such higher authority. Every effort should be made to resolve differences at the District Engineer level before referring the matter to higher authority.

(j) *Public notice.* (1) As required by paragraph (i)(4) of this section, a public notice will be issued after a permit application is determined to be in proper order. In cases where the permit applied for pertains to a discharge or deposit and does not involve construction or other work in navigable waters, the notice shall (i) state the name and address of the applicant, (ii) identify the waterway involved and provide a sketch showing the location of the proposed discharge or deposit, (iii) fully identify the character and frequency of the discharge or deposit, (iv) include any other information (such as the views of the State on the permit application) which may assist interested parties in evaluating the likely impact of the proposed discharge or deposit, if any, (v) provide 30 days within which interested parties may express their views concerning the permit application. All public notices involving a proposed discharge or deposit shall contain the following statement:

"The decision as to whether or on what conditions a permit authorizing a discharge or deposit will or will not be issued under the Refuse Act will be based on an evaluation of the impact which the proposed discharge or deposit may have on (i) anchorage and navigation, (ii) applicable water quality standards and related water quality considerations, including environmental values reflected in water quality standard, and (iii) fish and wildlife values not reflected in or adequately protected by applicable water quality standards, if any."

In the event that individual states may, in connection with applications for certifications required by subsection 21(b)(1) of the Federal Water Pollution Control Act, as amended, wish to enter into arrangements for joint public notice concerning proposed discharges or deposits, the Chief of Engineers may, after consulting with the Environmental Protection Agency, approve mutually satisfactory arrangements.

(2) Comments received from interested parties within the period provided for in the public notice or within such extensions of time for filing such comments as may be granted by the District Engineer will be retained and will be considered in determining whether the permit applied for should be issued.

(3) In addition to advising the applicant in writing of the final action taken on his application, including the reasons therefor if the application is denied, the District or Division Engineer will provide a copy to any member of Congress

who has expressed an interest in the particular permit application. Other persons interested in the final action taken on an application may contact the District Engineer.

(4) When objections to the issuance of a permit are received in response to a public notice, the Division or District Engineer will furnish the applicant with copies of the objections and afford him the opportunity to rebut or resolve the objections.

(k) *Public hearings.* (1) It is the policy of the Corps of Engineers to conduct the civil works program in an atmosphere of public understanding, trust, and mutual cooperation and in a manner responsive to the public interest. To this end, a public hearing may be helpful and will be held in connection with an application for a permit involving a discharge or deposit in navigable waters or tributaries thereof whenever, in the opinion of the District Engineer, such a hearing is advisable. In considering whether or not a public hearing is advisable, consideration will be given to the degree of interest by the public in the permit application, requests by the applicant or responsible Federal, State, or local authorities, including Members of the Congress, that a hearing be held, and the likelihood that information will be presented at the hearing that will be of assistance in determining whether the permit applied for should be issued. In this connection, a public hearing will not generally be held if there has been a prior hearing (local, State, or Federal) addressing the proposed discharge unless it clearly appears likely that the holding of a new hearing may result in the presentation of significant new information concerning the impact of the proposed discharge or deposit. The need for a hearing will be reported to the Division Engineer and his concurrence obtained. In certain circumstances a public hearing may be mandatory (see subparagraph (5) of this paragraph).

(2) In cases where it is determined that a public hearing should be held and it appears that the impact of the proposed discharge or deposit on applicable water quality standards or related water quality considerations will be an issue which will be raised at the hearing, the hearing shall be jointly held by both the District Engineer and the Regional Representative of EPA.

(3) The success of a public hearing depends upon the degree to which all interests are aware of the hearing and understand the issues involved. The following steps will be taken for each hearing:

(i) A public notice will be prepared and issued in clear, concise, objective style. The notice shall state the purpose of the hearing, provide details of time and place, and fully identify the location, character, and frequency of the proposed discharge or deposit.

(ii) The public notice will be given at least 30 days in advance of the hearing in the same manner as the public notice required under paragraph (j) (4) of this section. In addition, copies of the public notice will be provided to news media within the geographical area, and appropriate specialized news media for reaching interested groups and organizations.

(iii) As appropriate, supplementary informational matter, fact sheets, or more detailed news releases, will be distributed to the general or specialized news media.

(iv) Notice will be given to interested members of the Congress and Governors of the States involved.

(4) The hearing will be conducted in a manner that permits open and full discussion of any issues involved. A transcript of the hearing, together with copies of relevant documents, will become a part of the permit application record.

(5) In addition to the hearings which may be required by the policy specified in the preceding paragraphs, hearings are required under sections 21(b) (2) and 21(b) (4) of the Federal Water Pollution Control Act when (i) a State, other than the State of origin, objects to the issuance of a permit and requests a hearing on its objections or (ii) the Secretary of the Army proposes to suspend a Department of the Army permit upon notification by the certifying authority that applicable water quality standards will be violated. When a hearing is required pursuant to the Federal Water Pollution Control Act the matter should be reported to the Chief of Engineers, Attention: ENGGC-K. The Chief of Engineers will provide additional guidance with respect to holding of such hearings.

(6) In any case, when a District Engineer intends to schedule a public hearing he shall notify the Regional Representative of EPA not less than 10 days in ad-

vance of the deadline for the filing of comments by such Representative upon the permit application.

(1) *Environmental impact statement.* (1) Section 102(2)(C) of the National Environmental Policy Act of 1969 requires all Federal agencies, with respect to major Federal actions significantly affecting the quality of the human environment, to submit to the Council on Environmental Quality a detailed statement on:

- (i) The environmental impact of the proposed action,
- (ii) Any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) Alternatives to the proposed action,
- (iv) The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
- (v) Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

(2) Section 102(2)(C) statements will not be required in permit cases where it is likely that the proposed discharge will not have any significant impact on the human environment. Moreover, the Council on Environmental Quality has advised that such statements will not be required where the only impact of proposed discharge or deposit will be on water quality and related water quality considerations because these matters are specifically addressed under subsections 21(b) and (c), the Federal Water Pollution Control Act, as amended. However, such statements shall be required in connection with proposed discharges or deposits which may have a significant environmental impact unrelated to water quality. In cases in which a section 102(2)(C) statement may be required, the report of the District Engineer accompanying any case referred to higher authority (see paragraphs (d)(10) and (i)(7) of this section) will contain a separate section addressing the environmental impact of the proposed discharge or deposit, if any, and, if issuance of a permit is recommended, a draft section 102(2)(C) statement should be attached. In all other cases in which a section 102(2)(C) statement is required the District Engineer shall draft, consult with, and obtain the comments of any Federal, State, and local agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. In cases where the preparation of a 102(2)(C) statement is necessary, the District Engineer may require the applicant to furnish such information as he may consider necessary to prepare the required statement.

(m) *Publicity.* District Engineers will, in consultation with Regional Representatives, establish and maintain a program to assure that potential applicants for permits are informed of the requirements of this regulation and of the steps required to obtain permits for discharges into navigable waters. Whenever the District Engineer becomes aware of plans being developed by either private or public entities who will require permits in order to implement the plans, a letter will be sent to the potential permittee advising him of statutory requirements and the need to apply for a permit under this section.

(n) *Duration of permits issued.* (1) In cases where (i) certification pursuant to section 21(b) is required and has been received, (ii) certification is not required but the State has otherwise indicated that it has no objection to the issuance of a permit, or (iii) where certification or State views have not been received and the requirement for such certification or State views has been waived, but the Regional Representative of EPA has indicated that EPA has no objection to the issuance of a permit and issuance of such a permit is otherwise considered appropriate, a permit subject to revalidation at the expiration of 5 years may be issued: *Provided however,* That a permit of longer duration and subject to such revalidation provisions as the District Engineer may consider appropriate may issue with the approval of the Administrator of EPA or his authorized representative.

(2) In cases involving a facility which was in existence or lawfully under construction prior to April 3, 1970, and it appears after evaluation that issuance of a Federal permit would be appropriate although certification pursuant to section 21(b) has not been provided, a permit may be issued, provided (i) that the permit will expire on April 2, 1973, and (ii) that it is conditioned so as to re-

quire annual demonstration by the permittee that the discharge or deposit is in compliance with applicable water quality implementation schedules.

(3) Permits of less than 5 years duration may issue in appropriate cases and District Engineers shall give great weight to the advice of Regional Representatives of EPA on the appropriate duration for particular permits.

(o) (1) [Reserved]

(2) Permits shall include such special conditions as the Regional Representative of EPA may consider necessary or appropriate to insure compliance with applicable water quality standards and the purposes of the Federal Water Pollution Control Act. Permits shall also be subject to such special conditions as the District Engineer may, after consultation with State and local agencies, Interior, NOAA, and other appropriate Federal agencies, consider to be necessary or appropriate to insure the navigation and anchorage will not be injured and to insure that the discharge or deposit will not have a significant and unreasonable adverse impact on fish and wildlife resources.

(p) *Violations of the Refuse Act or permit conditions.* Discharges or deposits which are not authorized by an appropriate permit issued under the authority of the Secretary of the Army are unlawful and may result in the institution of legal proceedings under the Refuse Act. When a permit has been issued discharges or deposits must be consistent with the terms and conditions of such permit. Discharges or deposits in violation of permit terms or conditions shall result in the institution of legal proceedings under the Refuse Act and/or the initiation of administrative proceedings to suspend or revoke the permit.

[Regs., Apr. 1, 1971, ENGOW-ON] (Sec. 7, 40 Stat. 66; 33 U.S.C. 1; sec. 3012, 70A Stat. 157; 10 U.S.C. 3012)

For the Adjutant General.

EDWIN A. DAYTON,
LTC, AGC, Chief, Plans Office, TAGO.

TITLE 18—CONSERVATION OF POWER AND WATER RESOURCES

CHAPTER V—ENVIRONMENTAL PROTECTION AGENCY

PART 615—STATE CERTIFICATION OF ACTIVITIES REQUIRING A FEDERAL LICENSE OR PERMIT

On February 5, 1971, notice of proposed rule making was published in the FEDERAL REGISTER (36 F.R. 2516) which set forth the text of regulations proposed as a new Part 615 to Title 18, Chapter V, relating to the requirement of section 21(b)(1) of the Federal Water Pollution Control Act, as amended (33 U.S.C.A. 1171(b)) that any applicant for a Federal license or permit to conduct any activity, including, but not limited to, the construction or operation of facilities which may result in any discharge into the navigable waters of the United States, obtain a certification from the State in which the discharge originates, or, if appropriate, from the interstate agency having jurisdiction, or under certain circumstances, from the Administrator of the Environmental Protection Agency, that there is reasonable assurance that such activity will be conducted in a matter which will not violate applicable water quality standards.

Pursuant to the above notice, a number of comments have been received from interested persons, and due consideration has been given to all relevant matter presented. In light of the preceding, a number of revisions have been made in the rules as proposed. Part 615 to Title 18, Chapter V, as set forth below, is hereby adopted.

Effective date. These regulations shall become effective on the date of their publication in the FEDERAL REGISTER (5-8-71).

Dated: May 4, 1971.

WILLIAM D. RUCKELSHAUS,
Administrator.

Subpart A—General

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615.1	Definitions.
615.2	Contents of certification.
615.3	Contents of application.

Subpart B—Determination of Effect on Other States

- 615.11 Copies of documents.
- 615.12 Supplemental information.
- 615.13 Review by Regional Administrator and notification.
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- 615.21 When Administrator certifies.
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- 615.23 Notice of hearing.
- 615.24 Certification.
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- 615.30 Review and advice.

AUTHORITY: The provisions of this Part 615 issued under sec. 21 (b) and (c), of the Federal Water Pollution Control Act (Public Law 91-224), sec. 103, 84 Stat. 91, 33 U.S.C.A. 1171 (b) (1970); and Reorganization Plan No. 3 of 1970.

Subpart A—General

§ 615.1 Definitions.

As used in this part, the following terms shall have the meanings indicated below:

(a) "License or permit" means any license or permit granted by an agency of the Federal Government to conduct any activity which may result in any discharge into the navigable waters of the United States.

(b) "Licensing or permitting agency" means any agency of the Federal Government to which application is made for a license or permit.

(c) "Administrator" means the Administrator, Environmental Protection Agency.

(d) "Regional Administrator" means the Regional designee appointed by the Administrator, Environmental Protection Agency.

(e) "Certifying Agency" means the person or agency designated by the Governor of a State, by statute, or by other governmental act, to certify compliance with applicable water quality standards. If an interstate agency has sole authority to so certify for the area within its jurisdiction, such interstate agency shall be the certifying agency. Where a State agency and an interstate agency have concurrent authority to certify, the State agency shall be the certifying agency. Where water quality standards have been promulgated by the Administrator pursuant to section 10(c)(2) of the Act, or where no State or interstate agency has authority to certify, the Administrator shall be the certifying agency.

(f) "Act" means the Federal Water Pollution Control Act, 33 U.S.C.A. 1151 et seq.

(g) "Water Quality Standards" means standards established pursuant to section 10(c) of the Act, and State-adopted water quality standards for navigable waters which are not interstate waters.

§ 615.2 Contents of certification.

(a) A certification made by a certifying agency shall include the following:

(1) The name and address of the applicant;

(2) A statement that the certifying agency has either (i) examined the application made by the applicant to the licensing or permitting agency (specifically identifying the number or code affixed to such application) and bases its certification upon an evaluation of the information contained in such application which is relevant to water quality considerations, or (ii) examined other information furnished by the applicant sufficient to permit the certifying agency to make the statement described in subparagraph (3) of this paragraph;

(3) A statement that there is a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards;

(4) A statement of any conditions which the certifying agency deems necessary or desirable with respect to the discharge or the activity; and

(5) Such other information as the certifying agency may determine to be appropriate.

(b) The certifying agency may modify the certification in such manner as may be agreed upon by the certifying agency, the licensing or permitting agency, and the Regional Administrator.

§ 615.3 *Contents of application.*

A licensing or permitting agency shall require an applicant for a license or permit to include in the form of application such information relating to water quality considerations as may be agreed upon by the licensing or permitting agency and the Administrator.

SUBPART B—DETERMINATION OF EFFECT ON OTHER STATES

§ 615.11 *Copies of documents.*

(a) Upon receipt from an applicant of an application for a license or permit without an accompanying certification, the licensing or permitting agency shall either (1) forward one copy of the application to the appropriate certifying agency and two copies to the Regional Administrator, or (2) forward three copies of the application to the Regional Administrator, pursuant to an agreement between the licensing or permitting agency and the Administrator that the Regional Administrator will transmit a copy of the application to the appropriate certifying agency. Upon subsequent receipt from an applicant of a certification, the licensing or permitting agency shall forward a copy of such certification to the Regional Administrator, unless such certification shall have been made by the Regional Administrator pursuant to § 615.24.

(b) Upon receipt from an applicant of an application for a license or permit with all accompanying certification, the licensing or permitting agency shall forward two copies of the application and certification to the regional Administrator.

(c) Only those portions of the application which relate to water quality considerations shall be forwarded to the Regional Administrator.

§ 615.12 *Supplemental information.*

If the documents forwarded to the Regional Administrator by the licensing or permitting agency pursuant to § 615.11 do not contain sufficient information for the Regional Administrator to make the determination provided for in § 615.13, the Regional Administrator may request, and the licensing or permitting agency shall obtain from the applicant and forward to the Regional Administrator, any supplemental information as may be required to make such determination.

§ 615.13 *Review by Regional Administrator and notification.*

The Regional Administrator shall review the application, certification, and any supplemental information provided in accordance with §§ 615.11 and 615.12 and if the Regional Administrator determines there is reason to believe that a discharge may affect the quality of the waters of any State or States other than the State in which the discharge originates, the Regional Administrator shall, no later than 30 days of the date of receipt of the application and certification from the licensing or permitting agency as provided in § 615.11, so notify each affected State, the licensing or permitting agency, and the applicant.

§ 615.14 *Forwarding to affected State.*

The Regional Administrator shall forward to each affected State a copy of the material provided in accordance with § 615.11.

§ 615.15 *Hearings on objection of affected State.*

When a licensing or permitting agency holds a public hearing on the objection of an affected State, notice of such objection, including the grounds for such objection, shall be forwarded to the Regional Administrator by the licensing or permitting agency no later than 30 days prior to such hearing. The Regional Administrator shall at such hearing submit his evaluation with respect to such objection and his recommendations as to whether and under what conditions the license or permit should be issued.

§ 615.16 *Waiver.*

The certification requirement with respect to an application for a license or permit shall be waived upon:

(a) Written notification from the State or interstate agency concerned that it expressly waives its authority to act on a request for certification; or

(b) Written notification from the licensing or permitting agency to the Regional Administrator of the failure of the State or interstate agency concerned to act on such request for certification within a reasonable period of time after receipt of such request, as determined by the licensing or permitting agency (which period shall generally be considered to be 6 months, but in any event shall not exceed 1 year).

In the event of a waiver hereunder, the Regional Administrator shall consider such waiver as a substitute for a certification, and as appropriate, shall conduct the review, provide the notices, and perform the other functions identified in sections 615.13, 615.14, and 615.15. The notices required by section 615.13 shall be provided not later than 30 days after the date of receipt by the Regional Administrator of either notification referred to herein.

Subpart C—Certification by the Administrator

§ 615.21 *When Administrator certifies.*

Certification by the Administrator that the discharge resulting from an activity requiring a license or permit will not violate applicable water quality standards will be required where:

(a) Standards have been promulgated, in whole or in part, by the Administrator pursuant to section 10(c)(2) of the Act: *Provided, however,* That the Administrator will certify compliance only with respect to those water quality standards promulgated by him; or

(b) Water quality standards have been established, but no State or interstate agency has authority to give such a certification.

§ 615.22 *Applications.*

An applicant for certification from the Administrator shall submit to the Regional Administrator a complete description of the discharge involved in the activity for which certification is sought, with a request for certification signed by the applicant. Such description shall include the following:

(a) The name and address of the applicant;

(b) A description of the facility or activity, and of any discharge into navigable water which may result from the conduct of any activity including, but not limited to, the construction or operation of the facility, including the biological, chemical, thermal, and other characteristics of the discharge, and the location or locations at which such discharge may enter navigable waters;

(c) A description of the function and operation of equipment or facilities to treat wastes or other effluents which may be discharged, including specification of the degree of treatment expected to be attained;

(d) The date or dates on which the activity will begin and end, if known and the date or dates on which the discharge will take place;

(e) A description of the methods and means being used or proposed to monitor the quality and characteristics of the discharge and the operation of equipment or facilities employed in the treatment or control of wastes or other effluents.

§ 615.23 *Notice and hearing*

The Regional Administrator will provide public notice of each request for certification by mailing to State, County, and municipal authorities, heads of State agencies responsible for water quality improvement, and other parties known to be interested in the matter, including adjacent property owners and conservation organizations, or may provide such notice in a newspaper of general circulation in the area in which the activity is proposed to be conducted if the Regional Administrator deems mailed notice to be impracticable. Interested parties shall be provided an opportunity to comment on such request in such manner as the Regional Administrator deems appropriate. All interested and affected parties will be given reasonable opportunity to present evidence and testimony at a public hearing on the question whether to grant or deny certification if the Regional Administrator determines that such a hearing is necessary or appropriate.

§ 615.24 *Certification.*

If, after considering the complete description, the record of a hearing, if any, held pursuant to § 615.23, and such other information and data as the Regional Administrator deems relevant, the Regional Administrator determines that there is reasonable assurance that the proposed activity will not result in a violation

of applicable water quality standards, he shall so certify. If the Regional Administrator determines that no water quality standards are applicable to the waters which might be affected by the proposed activity, he shall so notify the applicant and the licensing or permitting agency in writing and shall provide the licensing or permitting agency with advice, suggestions, and recommendations with respect to conditions to be incorporated in any license or permit to achieve compliance with the purpose of this Act. In such case, no certification shall be required.

§ 615.25 *Adoption of new water quality standards.*

(a) In any case where:

- (1) A license or permit was issued without certification due to the absence of applicable water quality standards; and
- (2) Water quality standards applicable to the waters into which the license or permitted activity may discharge are subsequently established; and
- (3) The Administrator is the certifying agency because:
 - (i) No State or interstate agency has authority to certify; or
 - (ii) Such new standards were promulgated by the Administrator pursuant to section 10(c)(2) of the Act; and
- (4) The Regional Administrator determines that such uncertified activity is violating water quality standards;

Then the Regional Administrator shall notify the licensee or permittee of such violation, including his recommendations as to actions necessary for compliance. If the licensee or permittee fails within 6 months of the date of such notice to take action which in the opinion of the Regional Administrator will result in compliance with applicable water quality standards, the Regional Administrator shall notify the licensing or permitting agency that the licensee or permittee has failed, after reasonable notice, to comply with such standards and that suspension of the applicable license or permit is required by section 21(b)(9)(B) of the Act.

(b) Where a license or permit is suspended pursuant to paragraph (a) of this section, and where the licensee or permittee subsequently takes action which in the Regional Administrator's opinion will result in compliance with applicable water quality standards, the Regional Administrator shall then notify the licensing or permitting agency that there is reasonable assurance that the licensed or permitted activity will comply with applicable water quality standards.

§ 615.26 *Inspection of facility or activity before operation.*

Where any facility or activity has received certification pursuant to § 615.24 in connection with the issuance of a license or permit for construction, and where such facility or activity is not required to obtain an operating license or permit, the Regional Administrator or his representative, prior to the initial operation of such facility or activity, shall be afforded the opportunity to inspect such facility or activity for the purpose of determining if the manner in which such facility or activity will be operated or conducted will violate applicable water quality standards.

§ 615.27 *Notification to licensing or permitting agency.*

If the Regional Administrator after an inspection pursuant to § 615.26, determines that operation of the proposed facility or activity will violate applicable water quality standards, he shall so notify the applicant and the licensing or permitting agency, including his recommendations as to remedial measures necessary to bring the operation of the proposed facility into compliance with such standards.

§ 615.28 *Termination of suspension.*

Where a licensing or permitting agency, following a public hearing, suspends a license or permit after receiving the Regional Administrator's notice and recommendation pursuant to § 615.27, the applicant may submit evidence to the Regional Administrator that the facility or activity or the operation or conduct thereof has been modified so as not to violate water quality standards. If the Regional Administrator determines that water quality standards will not be violated, he shall so notify the licensing or permitting agency.

Subpart D—Consultations

§ 615.30 *Review and advice.*

The Regional Administrator may, and upon request shall, provide licensing and permitting agencies with determinations, definitions and interpretations with respect to the meaning and content of water quality standards where they have been federally approved under section 10 of the Act, and findings with respect to the application of all applicable water quality standards in particular cases and in specific circumstances relative to an activity for which a license or permit is sought. The Regional Administrator may, and upon request shall, also advise licensing and permitting agencies as to the status of compliance by dischargers with the conditions and requirements of applicable water quality standards. In cases where an activity for which a license or permit is sought will affect water quality, but for which there are no applicable water quality standards, the Regional Administrator may advise licensing or permitting agencies with respect to conditions of such license or permit to achieve compliance with the purpose of the Act.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE ARMY

ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY AND THE SECRETARY OF THE ARMY

NOTICE OF A MEMORANDUM OF UNDERSTANDING PROVIDING FOR COOPERATION IN THE INVESTIGATION OF VIOLATIONS OF THE REFUSE ACT

FEBRUARY 10, 1971.

Executive Order 11574 (35 F.R. 19627) announced the establishment of a permit program under the Refuse Act, 33 U.S.C. 407, Proposed Corps of Engineers regulations governing the permit program (35 F.R. 20005) and a proposed memorandum of understanding concerning the implementation of the program (36 F.R. 983) have been previously published in the FEDERAL REGISTER. The following memorandum of understanding which pertains to enforcement of and investigations under the Refuse Act rather than to the permit program itself has been executed by both the Administrator of the Environmental Protection Agency and the Secretary of the Army:

"MEMORANDUM OF UNDERSTANDING BETWEEN THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY AND THE SECRETARY OF THE ARMY

"The Administrator of the Environmental Protection Agency and the Secretary of the Army, recognizing the interrelationship between section 13 of the Act of March 3, 1899 (33 U.S.C. 407) (the "Refuse Act") administered by the Department of the Army and the statutory responsibilities of the Environmental Protection Agency under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.), and further recognizing their responsibilities under the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347), and their responsibilities under Executive Order 11574 dated December 23, 1970, which directs the Federal Government to implement a permit program under the Refuse Act to control the discharge of pollutants into navigable waters and their tributaries, have entered into this memorandum of understanding to delineate more fully the respective responsibilities of said Agency and Department for water pollution abatement and control, and to establish policies and procedures for interagency cooperation in the enforcement of the Refuse Act.

"I. *Responsibilities for water pollution abatement and control.* A. At the Federal level, the Environmental Protection Agency has primary responsibility, pursuant to the Federal Water Pollution Control Act, for the abatement and control of pollution of interstate and navigable waters of the United States.

"B. The Department of the Army has primary responsibility for the enforcement of the Refuse Act.

"C. Under Executive Order 11574, the Secretary is directed to develop regulations and procedures in consultation with the Administrator governing the issuance of discharge permits under the Refuse Act, and, in connection with the grant, denial, conditioning, revocation and suspension of such permits, to adopt determinations and interpretations of the Administrator respecting water quality standards and compliance therewith.

"D. The Department of the Army and the Environmental Protection Agency have in cooperation undertaken to implement the permit authority of the Refuse Act pursuant to a memorandum of understanding dated January, the terms of which are incorporated herein and made a part hereof.

"II. *The Refuse Act*. A. The Refuse Act, 33 U.S.C. 407, provides that:

"It shall not be lawful to throw, discharge, or deposit, or cause, suffer, or procure to be thrown, discharged or deposited either from or out of any ship, barge, or other floating craft of any kind, or from the short, wharf, manufacturing establishment, or mill of any kind, any refuse matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state, into any navigable water of the United States, or into any tributary of the navigable water from which the same shall float or be washed into such navigable water; and it shall not be lawful to deposit, or cause, suffer or procure to be deposited material of any kind in any place on the bank of any navigable water, or on the bank of any tributary of any navigable water, where the same shall be liable to be washed into such navigable water, either by ordinary or high tides, or by storms or floods, or otherwise, whereby navigation shall or may be impeded or obstructed; *Provided*, That nothing herein contained shall extend to, apply to, or prohibit the operations in connection with the improvement of navigable waters or construction of public works, considered necessary and proper by the U.S. officers supervising such improvement or public work: *And, provided further*, That the Secretary of the Army whenever in the judgment of the Chief of Engineers anchorage and navigation will not be injured thereby, may permit the deposit of any material above mentioned in navigable waters, within limits to be defined and under conditions to be prescribed by him, provided application is made to him prior to depositing such material; and whenever any permit is so granted the conditions thereof shall be strictly complied with, and any violation thereof shall be unlawful, March 3, 1899, c. 425."

"B. Criminal sanctions may be imposed against persons or corporations found guilty of violating provisions of the Refuse Act. As prescribed in 33 U.S.C. 411, the penalty upon conviction is 'a fine not exceeding \$2,500 nor less than \$500, or * * * imprisonment (in the case of a natural person) for not less than 30 days nor more than 1 year, or both such fine and imprisonment, in the discretion of the court, one-half of said fine to be paid to the person or persons giving information which shall lead to conviction.'

"C. Civil proceedings may also be instituted to enjoin conduct which would violate provisions of the Refuse Act. *United States v. Republic Steel Corp.*, 362 U.S. 482 (1960) and *Wyandotte Transportation Co. v. United States*, 389 U.S. 191 (1967).

"III. *Policy with respect to enforcement of Refuse Act*. The policy of the Environmental Protection Agency and the Department of the Army is to utilize the Refuse Act and the authorities contained therein to the fullest extent possible and in a manner consistent with the provisions of the Federal Water Pollution Control Act to insure compliance with applicable water quality standards and otherwise to carry out the purposes of the Federal Water Pollution Control Act. Persons wishing to discharge into or place deposits in navigable waters or tributaries thereof will be required to apply for and obtain a permit from the Department of the Army. Persons without an appropriate permit who discharge into navigable waters or tributaries thereof or who discharge into such waters in violation of the terms of a valid permit may be subjected to legal proceedings under the Refuse Act.

"IV. *Inter-agency cooperation*. A. In recognition of the expertise of the Department of the Army and the Corps of Engineers in matters pertaining to the navigability of a waterway, it is agreed that the Department of the Army, acting through the Corps of Engineers, has primary Federal responsibility for identifying and investigating violations of the Refuse Act which have an adverse impact on the navigable capacity of a waterway. Whenever a District Engineer has reason to believe that a discharge has or may have occurred having an adverse impact on water quality, he shall so notify the appropriate

Regional Representative of the Environmental Protection Agency and shall provide him with all information, including, if the discharger is the holder of a Refuse Act permit, a copy of said permit and all of the conditions attached thereto. The said Region Representative shall make such investigation as he deems appropriate and shall advise the District Engineer in a timely manner whether in his opinion a violation of the Refuse Act having an adverse impact on water quality has or may have occurred. If the Regional Representative is of such opinion, he shall make a report to the District Engineer as to the following:

"1. The nature and seriousness of the apparent violation (including, if the discharger is the holder of a Refuse Act permit, information as to the conditions of such permit which appear to have been violated).

"2. The nature and seriousness of the impact on water quality.

"3. The measures, if any, taken or being taken by the discharger to comply with applicable water quality standards or the conditions of a Refuse Act permit, if any.

"4. The existence and adequacy of State or local pollution abatement proceedings.

"5. The applicability of the Federal Water Pollution Control Act, whether any administrative or judicial proceedings are being taken or contemplated thereunder, and the status of any such proceedings.

"6. His recommendations as to the action, if any, which should be taken under the Refuse Act and his reasons therefor. If the discharger is the holder of a Refuse Act permit, such recommended action may include in addition to or in lieu of prosecution under the Refuse Act for one or more of the remedies available thereunder, the suspension or revocation of the permit. A recommendation to suspend shall include a recommendation as to the period and conditions of the suspension.

"B. In recognition of the expertise of the Environmental Protection Agency in matters pertaining to water quality, it is agreed that said Agency has primary Federal responsibility for identifying and investigating cases involving discharges into interstate or navigable waters which have an adverse impact on water quality. District Engineers shall assist Regional Representatives of the Environmental Protection Agency by providing them with such information as may become available concerning known or suspected discharges which may adversely affect water quality (including, if the discharger is the holder of a Refuse Act permit, a copy of said permit and all of the conditions attached thereto), and, to the extent of available resources, shall assist in the conduct of investigations concerning such discharges. Regional Representatives shall be responsible for notifying District Engineers of known or suspected violations of the Refuse Act and for providing District Engineers with timely reports of investigations conducted. Whenever in the opinion of the Regional Representative a violation of the Refuse Act having an adverse impact on water quality has or may have occurred, such report shall include all of the same information and recommendations called for in subparagraphs 1 through 6 of paragraph A with respect to reports submitted under that paragraph.

"C. In connection with any remedial action recommended or taken pursuant to this memorandum of understanding, due regard shall be given to the provisions of section 21(b) of the Federal Water Pollution Control Act, and in particular the provisions of sections 21(b) (4), 21(b) (5), and 21(b) (9) (B) relating to the revocation on suspension of permits.

"D. In any case in which a Refuse Act permit is suspended, if the District Engineer has reason to believe that the permittee has or may have violated the terms of the suspension, he shall notify the appropriate Regional Representative of the Environmental Protection Agency and provide him with all available information. The Regional Representative shall make such investigation as he deems appropriate and shall make a report to the District Engineer, such report to include, to the extent relevant, the information and recommendations called for in subparagraphs 1 through 6 of paragraph A with respect to reports submitted under that paragraph.

"E. If upon review of all reports and information prepared pursuant to this memorandum of understanding and any other available evidence, it is determined by the District Engineer of the Corps or the Regional Representative of EPA to request legal proceedings under the Refuse Act, such District Engineer or Regional Representative shall, in consultation with each other, forward all available evidence and information, including recommendations, if any, of both the

Regional Representative and the District Engineer, to the appropriate U.S. attorney. A copy of any covering letter forwarding information and evidence to the appropriate U.S. attorney should be mailed, together with a brief summary of the factual background of the case, to the Assistant Attorney General for Lands and Natural Resources, Department of Justice, Washington, D.C. 20530.

"WILLIAM D. RÜCKELSHAUS,
"Administrator,
"Environmental Protection Agency.
"STANLEY R. RESOR,
"Secretary of the Army."

Dated: January 12, 1971.
For the Adjutant General.

R. B. BELNAP,
Special Advisor to TAG.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

[33 CFR Part 209]

PERMITS FOR DISCHARGES OR DEPOSITS INTO NAVIGABLE WATERS

Proposed Policy, Practice and Procedure

Proposed regulations prescribing the policy, practice and procedure to be followed by all Corps of Engineers' installations and activities in connection with applications for permits authorizing discharges or deposits into navigable waters of the United States or into any tributary from which discharged matter shall float or be washed into a navigable water (33 U.S.C. 407) were published in the Federal Register of December 31, 1970 (35 F.R. 20005). Public comment on the proposed regulations was invited within a period of 45 days from December 31, 1970.

The proposed Memorandum of Understanding set forth below relates to the proposed regulations and to Executive Order 11574 which deals with the administration of the Refuse Act Permit Program (35 F.R. 19627). If executed, the proposed Memorandum of Understanding will be an additional paragraph to the proposed regulations 33 CFR 209.131(p).

Comments, suggestions, or objections to the proposed Memorandum of Understanding should be submitted in writing to the Office of Chief of Engineers, Washington, D.C. 20314, Attention: ENG CW-ON, within 30 days of publication of this notice in the Federal Register.

Dated: January 18, 1971.

F. P. KOISCH,
Major General, U.S. Army,
Director of Civil Works.

§ 209.131 *Permits for discharges or deposits into navigable waters.*

* * * * *

(p) *Memorandum of understanding between the Administrator of the Environmental Protection Agency and the Secretary of the Army.*

"PERMIT PROGRAM

"MEMORANDUM OF UNDERSTANDING BETWEEN THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY AND THE SECRETARY OF THE ARMY

"In recognition of the responsibilities of the Secretary of the Army under section 13 of the Act of March 3, 1899, "the Refuse Act," (33 U.S.C. 407) relating to the control of discharges and deposits in navigable waters of the United States and tributaries thereof, and the interrelationship of those responsibilities with the responsibilities of the Administrator of the Environmental Protection Agency under the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347), the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.) in

recognition of our joint responsibilities under Executive Order No. 11574 (dated December 23, 1970) we hereby adopt the following policies and procedures:

"POLICIES

"1. It is our policy that there shall be full coordination and cooperation between our respective organizations on the above responsibilities at all organizational levels, and it is our view that maximum efforts in the discharge of those responsibilities, including the resolution of differing views, must be undertaken at the earliest practicable time and at the field organizational unit most directly concerned. Accordingly, District Engineers of the U.S. Army Corps of Engineers (hereinafter "the Corps") shall coordinate the review of applications for permits under the Refuse Act for discharges or deposits into navigable waters of the United States or tributaries thereof with Regional Representatives designated by the Environmental Protection Agency (hereinafter "EPA").

"2. EPA shall advise the Corps with respect to the meaning, content and application of water quality standards applicable to a proposed discharge or deposit and as to the impact which the proposed discharge or deposit may or is likely to have on water quality standards and related water quality considerations. The Corps shall accept such advice on matters pertaining to water quality standards and related water quality considerations as conclusive and no permit shall be issued which is inconsistent with any finding, determination or interpretation of a Regional Representative with respect to such standards or considerations.

"3. In acting upon applications for permits, the Corps shall be responsible for considering the impact which the proposed discharge or deposit may have on navigation and anchorage and, in cases where the Fish and Wildlife Coordination Act is applicable, on fish and wildlife resources.

"PROCEDURES

"1. Applicants for permits pursuant to section 13 of the Rivers and Harbors Act of 1899 shall be required by District Engineers to supply data identified by EPA and the Department of the Army. A uniform format for supplying such data will be developed by the Corps and EPA.

"2. District Engineers shall provide Regional Representatives of EPA at the earliest practicable time with copies of an applicant's request for a permit, request for certification from a State pursuant to section 21(b) of the Federal Water Pollution Control Act, other requests for State Approval, and State or interstate agency certifications or other actions relating to such permit applications.

"3. In reaching determinations as to compliance with water quality standards, including determinations and interpretations arising from its review of State or interstate agency water quality certifications under section 21(b) of the Federal Water Pollution Control Act, Regional Representatives of EPA will determine and advise District Engineers with respect to the following:

"(i) The meaning and content of water quality standards, which under the provisions of the Federal Water Pollution Control Act, were established "to protect the public health and welfare, enhance the quality of water and serve the purposes" of that Act, with consideration of "their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses."

"(ii) The application of water quality standards to the proposed discharge or deposit, including the impact of the proposed discharge or deposit on such water quality standards and related water quality considerations;

"(iii) The permit conditions required to comply with water quality standards;

"(iv) The permit conditions required to carry out the purposes of the Federal Water Pollution Control Act where no water quality standards are applicable;

"(v) The interstate water quality effect of the proposed discharge or deposit.

"4. Regional Representatives of EPA shall provide advice as to the effect, if any, of the proposed discharge or deposit on the quality of the waters of any other State not later than 30 days after receipt of copies of both the completed permit

application and the State certification or other State action from the District Engineer. The other information and advice identified above shall be provided not later than 45 days after such receipt. If, however, additional time is required to respond, the Regional Representative shall so notify the District Engineer and shall advise him as to the additional period of time which will be required to provide a report. In cases where a Regional Representative does not provide such information and advice to a District Engineer within the time periods specified herein (including any extensions of time requested by the Regional Representative), the advice furnished by a State or other certifying authority shall be considered by the District Engineer to be the advice of the Regional Representative.

"5. In any case, where a District Engineer of the Corps has received notice that a State or other certifying agency has denied a certification prescribed by section 21(b) of the Federal Water Pollution Control Act, or except as provided in a subsection G below, where a Regional Representative has recommended that a permit be denied because its issuance would be inconsistent with his determination or interpretation with respect to applicable water quality standards and related water quality considerations the District Engineer, within 30 days of receipt of such notice, shall deny the permit and provide notice of such denial to the Regional Representative of EPA.

"6. In the absence of any objection by the Regional Representative to the issuance of a permit for a proposed discharge or deposit, District Engineers may take action denying a permit only if:

"(i) anchorage and navigation will be impaired; or

"(ii) the discharge for which a permit is sought impounds, diverts, deepens the channel, or otherwise controls or similarly modifies the stream or body of water into which the discharge is made, and, after the consultations required by the Fish and Wildlife Coordination Act, the District Engineer determines that the proposed discharge or deposit will have significant adverse impact on fish or wildlife resources.

7. In any case where the District Engineer believes that following the advice of the Regional Representative with respect to the issuance or denial of a permit would not be consistent with the purpose of the Refuse Act permit program, he shall, within 10 days of receiving such advice, forward the matter through channels to the Secretary of the Army to provide the Secretary with the opportunity to consult with the Administrator. Such consultation shall take place within 30 days of the date on which the Secretary receives the file from the District Engineer. Following such consultation, the Secretary shall accept the findings, determinations, and conclusions of the Administrator as to water quality standards and related water quality considerations and shall promptly forward the case to the District Engineer with instructions as to its disposition.

8. No permit will be issued in cases where the applicant, pursuant to 2(b)(1) of the Water Quality Improvement Act of 1970, is required to obtain a State or other appropriate certification that the discharge or deposit would not violate applicable water quality standards and such certification was denied.

REGULATIONS

The Department of the Army shall consult with EPA before promulgating regulations pursuant to the Refuse Act which relate to the subject of this memorandum of understanding. In no case will such regulations be issued unless at least 30 days prior to issuance, they shall have been forwarded to EPA for comment or unless prior to that time the Department of the Army and EPA have reached agreement. EPA shall consult with the Department of the Army prior to the issuance of guidelines, policies or procedures relating to the subject of this memorandum of understanding. In no event shall such guidelines, policies or procedures be issued prior to 30 days from the date they were forwarded to the Department of the Army for comment unless prior to that time the Department of the Army and EPA have reached agreement. In no event shall regulations, guidelines, policies or procedures which are inconsistent with the provisions of this memorandum of understanding be published or issued.

PERMIT CONDITIONS

1. Every permit issued shall:

"(i) Require compliance with applicable water quality standards, including implementing schedules adopted in connection with such standards;

"(ii) Include provisions incorporating into the permit changes in water quality standards subsequent to the date of the permit, and requiring compliance with such changed standards;

"(iii) Provide for possible suspension or revocation in the event that the permittee breaches any condition of the permit.

"(iv) Provide for possible suspension, modification or revocation if, subsequent to the issuance of a permit, it is discovered that the discharge or deposit contains hazardous materials which may pose a danger to health or safety.

"2. Permits also be subject to conditions, as determined by EPA, to be necessary for purposes of insuring compliance with water quality standards or the purposes of the Federal Water Pollution Control Act. Such conditions may include, but are not necessarily limited to:

"(i) Requirements for periodic demonstrations of compliance with water quality criteria, established implementation schedules, or prescribed levels of treatment;

"(ii) Site and sampling accessibility;

"(iii) Requirements for periodic reports as to the nature and quality of discharges or deposits.

"3. Regional Representatives of EPA may also provide District Engineers with advice as to the duration for which permits should be issued. Relevant considerations shall include the nature of the discharge, basin plans, and changing treatment technology.

TECHNICAL DATA

"EPA, in consultation with the Department of the Army, shall develop and make available analytical procedures, methods and criteria to be employed in identifying the meaning and application of water quality standards and pursuant to which EPA's determinations and interpretations respecting water quality standards will be made.

AMENDMENT

"If, in the course of operations within this memorandum of understanding, either party finds its terms in need of modification, he may notify the other of the nature of the desired changes. In that event, the parties shall within 90 days negotiate such amendments as are considered mutually desirable.

"(Secretary of
the Army)

"(Administrator of
the Environmental
Protection Agency)"

TITLE 3—THE PRESIDENT

EXECUTIVE ORDER 11574

ADMINISTRATION OF REFUSE ACT PERMIT PROGRAM

By virtue of the authority vested in me as President of the United States, and in furtherance of the purposes and policies of section 13 of the Act of March 3, 1899, c. 425, 30 Stat. 1152 (33 U.S.C. 407), the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et. seq.), the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-666c), and the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347), it is hereby ordered as follows:

SECTION 1. *Refuse Act permit program.* The executive branch of the Federal Government shall implement a permit program under the aforesaid section 13 of the Act of March 3, 1899 (hereinafter referred to as "the Act") to regulate the discharge of pollutants and other refuse matter into the navigable waters of the United States or their tributaries and the placing of such matter upon their banks.

SEC. 2. Responsibilities of Federal agencies. (a) (1) The Secretary shall, after consultation with the Administrator respecting water quality matters, issue and amend, as appropriate, regulations, procedures, and instructions for receiving, processing, and evaluating applications for permits pursuant to the authority of the Act.

(2) The Secretary shall be responsible for granting, denying, conditioning, revoking, or suspending Refuse Act permits. In so doing:

(A) He shall accept findings, determinations, and interpretations which the Administrator shall make respecting applicable water quality standards and compliance with those standards in particular circumstances, including findings, determinations, and interpretations arising from the Administrator's review of State or interstate agency water quality certifications under section 21(b) of the Federal Water Pollution Control Act (84 Stat. 108). A permit shall be denied where the certification prescribed by section 21(b) of the Federal Water Pollution Control Act has been denied, or where issuance would be inconsistent with any finding, determination, or interpretation of the Administrator pertaining to applicable water quality standards and considerations.

(B) In addition, he shall consider factors, other than water quality, which are prescribed by or may be lawfully considered under the Act or other pertinent laws.

(3) The Secretary shall consult with the Secretary of the Interior, with the Secretary of Commerce, with the Administrator, and with the head of the agency exercising administration over the wildlife resources of any affected State, regarding effects on fish and wildlife which are not reflected in water quality considerations, where the discharge for which a permit is sought impounds, diverts, deepens the channel, or otherwise controls or similarly modifies the stream or body of water into which the discharge is made.

(4) Where appropriate for a particular permit application, the Secretary shall perform such consultations respecting environmental amenities and values other than those specifically referred to in paragraphs (2) and (3) above, as may be required by the National Environmental Policy Act of 1969.

(b) The Attorney General shall conduct the legal proceedings necessary to enforce the Act and permits issued pursuant to it.

SEC. 3. Coordination by Council on Environmental Quality. (a) The Council on Environmental Quality shall coordinate the regulations, policies, and procedures of Federal agencies with respect to the Refuse Act permit program.

(b) The Council on Environmental Quality, after consultation with the Secretary, the Administrator, the Secretary of the Interior, the Secretary of Commerce, the Secretary of Agriculture, and the Attorney General, shall from time to time or as directed by the President advise the President respecting the implementation of the Refuse Act permit program, including recommendations regarding any measures which should be taken to improve its administration.

SEC. 4. Definitions. As used in this order, the word "Secretary" means the Secretary of the Army, and the word "Administrator" means the Administrator of the Environmental Protection Agency.

RICHARD NIXON.

THE WHITE HOUSE,
December 23, 1970.

WATER QUALITY ENFORCEMENT PROGRAM

STATEMENT BY THE PRESIDENT UPON SIGNING AN EXECUTIVE ORDER PROVIDING FOR THE ESTABLISHMENT OF A FEDERAL PERMIT PROGRAM TO REGULATE THE DISCHARGE OF WASTE INTO THE WATERS OF THE UNITED STATES, DECEMBER 23, 1970

I have today directed the establishment of a Federal permit program covering facilities which discharge waste into navigable waters and their tributaries in the United States. This new program will enhance the ability of the Federal Government to enforce water quality standards and provide a major strengthening of our efforts to clean up our Nation's water.

Last February I transmitted to the Congress a comprehensive water pollution program, as part of my 37-point program designed to protect our environment. My proposals included legislative measures to make the establishment and en-

forcement of water quality standards more effective and expeditious. Unfortunately, no congressional action has been taken on my water pollution control proposals. I will continue to seek enactment of these proposals during the next session of the Congress.

In the meantime, I am directing the immediate initiation of a new, coordinated program of water quality enforcement under the Refuse Act of 1899, an act whose potential for water pollution control has only recently been recognized.

This law, which we have relied upon for many of our water pollution enforcement actions to date, prohibits the discharge of refuse matter, except that flowing from streets and sewers, into navigable waters or their tributaries without a permit from the Army Corps of Engineers. Through a more activist utilization of this act, we will be able to require industries to submit to State authorities and the Federal Government data concerning effluents which they plan to discharge into navigable waters. For those firms that are complying with water quality standards, the issuance of a permit, agreed upon by the Federal Government and the States, will assure all parties that standards are being met. To deal with those who are disregarding our pollution control laws, a swift and comprehensive enforcement mechanism is provided by this authority.

The most effective use of the Refuse Act will require close coordination between the Corps of Engineers and the Environmental Protection Agency as well as other Federal and State authorities. The Executive order I am signing today will ensure that such coordination is provided and that the program is initiated promptly. As this order makes clear, the Environmental Protection Agency will make the necessary determinations on behalf of the Federal Government for all water quality aspects of this program.

The Refuse Act permit program makes maximum use of all existing provisions of law relating to water quality. It will apply to discharges both from new installations and from existing facilities. Implementation of the program will begin when proposed regulations, soon to be issued for comment, are promulgated. Permits for new discharges will be required immediately. For existing discharges, the deadline for filing applications will be July 1, 1971, to provide the States an opportunity to mobilize for this program. In the meantime, violators of water quality standards will not be exempt from prosecution under the Refuse Act.

I wish to make clear that although the Refuse Act generally does not apply to municipal discharges, we will continue to vigorously employ other authorities for dealing with violations of water quality standards by municipalities. The Environmental Protection Agency recently put three large cities on notice that it will take legal action under the Federal Water Pollution Control Act if they do not take steps to correct water quality violations.

Implementation of a program of this magnitude will not be easy. It involves a number of Federal agencies, 50 States, and many thousands of industries. But we cannot afford to wait. We must move ahead to clean up our waters. I invite the help and cooperation of the States, private industry, and all citizens in making the Refuse Act permit program an effective tool to promote our water quality objectives.

processes of water quality standards have been established. I believe that the water quality standards which have been adopted in the water pollution control program will continue to be a major component of the program during the next several years.

In the immediate future, the Department will continue to work on the development of water quality standards which will be effective in the long run. I believe that the Department will continue to work on the development of water quality standards which will be effective in the long run.

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