ENVIRONMENTAL PROTECTION AGENCY

40 CFR Ch. I

[EN FRL-3046-7]

Preliminary Approaches to Implementing the Recommendations of the Domestic Sewage Study; Advance Notice of Proposed Rulemaking

AGENCY: Environmental Protection Agency (EPA).

ACTION: Advance notice of proposed rulemaking.

SUMMARY: In 1984, Congress enacted the Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA). Section 3018(a) of RCRA, as amended, directed EPA to submit a report to Congress concerning wastes discharged through sewer systems to publicly owned treatment works (POTWs) that are exempt from RCRA regulation as a result of the Domestic Sewage Exclusion of RCRA. This report (the Domestic Sewage Study, hereinafter referred to as "the Study") was prepared by EPA's Office of Water and submitted to Congress on February 7, 1986. The Study examined the nature and sources of hazardous wastes discharged to POTWs, measured the effectiveness of Agency programs in dealing with such discharges, and recommended ways to improve the programs to achieve better control of hazardous wastes entering POTWs.

As a follow-up to the Study, section 3018(b) of RCRA directs the Administrator to revise existing regulations and promulgate such regulations as are necessary to assure that hazardous wastes discharged to POTWs are adequately controlled to protect human health and the environment. The regulations must be promulgated within eighteen months after submission of the Study to Congress (August 1987).

The Agency is today publishing an Advance Notice of Proposed Rulemaking (ANPR) which will be the first step towards promulgating the regulations required by section 3018(b). EPA wishes to use today's notice primarily to obtain public comments and suggestions on possible ways to implement or address the recommendations of the Study. The Agency will then evaluate the comments and suggestions and use them to help prepare specific proposed rules for publication. Today's notice contains no formal proposals for regulatory amendments. Instead, EPA suggests a range of preliminary approaches to improving the control of hazardous wastes discharged to the nation's POTWs. The Agency solicits comments on these approaches and invites suggestions on any other approaches the public believes appropriate.

DATES: Comments must be received on or before October 21, 1986.

ADDRESS: Comments should be addressed to Ms. Marilyn Goode, Permits Division (EN-336), U.S. Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460, (202) 475-9534.

FOR FURTHER INFORMATION CONTACT: Ms. Marilyn Goode, Permits Division, (EN-336), U.S. Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460, (202) 475-9534.

For copies of the Domestic Sewage Study, contact Ms. Carol Swann, Industrial Technology Division (WH-552), U.S. Environmental Protection Agency, 401 M St. S.W., Washington, D.C. 20460, (202) 382-7137.

SUPPLEMENTARY INFORMATION:

I. Statutory Background

The origins of the Study lie in the Domestic Sewage Exclusion of RCRA. The exclusion, established by Congress in section 1004(27) of RCRA, provides that solid or dissolved material in domestic sewage is not solid waste as defined in RCRA. A corollary is that such material also cannot be considered a hazardous waste for purposes of RCRA.

The regulatory exclusion applies to domestic sewage as well as mixtures of domestic sewage and other wastes that pass through the sewer system to a POTW (see 40 CFR 261.4(a)(1)). The exclusion thus covers industrial wastes discharged to POTW sewers which contain domestic sewage, even if the industrial wastes would otherwise be considered hazardous wastes.

Under the exclusion, industrial facilities which discharge such wastes to sewers containing domestic sewage are not subject to RCRA generator and transporter requirements, such as manifesting and reporting. In addition, POTWs receiving such wastes mixed with domestic sewage are not thereby deemed to have received hazardous wastes and therefore need not comply with certain RCRA hazardous waste treatment, storage, and disposal requirements with respect to these wastes. However, the Domestic Sewage Exclusion does not apply to sludge produced by a POTW as a result of wastewater treatment if such sludge is found to be a RCRA characteristic waste under 40 CFR 261 Subpart C. In addition, hazardous wastes delivered to a POTW by truck, rail, or dedicated pipe are not covered by the Domestic Sewage Exclusion, and are subject to regulation under the RCRA permit-by-rule (see 40 CFR Part 270.60(c)).

The legislative history of RCRA indicates that the Domestic Sewage Exclusion stems from the assumption that the pretreatment program of the Clean Water Act (CWA) can ensure adequate control of industrial discharges to sewers. This program, mandated by section 307(b) of the CWA and implemented in 40 CFR Part 403, provides for pretreatment by industrial facilities of pollutants discharged to POTWs, to the extent that such pollutants would interfere with, pass through, or otherwise be incompatible with the operations of POTWs. The Exclusion avoids the potential regulatory redundancy of subjecting hazardous wastes mixed with domestic sewage to RCRA management requirements if these wastes are already subject to appropriate pretreatment requirements under the CWA.

In 1984, Congress enacted the Hazardous and Solid Waste Amendments to RCRA. The legislative history of these amendments reveals that Congress wanted EPA to evaluate the effects of the Domestic Sewage Exclusion. Congressman Molinari (R.N.Y.), one of the sponsors of the amendment, expressed concern about possible gaps in RCRA which could threaten public health and the environment. He stated that EPA should:

> . . . quantify, as accurately as possible, the nature and scope of hazardous waste disposal into domestic sewers . . . the extent to which the exclusion is justified . . . *and the adequacy of pretreatment as a means of dealing with the problem.* [CONG. REC. H9150 (daily ed. November 3, 1983), emphasis added]

To this end, section 3018(a) of the Hazardous and Solid Waste Amendments to RCRA required EPA to prepare:

> . . . a report to Congress concerning those substances identified or listed under section 3001 which are not regulated under this subtitle by reason of the exclusion for mixtures of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works. Such report shall include the types, size, and number of generators which dispose of substances in this manner, and the identification of significant generators, wastes, and waste constituents not regulated under existing Federal law or regulated in a manner sufficient to protect human health and the environment.

Section 3018(b) then requires the Administrator to revise existing regulations and to promulgate such additional regulations as are necessary to ensure that hazardous wastes discharged to POTWs are adequately controlled to protect human health and the environment. These regulations are to be promulgated pursuant to RCRA, section 307 of the CWA, or any other appropriate authority possessed by EPA. The regulations must be promulgated within eighteen months after submission of the Study to Congress (August 1987).

II. Summary of the Domestic Sewage Study

EPA submitted the Study to Congress on February 7, 1986. In performing the Study, the Agency reviewed information on 160,000 waste dischargers from 47 industrial categories and the residential sector. Because of the nature of the available data sources, the Study provided estimates for the discharge of 165 specific constituents of hazardous waste (e.g., benzene, acetone, etc.) rather than estimates for hazardous wastes as they are more generally defined under section 3001 of RCRA (i.e., characteristic wastes such as ignitable or reactive materials, or listed wastes such as spent solvents, electroplating baths, etc.).

Data limitations also led the Study to provide more extensive estimates for those hazardous constituents which are also CWA priority pollutants. The CWA priority pollutant list was originally developed as part of a settlement agreement between the Natural Resources Defense Council (NRDC) and EPA (*NRDC* v. *Train*, 8 ERC 2120 (D.D.C. 1976)). This agreement required the Agency to promulgate technology-based standards for 65 compounds or classes of compounds. Congress then incorporated this list of toxic pollutants as part of the 1977 amendments to the CWA. From the list of compounds or classes of compounds, EPA later developed a list of 126 individual priority pollutants.

A more thorough assessment of hazardous waste discharges depends on collecting additional data on discharges of non-priority hazardous wastes to POTWs. Furthermore, the Agency possesses little knowledge about the behavior and effects of many hazardous constituents in aqueous solutions. In particular, the Study determined that little is known about groundwater contamination as a result of exfiltration (leakage) from POTW systems or air emissions due to the volatilization of industrial wastes discharged to sewers.

In spite of these limitations, EPA was able to give estimates in the Study on the types, sources, and quantities of many hazardous constituents discharged to POTWs. The Study provides information on industrial categories ranging from the largest hazardous waste generators (such as the organic chemicals and petroleum refining industries) to small quantity generators (such as laundries and motor vehicle services). In selecting hazardous constituents to be included in the Study, EPA took care to choose those which seemed representative of actual industrial discharges. For example, the Study emphasized hazardous constituents for which national production rates are high (as opposed to specialty chemicals), as well as constituents found in the wastestreams of industries known to be significant generators of hazardous wastes.

The Study also examines the fate of hazardous constituents once they are discharged to POTW collection and treatment systems and discusses the potential for environmental effects resulting from the discharge of these constituents after treatment by POTWs. The Study then measures the effectiveness of government controls in dealing with these discharges, paying particular attention to federal and local pretreatment programs and categorical pretreatment standards applicable to industrial users of POTWs.

After considering all the pertinent data, EPA concluded that the Domestic Sewage Exclusion should be retained at the present time. The Study found that CWA authorities are generally the best method of controlling hazardous waste discharges to POTWs. However, the Study also found that these authorities should be more broadly and effectively employed to regulate these discharges. The Study therefore recommended ways to improve various EPA programs under the CWA to obtain better control of hazardous wastes entering POTWs. In addition, the Study recommended research efforts to fill certain information gaps, and indicated that other statutes (such as RCRA and the Clean Air Act) should be considered along with the CWA to control hazardous waste dischargers and/or receiving POTWs if the recommended research indicates the presence of problems not adequately addressed by the CWA. These recommendations are discussed in Part IV below.

III. Public Participation

As stated earlier, EPA wishes to obtain through this notice suggestions and comments from the public about the best ways to deal with the problem of hazardous wastes discharged into the nation's municipal treatment plants. For this reason, the Agency is not proposing any specific regulatory amendments at this time. Some of the regulatory efforts in which EPA has been and continues to be engaged under the CWA are related directly to the recommendations of the Study. Where relevant, these efforts are described below. Generally, however, EPA is today presenting a range of new ideas that could be starting points for specific future regulatory proposals that, when implemented, would improve control of hazardous wastes discharged to POTWs. EPA invites comment on these ideas and actively solicits comments and suggestions on any other alternative methods of dealing with the problems discussed by the Study.

Besides inviting comments on the merits of all approaches, the Agency also requests comments on the resource implications of all alternative suggestions, since such implications must be taken into account when EPA selects options for formal proposals and final rulemakings.

The Agency believes that wide public participation is essential to help EPA select the best choices among all available options. To this end, the Agency has announced in a separate **Federal Register** notice three public meetings to be held after today's ANPR is published (51 FR 29499, August 18, 1986). The meetings will take place as follows:

Hall of States, Skyline Inn, 10 I St. SW, Washington, D.C. 20024—9:30 a.m., September 11, 1986

Grand Ballroom North, Sheraton International at O'Hare, 6810 North Mannheim Road, Rosemont, Illinois 60018—9:30 a.m., September 17, 1986

Continental Parlor, San Francisco Hilton and Tower, 333 O'Farrell Street, San Francisco, California 94102—10:00 a.m., September 18, 1986

Each meeting will last for approximately four hours. All interested persons are invited to attend.

In addition to holding public meetings and evaluating comments received in response to today's notice, the Agency plans to consult interested groups and organizations (including environmental groups, industry trade associations, and State and local pollution control authorities) to obtain the benefit of their advice and expertise. EPA will then publish formal proposals, followed by promulgation of final rules.

IV. Recommendations of the Domestic Sewage Study and Preliminary Approaches Toward Their Implementation

The Study summarizes its recommendations for improvement of EPA programs as follows:

- Improvements can be made to federal categorical standards and local pretreatment controls to enhance control of hazardous wastes discharged to sewers;
- EPA should emphasize improvement of controls on hazardous wastes through ongoing implementation of water programs, including enforcement, sludge management, and water quality programs;
- Additional research is necessary on the sources and quantities of hazardous wastes, their fate and effects in POTW systems and the environment, and the design of any additional regulatory controls that might be necessary;
- RCRA, CERCLA, and the CAA should be considered along with the CWA to control hazardous waste discharges and/or receiving POTWs if the recommended research indicates the presence of problems.

The specific recommendations of the Study are discussed in more detail below. The Agency's planned approaches to implementing these recommendations are also described. In each case, comments are invited and any other new ideas are requested and welcomed.

A. General Pretreatment Program

1. General and Specific Prohibited Discharge Standards

As part of its evaluation of the national pretreatment program, the Study recommended modifying the prohibited discharge standards of the general pretreatment regulations to improve control of characteristic hazardous wastes and solvents.

The prohibited discharge standards forbid certain types of discharges to POTWs from all industrial users (including those not regulated by categorical pretreatment standards). The general prohibitions (40 CFR 403.5(a)) forbid discharges which pass through the POTW or interfere with its operation or performance. The specific prohibitions (40 CFR 403.5(b)) currently forbid the discharge of specific types of materials which can harm POTW collection and treatment systems. These are:

- Pollutants which create a fire or explosion hazard;
- Pollutants which cause corrosive damage;
- Pollutants which cause obstruction to flow within a POTW;
- Any pollutants discharged in concentrations or flow rates which cause interference with a POTW;
- Heat which inhibits POTW biological activity.

With respect to the specific discharge prohibitions, the Study suggested ways that EPA might amend these prohibitions to improve the control of hazardous wastes. In particular, the Study discussed expanding the list of specific prohibitions to include certain characteristics of hazardous wastes under RCRA (i.e., wastes that are deemed hazardous if they possess certain characteristics). These characteristics of hazardous wastes are ignitability, corrosivity, reactivity, and Extraction Procedure (EP) toxicity.

The existing specific prohibition against pollutants which create a danger of fires and explosions could possibly be used to control discharges of certain RCRA characteristic wastes, particularly ignitable and reactive wastes. However, the current wording of the pretreatment prohibitions is general in nature and may not be fully effective in preventing the discharge of wastes exhibiting these characteristics.

With respect to the EP toxicity characteristic, the Agency will soon propose a rule to expand this characteristic under RCRA to include 38 additional organic chemicals and an improved leaching test (the Toxicity Characteristic Leaching Procedure, or TCLP). The new test method allows better evaluation of organic pollutants (including volatiles), provides enhanced precision and accuracy, solves several operational problems associated with the EP protocol, and models effects of leaching the constituents into the environment. However, there is some question about whether these test procedures are appropriate for determining whether particular pollutants are likely to cause pass through and interference. Materials may be subsequently diluted when mixed with large amounts of domestic sewage, and POTWs are capable of removing many such materials even in small amounts.

EPA believes that the current specific discharge prohibitions for characteristic wastes are probably adequate to control hazardous wastes which exhibit the corrosion characteristic as defined under RCRA. Further, as described above, a specific discharge prohibition against wastes exhibiting the EP toxicity characteristic may be neither appropriate nor necessary. The reactivity and ignitability characteristics may be appropriate additions to the specific discharge prohibitions under the CWA pretreatment program, and EPA currently plans to propose to add these characteristics to 40 CFR 403.5(b). EPA solicits comments on whether to modify the specific prohibitions to include some or all characteristics of hazardous wastes under RCRA. (Comments on the TCLP procedure not related to the specific prohibitions should be submitted in the context of that rulemaking.)

Alternatively, or perhaps in conjunction with this approach, the Agency could prohibit (absolutely or conditionally) the discharge to POTWs of some or all constituents of hazardous waste identified in Appendix VIII of 40 CFR Part 261. Some or all listed hazardous wastes (see 40 CFR 261.31-33) could be prohibited as well. The Agency currently believes that listed hazardous wastes and constituents of hazardous wastes may often be appropriately addressed through local limits. While generally applicable discharge prohibitions may be appropriate for some wastes, constituents or classes of constituents found to cause pass through or interference, EPA does not now plan to develop general or specific discharge prohibitions for all hazardous wastes. Nevertheless, the Agency would like to receive comments on this method of implementing the recommendations of the Study.

With respect to the general prohibitions against pass through and interference (40 CFR 403.5(a)), the Agency solicits comments on whether or how to reconsider the notion of which activities should constitute violations of these prohibitions. The definitions of pass through and interference (40 CFR 403.3 (i) and (n), currently suspended) were proposed on June 19, 1985 at 50 FR 25526. Under these proposed definitions, interference occurs when an industrial user's discharge (alone or in conjunction with other sources) causes a violation of the POTW's NPDES permit or prevents sewage sludge use or disposal by the POTW in accordance with applicable laws. Similarly, pass through occurs when pollutants discharged by an industrial user (alone or in conjunction with other sources) pass through the POTW into navigable waters in quantities or concentrations that, alone or in conjunction with other sources, cause a violation of the POTW's NPDES permit. POTWs are required to establish needed local limits to prevent pass through and interference.

The Study suggested that these definitions are not fully effective in cases where hazardous wastes, though potentially harmful, do not actually

cause a violation of the POTW's NPDES permit or applicable sludge requirements. For example, it is possible for hazardous wastes discharged by an industrial user to impair plant efficiency (producing toxicity or sludge problems) without actually causing the POTW to violate its permit or applicable sludge requirements. The addition of the hazardous waste may also produce toxicity without impairing the plant's treatment efficiency for the pollutants limited in the permit. Likewise, the prohibition against pass through may not be effective in regulating hazardous wastes if water quality-based effluent limitations for toxic pollutants or total toxicity have not been specifically incorporated in the POTW's permit. In that case a permit violation would not occur regardless of the rate of discharge.

The Agency has encountered considerable difficulty in promulgating definitions of pass through and interference that are acceptable to members of the regulated community and that can withstand legal challenge (for a history of the relevent rulemakings and a discussion of the issues raised in litigation, see the preamble of the above-referenced **Federal Register** notice published on June 19, 1985). Nevertheless, EPA solicits useful comments on how these definitions might be amended in a way that strengthens control of hazardous waste discharges while at the same time giving adequate notice to industrial users of their potential responsibilities. One possible approach that the Agency is actively considering is to retain the current definitions of pass through and interference for enforcement purposes, but to require local limits development for pollutants of concern even if no POTW permit violation occurs or is threatened.

A second way to implement the prohibitions against pass through and interference is to move aggressively to set toxicity-based limits in NPDES permits issued to POTWs. Since findings of pass through and interference depend, by EPA's regulatory definition, on a violation of the POTW's NPDES permit, permit limits developed to protect against toxicity or based on toxicity testing would help POTWs develop local limits designed to avoid such violations. EPA has found that the effluents from many POTWs exhibit toxicity, so testing for compliance with toxicity-based limits should often serve as a reliable measure of whether pass through or interference has occurred. Expanding the use of toxicity-based permit limits is one of the Agency's principal goals, and EPA is currently emphasizing this concern in its quality reviews of NPDES State permit programs (for a more detailed discussion of this issue, see Part IV–C–1 below).

A related way to implement these prohibitions is to require that water-quality based permit limits for POTWs be established for additional constituents of hazardous waste likely to cause pass through or interference. These limits, when violated, would serve as a basis for determining instances of pass through or interference and for developing local limits designed to avoid such pass through and interference. Although EPA believes that this method would be more difficult to implement and would prefer to implement the prohibitions by amending the definitions of pass through and interference and by generally expanding the use of toxicity-based permit limits, the Agency nevertheless solicits comments on which constituents (if any) would be appropriate for additional permit limits.

2. Improvement of Controls on Spills and Batch Discharges, Illegal Discharges, and Discharges by Liquid Waste Haulers

Spills and batch discharges, as well as illegal discharges and discharges by liquid waste haulers, present special control and operational challenges to POTWs. Responses to an informal EPA questionnaire submitted by members of the Association of Metropolitan Sewerage Authorities (AMSA) indicated that spills and batch discharges to sewage treatment plants are frequent occurrences. As documented by POTW incidents data, these discharges cause many problems at the treatment plant, including worker illness, actual or threatened explosion, biological upset/inhibition, toxic fumes, corrosion, and contamination of sludge and receiving waters. Although some POTWs have adopted spill control measures, others are poorly prepared to cope with spills and batch discharges of hazardous wastes from industries.

Likewise, many respondents in the AMSA survey indicated concern about discharges from liquid waste haulers (legal and illegal) and "midnight dumpers" who utilize public sewers for illegal waste disposal. To address these problems, the Study recommended strengthening pretreatment regulatory and program controls.

The current general pretreatment regulations do not address these problems comprehensively, although present procedures may minimize some of the risks associated with these sources. The principal pretreatment regulation concerning spills is the requirement that all industrial users notify POTWs of slug loads of pollutant discharges that, because of volume or concentration, will interfere with or pass through the POTW (40 CFR 403.12). The Agency recently proposed to expand this requirement to include notification of slug loads that would violate any of the specific prohibitions of 40 CFR 403.5(b) (see 51 FR 21454, June 12, 1986).

Several options are available to strengthen the general pretreatment regulations to deal with these problems. For example, the pretreatment regulations might also be amended to require all industrial users to undertake preventive measures and institute follow-up on spill incidents. Alternatively, or in addition, the Agency could amend the regulations to require that POTWs develop their own enforceable plans for accidental spill prevention and control. Many POTWs already have such plans, and EPA believes that they hold promise in giving POTWs better control of hazardous wastes entering their treatment and collection systems. EPA's Region X has adopted this approach, and reports that it has been successful.

With respect to discharges from liquid waste haulers, these are subject to the same categorical standards, general and specific prohibitions, and local limits presently in effect for any industrial user. In addition, POTWs that receive RCRA hazardous wastes by truck, rail, or dedicated pipe are not covered by the Domestic Sewage Exclusion of RCRA, and are therefore subject to regulation under the RCRA permit-by-rule (40 CFR 270.60(c)), which includes a requirement that POTWs take corrective action for releases at their own solid waste management units.

One way to strengthen the present controls on discharges from liquid waste haulers would be to amend the general pretreatment regulations to require POTWs to develop and obtain EPA approval of procedures (in addition to those presently required under RCRA) for dealing with trucked-in wastes (whether trucked to the POTW headworks or to the sewer). These procedures could include manifesting, monitoring, and sampling requirements. Another method would be to amend the regulations to ban the introduction of hazardous wastes or constituents of hazardous wastes to sewer systems by truck except at specific points designated by the POTW (in addition to the RCRA requirements already applicable to generators or transporters of hazardous wastes).

EPA believes that each of these options would help improve controls on

spills and batch discharges and discharges by liquid waste haulers, and now plans to propose regulations along the lines described above. The Agency solicits comments or information on the number and types of local programs which already have measures in place to deal with such problems, and requests alternative suggestions on ways to address these concerns.

A related recommendation of the Study was that EPA assess the incidence and effects of "midnight dumping" into sewers. Part of the Agency's follow-up effort on the Study consists of consulting groups such as state and local water pollution control agencies and AMSA who will be able to help EPA review the incidence of illegal discharges of hazardous wastes to sewers. In this way, the Agency hopes to learn more about the number and significance of these discharges to determine whether it needs to develop a more effective program for their control. At present, it is unclear whether more regulatory requirements would be useful, or whether an aggressive policy of monitoring and enforcement is the only effective way to deal with these illegal actions. The Agency invites comment on this question.

In the meantime, EPA is continuing its criminal enforcement effort against these and other violators of the Clean Water Act. Investigators from the EPA National Enforcement Investigations Center's Office of Criminal Investigation continue to follow leads and gather evidence against illegal dischargers. If evidence exists that a crime has been committed, the case is referred first to EPA's Office of Criminal Enforcement and then, if warranted, to the Department of Justice or the appropriate U.S. Attorney's Office. Since 1983, several prosecutions have been initiated for willful illegal discharges into sewers or POTWs, all of which have resulted in convictions and substantial fines. The Agency will vigorously continue this effort to deter similar potential violators.

3. Notification Requirements

Proper notification to POTWs of hazardous waste discharges is essential to the control of such wastes. Without workable notification requirements, any further attempt to regulate hazardous constituents discharged to POTWs is difficult if not impossible.

Section 3010(a) of RCRA requires that any person who generates or transports a RCRA hazardous waste, or who owns or operates a facility for the treatment, storage, or disposal of such waste, must file a notification with EPA or with a State with an authorized hazardous waste permit program. Section 3018(d) of RCRA (enacted as part of the HSWA in 1984) clarifies that wastes mixed with domestic sewage are also subject to this notification requirement.

The Agency has not yet promulgated regulations to implement the Section 3018(d) notification requirements. The Study recommended that these requirements be implemented to ensure that regulatory authorities were aware of discharges of hazardous wastes to POTWs. EPA presently plans to amend the general pretreatment regulations to require that industrial users notify their POTW (rather than EPA or the State) of any constituents of hazardous wastes discharged. In addition, EPA has recently proposed to require industrial users to notify the POTW of certain changes in their discharges (see 51 FR 21454, June 12, 1986). The Agency solicits comments on these and other ways to improve notification requirements (including amendments to the RCRA regulations) to give POTWs greater control of hazardous constituents entering their treatment and collection systems.

4. Enforcement of Categorical Standards

The Study recommended that EPA implement stringent enforcement of categorical pretreatment standards. Such enforcement would cause a significant reduction of pollutant loadings to POTWs, particularly of heavy metals. More stringent enforcement of the standards was also recommended recently by the Pretreatment Implementation Review Task Force (PIRT) which last year gave the Agency recommendations for improving the national pretreatment program.

A series of audits performed by EPA of pretreatment programs at many municipalities has revealed that there is considerable room for improvement in compliance by industry with the categorical standards. One way to address the problem is through the relevant PIRT recommendations. In accordance with those recommendations, EPA has prepared guidance on compliance monitoring and enforcement for POTWs. This guidance will help POTWs set priorities for their local enforcement programs by providing definitions of "significant" industrial users and "significant" noncompliance. The guidance will also recommend monitoring frequencies for industrial users and provide guidance on the semi-annual reports required of industrial users.

The Agency is also conducting audits of all approved local pretreatment programs over a five-year period, as well as conducting pretreatment compliance inspections at POTWs once a year. EPA Regions and States will ensure that compliance is achieved by reviewing annual reports, conducting audits and inspections, ensuring public notice of violations, and, where appropriate, enforcing against industrial users. EPA has already filed many enforcement actions against violations of the pretreatment standards. However, the Agency's enforcement efforts are only one portion of the total effort envisioned by Congress. Improved POTW pretreatment programs are essential to the implementation and enforcement of pretreatment requirements.

The Agency will provide assistance and advice to POTWs experiencing difficulty in the early stages of local pretreatment program implementation. To this end, EPA plans to develop guidance on what constitutes proper implementation of a local program. The guidance would indicate the circumstances under which EPA would take action against a POTW for unacceptable performance. In addition, EPA Regions and States will establish an inventory of industrial users in areas where there is no local program and will establish control mechanisms for these users, as well as initiating enforcement actions where necessary.

EPA also intends to complete existing enforcement cases against any POTWs with unapproved local programs and will initiate new enforcement actions against POTWs that fail to implement approved programs.

The Agency has also recently proposed amendments to the general pretreatment regulations which would clarify and expand the requirements applicable to industrial users for self-monitoring (see 51 FR 21454, June 12, 1986). These amendments will help both POTWs and industrial users to become aware if categorical standards have been violated and to take the appropriate remedial or enforcement measures.

Industrial users must currently submit to the Control Authority (i.e., the POTW, the State, or EPA) a baseline monitoring report containing basic information on the user's discharge and compliance status (this report must be submitted within 180 days after the effective date of the applicable categorical standard). Industrial users must also submit a preliminary report on compliance with categorical pretreatment standards (to be submitted within 90 days of the deadline for compliance with the applicable standard) and subsequent periodic reports on compliance with the standards (to be submitted twice

yearly). The proposed amendments would clarify that the periodic compliance reports must be based on an appropriate amount of sampling and analysis (to be determined by the POTW) performed during the reporting period. The amendments also propose to require that industrial users report the results of sampling and analysis if these results indicate that a violation has occurred (this report must be submitted within three weeks of the apparent violation). The proposed amendments would further require industrial users to inform the Control Authority of any substantial changes in the volume or character of pollutants in the user's discharge. However, they would clarify that the Control Authority may elect to conduct its own monitoring program in lieu of relying solely on self-monitoring by its industrial users. Finally, the proposed amendments require the Control Authority to impose appropriate reporting requirements for pollutants not regulated by categorical standards.

EPA believes that these proposed changes, when promulgated, will substantially improve POTWs' ability to enforce compliance with categorical pretreatment standards. The Agency solicits comments on any additional ways to ensure that these standards are enforced to the fullest extent possible.

5. Local Limits

The Study recommended that local limits be improved and fully implemented at POTWs to control discharges of organic pollutants and other hazardous wastes.

Under the general pretreatment regulations (40 CFR 403.5(c)), POTWs administering local pretreatment programs must develop and enforce local limits to implement the general and specific prohibitions discussed above. All other POTWs must develop specific effluent limits if pollutants contributed by industrial users have resulted in instances of pass through or interference that are likely to recur.

Local limit-setting offers high potential for improved control of hazardous waste discharges. Efforts by POTWs to establish local limits have been successful in the case of toxic metals (cadmium, chromium, copper, lead, nickel, and zinc) which are frequently found in the sludges, the effluent, and the influent at POTWs. In August 1985, EPA Headquarters issued interpretive guidance to EPA Regions and States that clarified EPA's minimum local limits requirements for POTWs, especially the requirements for local limits on the metals mentioned above. Additional technical guidance is available in EPA's *Guidance Manual for Pretreatment Program Development* (October 1983).

Nevertheless, much work remains to be done to develop local limits for other hazardous constituents, especially organic solvents and other organic constituents. It is particularly important that these limits be derived from a sound technical analysis of interference and pass through concerns, so that the requirements of the CWA prohibiting interference and pass through will be more readily enforceable through specific, verifiable numeric effluent limits.

Issuing guidance in certain areas might be useful in helping POTWs to develop effective and enforceable local limits. For example, the Agency could issue guidance on limit-setting methodologies that emphasize pass through or interference concerns, although this is a technically difficult problem which may be best approached by issuing guidance in several steps, beginning with those constituents that are best understood. Likewise, the Agency could provide guidance and information on available technologies for use by POTWs in setting limits based on best professional judgment. EPA is now preparing such guidance, which will include advice on the use of toxicity testing to help POTWs set priorities for local limits by identifying discharges of particular concern.

In addition, the Agency might consider amending the general pretreatment regulations to require POTWs to use a permit system as the basis of their pretreatment programs, unless the POTW could demonstrate an adequate alternative approach. Such a system would involve a written document such as a permit that would reflect a binding agreement between the POTW and the industrial user concerning effluent limitations and monitoring frequency. Such a document, besides being a useful enforcement tool, could serve as a convenient mechanism for POTWs to develop local limits applicable to all industrial users. Although the Agency has not heretofore required POTWs to adopt such an approach, it is possible that many pretreatment programs would benefit from it.

As mentioned above, EPA also intends to propose modifying the regulations relating to pass through and interference to require that local limits be established for hazardous constituents in the absence of NPDES permit limits for these pollutants (for a further discussion of this issue, see Part IV.A.1 above).

EPA solicits comments on these and other ways to help POTWs set specific limits to control hazardous constituents.

B. Categorical Pretreatment Standards

One of the main recommendations of the Study was that EPA review and amend categorical pretreatment standards to achieve better control of the constituents of hazardous wastes. The Study recommended that the Agency modify existing standards to improve control of organic priority pollutants and non-priority pollutants, and that EPA promulgate categorical standards for industrial categories not included in the Natural Resources Defense Council consent decree (*NRDC v. Train*, 8 ERC 2120, D.C.C. 1976). As part of the effort of developing new categorical standards and amending existing standards, the Study also recommended that the Agency evaluate sources of solvents listed as hazardous wastes under RCRA that are discharged to POTWs and develop sampling and analytical protocols for nonpriority pollutants. In addition, the Study recommended that EPA consider including selected RCRA constituents on the CWA priority pollutant list, or adopting an equivalent approach for regulating these constituents.

Categorical pretreatment standards are an important means of reducing toxic loadings to the nation's sewers. EPA has made considerable progress in promulgating these national standards. Currently, categorical pretreatment standards for existing sources which include discharge limits for toxic pollutants apply to 23 specific industrial categories. The Study estimated that roughly 14,000 indirect dischargers are subject to categorical pretreatment standards, including such major contributors of industrial wastes as metal finishers, manufacturers of pesticides, and iron and steel manufacturers. Full compliance with the standards will result in a significant reduction in toxic loadings to POTWs.

The effluent guidelines rulemakings for these standards have concentrated on the control of the 126 compounds on the CWA priority pollutant list. Because heavy metals (e.g., lead, cadmium, nickel) are well represented on this list, the Study found that full compliance with existing categorical standards should significantly reduce loadings to POTWs of metal constituents such as those discharged by the metal finishing, battery manufacturing leather tanning and inorganic chemicals industries.

However, the Study predicted that implementing the standards would not reduce loadings of organic pollutants to

the same extent. The Study found that significant organics sources (e.g., pharmaceutical manufacturers, laundries, equipment manufacturing, wood refinishing, petroleum refining) are largely unregulated for these pollutants under existing categorical pretreatment standards.

Moreover, by authority of paragraph 8 of the NRDC consent decree, EPA determined that national categorical standards for all or part of twelve other industrial categories (including paint formulation, printing and publishing, and auto and other industrial laundries) were not necessary. Sources in these categories are still subject to the prohibited discharge standards of the general pretreatment regulations and may also be specifically regulated by local POTW ordinances, including local limits.

After considering the scope of the NRDC consent decree and the extent of paragraph 8 exemptions, the Study found that potential industrial sources of hazardous waste discharges to POTWs may not be sufficiently regulated by categorical standards. These unregulated sources include emerging industries (e.g., hazardous waste treatment and solvent and oil recovery) that are not addressed in the consent decree, and service-oriented industries (such as industrial laundries and hospitals) that tend to discharge smaller quantities of toxic pollutants on a facility-specific basis.

In addition, EPA has identified three other unregulated industrial categories as potential candidates for regulatory action to control discharges of toxic and hazardous pollutants. These are ferroalloy manufacturing, hot dip coating, and textiles.

In response to the recommendations of the Study, EPA has begun to collect additional data from twelve regulated and unregulated industries to determine which warrant national regulation. The unregulated industries are hazardous waste treaters (including centralized waste treaters), solvent reclaimers, barrel reclaimers, waste oil reclaimers, equipment manufacturers and rebuilders, paint manufacturers, transportation, industrial laundries, and hospitals. The regulated industries are textiles, timber, and pharmaceuticals. The data collection efforts consist of workplan development, characterization of the industry, sampling and analysis, wastestream characterization, determination of wastewater treatability, and environmental impact analyses. Wastestream sampling and analysis will be initiated for most of the twelve industries in FY 1986. Wastewater and sludges from five municipal wastewater treatment facilities will also be collected and analyzed.

The Agency will use the information collected through these efforts to develop decision documents, which will eventually be published for all the industries discussed above (beginning with hazardous waste treaters, solvent reclaimers, and pharmaceuticals in FY 1987). These decision documents will provide a technical basis to determine whether a regulation should be developed for a particular industry, and will also serve as a summary of information to be used by permit writers and POTWs in controlling hazardous wastes until final rules are published.

In response to the Study's recommendations concerning evaluation of solvents and development of sampling and analytical protocols, EPA has already begun to develop analytical techniques for the measurement of hazardous waste constituents, using Gas Chromatography/Mass Spectroscopy methods with new extraction procedures, standards for new compounds, new response time information, and spectra identification information. The Agency will use these techniques to evaluate industrial wastewaters for the presence of heretofore unmeasured pollutants in these wastewaters, including hazardous constituents which are also non-priority pollutants under the CWA. As part of this effort, EPA will be analyzing industrial and municipal wastewaters for over 350 chemicals in 1986.

EPA solicits comments on these and other ways to improve categorical pretreatment standards to achieve better control of hazardous constituents discharged to POTWs.

C. Water Quality Issues and Sludge Control

1. Issuance of Water Quality Criteria; Water Quality-Based Permitting

The Study recommended that EPA develop additional water quality criteria for constituents of RCRA hazardous waste, particularly pollutants that are not listed as priority pollutants under the CWA. The Study further recommended that the Agency expand the use of biomonitoring techniques and water quality-based permitting to improve protection of receiving waters. Expedited issuance of water quality standards was also recommended by PIRT.

Under section 303 of the CWA, water quality standards are developed by States, based either on federal water quality criteria or site specifically-derived criteria. The standards are meant to protect certain uses for receiving waters, such as fishing, swimming, water supply, or industrial use. Using wasteload allocation techniques, these water quality-based pollutant standards, in turn, are translated into effluent limits needed to protect water quality and designated uses pursuant to sections 301 and 302 of the CWA. The standards are also used by POTWs in developing local limits for industrial users to prevent pass through of pollutants which would cause a violation of the water quality-based limits of the POTW's NPDES permit (see 40 CFR 403.3(n), currently suspended). Guidance on the application of water quality criteria and standards and on general water quality-based toxics control is available in the Agency's *Technical Support Document for Water Quality-Based Toxics Control* (September, 1985).

The Agency has published water quality criteria documents for many organic pollutants, including some hazardous constituents evaluated in the Study. These pollutants include benzene, chlorinated benzenes, phenols, and toluene (for copies of the complete documents for individual pollutants, contact the National Technical Information Service [NTIS], 5285 Port Royal Road, Springfield, Virginia 22161). The Agency is presently developing criteria for some additional RCRA constituents (particularly organic pollutants, including solvents) which will help States to implement more water quality standards.

In addition, the Agency is conducting other activities to improve receiving water quality as part of its third round permits strategy. For example, every State and territory now has a water quality standard requiring that discharges must be free from toxic pollutants in toxic amounts. Using the chemical-specific and biological approaches presented in the *Technical Support Document*, EPA plans to encourage permitting authorities to implement these "free from" water quality standards more aggressively in permits to help ensure that hazardous constituents are not discharged from POTWs in toxic amounts. As part of this effort, EPA has begun working with the States to develop a list of waters for which technology-based requirements are not sufficient to protect water quality standards. The Agency's target is for States to develop needed water quality-based controls for twenty percent or more of the waters on the list by September 1987.

The Agency also plans to prepare a methodology for screening chemicals

not specifically covered by regulations promulgated by EPA to date under the Clean Water Act. This methodology would include scientific analysis of the particular chemical, review of toxicity information and ambient levels, treatability analysis, determination of whether the chemical is likely to be removed by technology-based treatment, and a decision about the need for a water quality criterion. Completing and implementing this methodology will continue over several years.

The Agency solicits suggestions on these and other ways to improve the state of water quality-based programs.

2. Sludge Criteria for RCRA Hazardous Wastes; Criteria for the Use and Disposal of Sewage Sludge

The Study recommended that EPA develop sewage sludge criteria for RCRA hazardous constituents, as well as criteria for the use and disposal of sewage sludge. These criteria will help POTWs set local limits to prevent interference with their sludge disposal options (see 40 CFR Part 403.3(i), currently suspended). PIRT also recommended that sludge management and disposal requirements be developed as soon as possible.

Section 405 of the CWA requires EPA to develop regulations providing guidelines for the use and disposal of municipal sludge. These regulations must identify sludge use and disposal options, specify factors to be considered in determining the practices applicable to each option, and identify concentrations of pollutants that interfere with each option. To date, regulations defining acceptable land disposal practices (40 CFR Part 257) have been promulgated under the joint authority of section 405 of the CWA and Subtitle D of RCRA which establish general requirements for the landfilling and land application of sludge and set maximum contaminant levels for cadmium and polychlorinated biphenyls (PCBs). Other laws, such as the Clean Air Act (CAA), RCRA Subtitle C, and the Toxic Substances Control Act (TSCA) also govern municipal sludge use or disposal, depending on the disposal option employed or the constituents and their levels present in the sludge.

EPA is currently preparing comprehensive sludge management regulations under the authority of section 405 of the CWA. This initiative has two parts. The first is programmatic: regulations have been proposed (February 4, 1986; 51 FR 4458) which delineate the roles of Federal and State governments in sludge management and which set forth the minimum criteria for state sludge management programs. The second part is technical: the Agency plans to propose and promulgate in two phases (the first phase is due to be promulgated in 1987) technical regulations addressing certain constituents in sludges managed by different practices (distribution and marketing, ocean dumping, landfilling, land application, and incineration). As a first step towards promulgating the technical sludge criteria, EPA has already developed a list of approximately 41 pollutants to be considered for regulation, many of which are RCRA constituents. The Agency plans to continue research on additional constituents of hazardous waste to be included in the second phase criteria. Promulgating these technical regulations for the use and disposal of sewage sludge should alleviate sludge management problems occasioned by the discharge of hazardous constituents to POTWs.

The Agency solicits comments on these and other ways to improve the quality and management of municipal sewage sludge. Comments concerning the specific proposed rules on state program requirements and technical criteria should be submitted in the context of those rulemakings.

D. Research and Data Collection

In addition to recommending regulatory and program changes to improve control of hazardous constituents, the Study recommended certain research and data collection efforts to fill information gaps on the sources and quantities of hazardous wastes and their fates and effects in POTW systems and the environment. The results of these efforts can then be used to design any additional controls which might prove necessary. If the recommended research indicates the presence of problems, RCRA, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Clean Air Act (CAA) may be considered along with the CWA to control hazardous constituents and/or receiving POTWs.

EPA has already begun two of the research efforts recommended by the Study (development and refinement of sampling and analytical protocols for non-priority pollutants, and evaluation of RCRA solvents discharged to POTWs) as part of the process of modifying the categorical pretreatment standards as discussed above. Another research effort (assessment of midnight dumping into sewers) is discussed in Part IV-A-2 above. The remaining recommendations of the Study concerning research and data collection are discussed below.

1. General Pollutant Fate and Effects

The Study recommended that the Agency continue research on pollutant fate within POTW collection and treatment systems, including examination of the effects of biological acclimation on POTW removal efficiencies and pollutant fate. The Study also recommended continued research concerning the effects on human health and the environment of the discharge of hazardous wastes to POTWs.

The Study identified four significant pollutant fates within POTW treatment systems: air stripping, adsorption to sludge, biodegradation, and pass through to receiving waters. The first three of these constitute "removal" of pollutants from wastewaters; however, air stripping and adsorption do not necessarily destroy the pollutant and may result in adverse environmental impacts. Based on laboratory studies, the Study estimated that 92 percent of the pollutants identified in the Study are removed by a fully *acclimated* biological treatment system before discharge to surface waters. Assuming an *unacclimated* biological treatment system at a POTW, an estimated 82 percent of the pollutants identified in the Study are removed before discharge to surface waters. Of course, the actual removals at any site will depend upon the quality of the influent and can vary from little removal to substantial removal. In addition, as indicated by these projections, the degree of biological acclimation in POTW treatment units may significantly affect POTW removal efficiencies. The Agency needs additional information on wastewater discharge patterns and biological acclimation rates at POTWs before it can determine the importance of the individual fate mechanisms and the potential for adverse environmental impacts.

As an additional caveat, the Study also found that significant effects on water quality and sludge are caused as much by toxicity and other characteristics of the pollutants discharged, as by the mere quantities of these pollutants entering the environment. Water quality analyses and bioassays conducted by EPA's Office of Research and Development, EPA Regions, and States indicate that POTW effluent discharges frequently exhibit adverse water quality impacts when measured in terms of toxicity. The results of these studies depend on the particular methodology used and the

circumstances present at each site. There is no general study on the fate and effects of hazardous constituents discharged to POTWs. Therefore, research should be continued to learn more about the causes of toxicity, including hazardous constituents and non-priority pollutants.

EPA intends to continue its research on the fates and effects of hazardous wastes discharged to POTWs. In the meantime, the Agency solicits comments on these and other ways to improve its knowledge in this area.

2. Air Emissions

The Study recommended collecting data on emissions of volatile organic compounds (VOCs) and other potentially toxic air pollutants from POTWs, as well as developing and refining techniques for monitoring air releases at POTWs.

Air emissions from POTWs may emanate from collection and treatment systems in several ways. Organic compounds contained in the discharges from industrial users may volatilize both en route to the POTW and at the POTW itself. These pollutants are emitted as gases to both the ambient air and the workplace (POTW) environment. In addition, the incineration of sewage sludge may emit to the ambient air hazardous constituents (especially VOCs and metals) which have been adsorbed to the sludge during treatment. Both volatilization and incineration may affect worker health and safety and ambient air quality. Worker health and safety might be affected by the increased potential for explosions due to volatile constituents in the wastestream, and by acute and chronic health effects due to contact with volatilized pollutants.

With respect to ambient air quality, EPA estimates that at least 12 million kilograms per year of VOCs are emitted by POTWs to ambient air. POTW emission of VOCs is predicted by mathematical models and has been confirmed by EPA through ambient monitoring at Philadelphia, Pennsylvania as well as in laboratory tests. However, a more thorough evaluation of the health effects of these and other volatile pollutants is hampered substantially by difficulties in measuring emissions from POTWs, limited understanding of pollutant fate in ambient air, lack of exposure assessments, and lack of human health criteria for exposure to toxics in the ambient air environment. In addition, more information is needed on the effect of incineration of contaminated municipal sludges on air quality. To this end, the Agency is preparing a risk assessment methodology which will improve its knowledge of the environmental impacts of sludge incineration.

The Study recommended that EPA conduct further study of air emissions from POTWs before developing regulatory or other strategies to deal with the problems. Strengthening the general pretreatment program as discussed in Parts A and B below should result in improvement of the quality of such emissions. In addition (depending on the results of the recommended research), the Agency may consider expanding the regulation of VOCs under the CAA. For example, emission limits might be established for VOCs from sewers and POTWs (on a State-by-State basis using State Implementation Plans or by means of permits for non-attainment areas) in order to meet the National Ambient Air Quality Standards established under section 109 of the CAA. In addition, the National Emissions Standards for Hazardous Air Pollutants (NESHAPS) under section 112 of the CAA might also be used to control air releases of hazardous wastes. Section 112 of the CAA also provides for imposition of management practices that could be employed to keep volatile materials out of the system before they can pose a problem.

Alternatively, EPA might consider regulating air emissions from POTWs receiving hazardous wastes under section 3004(n) of RCRA, which requires the Agency to promulgate regulations for the monitoring and control of air emissions at RCRA treatment, storage, and disposal facilities (TSDFs). Such an action would require modifying the Domestic Sewage Exclusion. Other possible RCRA regulatory mechanisms for the control of air emissions are section 3004(m), which requires EPA to promulgate treatment standards for wastes subject to the land disposal ban, and section 3005(c), which enables the Agency to add site-specific conditions to RCRA permits as necessary to protect human health and the environment.

EPA solicits comments on these and other ways to improve control of hazardous constituents discharged to the ambient air from POTW treatment and collection systems.

3. Groundwater Contamination

The Study recommended that EPA assess possible sources of groundwater contamination from POTWs, including exfiltration (leakage) from sewers and contamination due to leachates from landfills which handle sewage sludges.

At the present time, the Agency does not know whether leaks from POTW sewer systems have caused groundwater contamination. There are several theoretically possible pathways for the contamination of groundwater by the discharge of hazardous wastes to POTWs, including exfiltration from sewers, leaks from wastewater treatment units, land application of municipal sludge (land filling and land spreading), wastewater treatment lagoons, land treatment of municipal wastewater, and deep well injection.

Of these pathways, the Study singled out exfiltration from sewers as most deserving of further study (because of current lack of knowledge on the subject rather than because contamination from this pathway seemed likely). Municipal sludge disposal and land treatment are already regulated and under consideration for further regulation. With respect to wastewater treatment lagoons, the Agency is conducting a study under the authority of section 3018(c) of the HSWA of 1984 to determine the impact of these lagoons on groundwater contamination. This study is due to be completed in the spring of 1987. Concerning deep well injection, the Study estimated that fewer than 100 POTWs use this method of waste disposal. The Study assumed that injection would in any event produce minimal groundwater impacts because of its regulation under the Safe Drinking Water Act. Therefore, compared to other pathways to contamination discussed by the Study, exfiltration to groundwater from sewers seemed to be the most likely candidate for future research.

After study is completed on the effects (if any) of groundwater contamination resulting from hazardous constituents discharged to POTWs, the Agency will consider regulatory or program strategies to control such contamination. In the meantime, EPA solicits comments on ways to improve its knowledge about groundwater contamination caused by the discharge of hazardous wastes to POTWs.

V. Related Issues

Section 3018(a) and the Study are both concerned with the results of the Domestic Sewage Exclusion of RCRA. Since today's notice is intended by EPA to address the specific recommendations of the Study, it does not discuss all related issues concerning hazardous and other wastes received by POTWs. These peripheral issues include the interpretation of RCRA corrective action requirements, the RCRA mixture rule for the definition of hazardous waste, and the dimensions of the RCRA "permit by rule." Other issues include the application of RCRA financial

responsibility requirements (including the closure and financial assurance provisions for hazardous waste management), the disposal of wastes to POTWs from CERCLA sites, the role of quantitative risk assessment in protecting human health and the environment, and the relation of future regulatory actions to current RCRA delegation to States. EPA is now separately examining these related concerns, and plans to issue policies and propose regulatory changes as appropriate in the future.

In addition, the Agency wishes to point out that, according to the Study, approximately half of all hazardous wastes studied in four organic chemicals industries are treated and discharged directly to surface waters under National Pollutant Discharge Elimination System (NPDES) permits. Such wastes are not deemed hazardous under RCRA section 1004(27) (see 40 CFR 261.4(a)(2)). Although this ANPR addresses mainly hazardous waste disposal to POTWs, the Agency is also interested in receiving comments about the implications of this finding for the NPDES permit program.

VI. Regulatory Impact Analysis

Executive Order 12291 requires that a regulatory impact analysis (RIA) be conducted if certain criteria are met, such as an annual economic impact of a regulation totaling $100 million. Because no regulatory amendments are proposed in today's notice, EPA has not yet evaluated whether or not an RIA is necessary. When formal proposals are developed for publication, the Agency will reconsider the question of the necessity for an RIA.

VII. Regulatory Flexibility Analysis

The Regulatory Flexibility Act of 1980 (RFA) requires an analysis of any significant economic impact of proposed and final regulations on small entities. Because the Agency is proposing no regulatory amendments in today's notice, we have not developed an RFA analysis. When EPA develops formal proposals for publication pursuant to today's notice, we will reconsider whether or not to develop an RFA analysis.

VIII. Paperwork Reduction Act

Today's notice contains no formal proposals for regulatory amendments and therefore contains no information collection requirements which must be reviewed by OMB under Section 3504(h) of the Paperwork Reduction Act of 1980. These requirements will be submitted for review at the time the Agency makes a decision on proposals for publication.

Lee M. Thomas,

Administrator.

August 14, 1986.

[FR Doc. 86-18984 Filed 8-21-86; 8:45 am]

BILLING CODE 6560-50-M