Sunshine Act Meetings

Federal Register
Vol. 55, No. 142
Tuesday, July 24, 1990

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

CONSUMER PRODUCT SAFETY COMMISSION

TIME AND DATE: Wednesday, July 25, 1990, 10:00 a.m.

LOCATION: Room 556, Westwood Towers, 5401 Westbard Avenue, Bethesda, Maryland.

STATUS: Open to the Public.

MATTERS TO BE CONSIDERED: FY 92 Budget.

The Commission will consider issues related to the CPSC Budget for Fiscal Year 1992.

For a Recorded Message Containing the Latest Agenda Information, Call: 301–492–5709

CONTACT PERSON FOR ADDITIONAL INFORMATION: Sheldon D. Butts, Office of the Secretary, 5401 Westbard Ave., Bethesda, Md. 20207, 301–492–6800.

Sadye E. Dunn,

Secretary.

[FR Doc. 90–17388 Filed 7–20–90; 2:10 pm]

BILLING CODE 6355–01–M

CONSUMER PRODUCT SAFETY COMMISSION

TIME AND DATE: Thursday, July 26, 1990, See times below.

LOCATION: Room 556, Westwood Towers, 5401 Westbard Avenue, Bethesda, Maryland.

STATUS: _____

MATTERS TO BE CONSIDERED:

10:00 a.m.

Open to the Public

1. *PPPA Protocol Revisions*

The staff will brief the Commission on a draft proposal to amend the current Poison Prevention Packaging Act protocol for testing child-resistant packaging with children and adults.

2. *Crib Toy Petition, HP 89–1*

The staff will brief the Commission on petition HP 89–1 from the Consumer Federation of America and the Attorney General of New York which requests the Commission to issue a rule banning certain crib gyms, crib mobiles, and crib toys.

3. *CP 89–2, Heat Tapes Petition*

The Commission will consider petition CP 89–2 from Christian B. Stegeman and others requesting the Commission to issue a safety standard for electric heat tapes.

2:00 p.m.

Closed to the Public

4. *Compliance Status Report*

The staff will brief the Commission on the status of various compliance matters.

For a Recorded Message Containing the Latest Agenda Information, Call: 301–492–5709

CONTACT PERSON FOR ADDITIONAL INFORMATION: Sheldon D. Butts, Office of the Secretary, 5401 Westbard Ave., Bethesda, Md. 20207, 301–492–6800.

Sadye E. Dunn,

Secrtary.

[FR Doc. 90–17389 Filed 7–20–90; 2:10 pm]

BILLING CODE 6355–01–M

FEDERAL RESERVE SYSTEM BOARD OF GOVERNORS

TIME AND DATE: 11:00 a.m., Monday, July 30, 1990.

PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, N.W., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERD:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.

2. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452–3204. You may call (202) 452–3207, beginning at approximately 5 p.m. two business days before this meeting, for a recorded announcement of bank and bank holding company applications scheduled for the meeting.

Dated: July 20, 1990.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 90–17396 Filed 7–24–90; 3:34 pm]

BILLING CODE 6210–01–M

MERIT SYSTEMS PROTECTION BOARD

TIME AND DATE: 11:00 a.m., Thursday, July 26, 1990.

PLACE: Eighth Floor, 1120 Vermont Avenue, NW., Washington, DC.

STATUS: Open [A portion of the meeting may be closed subject to the recorded vote of a majority of the Board to discuss matters exempt from the provisions of the Government in the Sunshine Act under 5 U.S.C. 552b(c)(10)].

MATTERS TO BE CONSIDERED: *McAndrews* v. *Office of Personnel Management*, SE083189C0651; to hear the agency's response to the Board's order dated July 18, 1990, directing certain officials of the agency to "show cause why their salaries should not be withheld in accordance with the authority described at 5 U.S.C. 1204(a) and (e)(2)(A) (West Supp. July 1989) for the period of noncompliance" with the Board's April 23, 1990 decision and subsequent compliance orders.

CONTACT PERSON FOR ADDITIONAL INFORMATION: Robert E. Taylor, Clerk of the Board, (202) 653–7200.

Dated: July 20, 1990

Robert E. Taylor,

Clerk of the Board.

[FR Doc. 90–17397 Filed 7–20–90; 3:34 pm]

BILLING CODE 7400–01–M

NUCLEAR REGULATORY COMMISSION

DATE: Weeks of July 23, 30, August 6, and 13, 1990.

PLACE: Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.

STATUS: Open and Closed.

MATTERS TO BE CONSIDERED:

Week of July 23

Thursday, July 26

1:00 p.m.
Affirmation/Discussion and Vote (Public Meeting) (if needed)

Week of July 30—Tentative

Wednesday, August 1

10:00 a.m.
Briefing on Development of Radiation Protection Standards (Public Meeting)

Thursday, August 2

11:30 a.m.
Affirmation/Discussion and Vote (Public Meeting) (if needed)

Week of August 6—Tentative

Friday, August 10

11:30 a.m.
Affirmation/Discussion and Vote (Public Meeting) (if needed)

Week of August 13—Tentative

Thursday, August 16

8:30 a.m.
Collegial Discussion of Items of Commissioner Interest (Public Meeting)
10:00 a.m.
Briefing on Continuity of Government Program (Closed—Ex.1)
11:30 a.m.
Affirmation/Discusion and Vote (Public Meeting) (if needed)

ADDITIONAL INFORMATION: By a vote of 4–0 on July 18, the Commission determined pursuant to U.S.C. 552b(e) and § 9.107(a) of the Commission's rules that Commission business required the "Affirmation of Interim Final Rule to Amend 10 CFR Parts 30 and 35" (Public Meeting), scheduled for July 18 be held on less than one week's notice.

Note: Affirmation sessions are initially scheduled and announced to the public on a time-reserved basis. Supplementary notice is provided in accordance with the Sunshine Act as specific items are identified and added to the meeting agenda. If there is no specific subject listed for affirmation, this means that no item has as yet been identified as requiring any Commission vote on this date.

To Verify the Status of Meetings Call (Recording)—(301) 492–0292

CONTACT PERSON FOR MORE INFORMATION: William Hill (301) 402–1661.

Dated: July 19, 1990.

Andrew L. Bates,

Office of the Secretary.

[FR Doc. 90–17395 Filed 7–20–90; 3:34 pm]

BILLING CODE 7590–01–M

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

Meeting Notice

TIME AND DATE: 8:00 a.m., September 24, 1990.

PLACE: Uniformed Services University of the Health Sciences, Room D3–001, 4301 Jones Bridge Road, Bethesda, Maryland 20814–4799.

STATUS: Open—under "Government in the Sunshine Act" (5 U.S.C. 552b(e)(3)).

MATTERS TO BE CONSIDERED:

8:00 a.m. Meeting—Board of Regents

(1) Approval of Minutes—July 9, 1990; (2) Faculty Matters; (3) Report—Admissions; (4) Report—Associate Dean for Operations; (5) Report—Dean, Military Medicine Education Institute; (6) Report—Nursing School Task Force; (7) Report—President, USUHS; (8) Comments—Members, Board of Regents; (9) Comments—Chairman, Board of Regents
New Business

SCHEDULED MEETINGS: October 29, 1990.

CONTACT PERSON FOR MORE INFORMATION: Charles R. Mannix, Executive Secretary of the Board of Regents, 202/295–3028.

Dated: July 19, 1990.

Patricia H. Means,

OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 90–17292 Filed 7–19–90; 5:00 am]

BILLING CODE 3810–01–M

Federal Register

Tuesday
July 24, 1990

Part II

Environmental Protection Agency

40 CFR Parts 122 and 403
General Pretreatment and National Pollutant Discharge Elimination System Regulations; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 122 and 403

[EN-FRL-3691-7]

RIN 2040-AA99

EPA Administered Permit Programs; the National Pollutant Discharge Elimination System; General Pretreatment Regulations for Existing and New Sources; Regulations To Enhance Control of Toxic Pollutant and Hazardous Waste Discharges to Publicly Owned Treatment Works

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: On November 23, 1988 (53 FR 47632), EPA proposed to revise the General Pretreatment and National Pollutant Discharge Elimination System regulations (40 CFR parts 122 and 403) pursuant to section 3018(b) of the Resource Conservation and Recovery Act (RCRA) and sections 307(b) and 402(b)(8) of the Clean Water Act (CWA). The proposed regulations were developed in accordance with EPA's *Report to Congress on the Discharge of Hazardous Wastes to Publicly Owned Treatment Works* (EPA/530-SW-86-004, hereinafter referred to as "the Domestic Sewage Study" or "the Study"). Today the Agency is promulgating a final rule to implement many of the proposed revisions.

EPA submitted the Study to Congress in response to section 3018(a) of RCRA. This provision directed the Agency to prepare a report for Congress on wastes discharged through sewer systems to publicly owned treatment works (POTWs) that are exempt from regulation under RCRA as a result of the Domestic Sewage Exclusion. The Study examined the nature and sources of hazardous wastes discharged to POTWs, measured the effectiveness of EPA's programs in dealing with such discharges, and identified for Agency consideration a number of possible initiatives that could enhance control of hazardous wastes entering POTWs.

Today's final rule is promulgated pursuant to section 3018(b) of RCRA. This section directs the Administrator to revise existing regulations and promulgate additional regulations as are necessary to assure that hazardous wastes discharged to POTWs are adequately controlled to protect human health and the environment.

DATES: This regulation shall become effective on August 23, 1990. For purposes of judicial review, this regulation is issued at 1 p.m. on August 7, 1990.

ADDRESSES: Questions on today's rule of a technical nature should be addressed to: Marilyn Goode, Permits Division (EN-336), Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. The record for this rulemaking, including all public comments received on the proposal, is available for inspection and copying at the EPA Public Information Reference Unit, room 2402, 401 M Street SW., Washington, DC 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Marilyn Goode, Permits Division (EN-336), Environmental Protection Agency, 401 M Street SW., Washington, DC 20460 (202) 475-9526.

SUPPLEMENTARY INFORMATION:

I. Background

The regulatory changes promulgated today are intended to improve control of hazardous wastes introduced into POTWs under the Domestic Sewage Exclusion. The exclusion, established by Congress in Section 1004(27) of the Resource Conservation and Recovery Act (RCRA), provides that solid or dissolved material in domestic sewage is not solid waste as defined in RCRA. A corollary is that such material cannot be considered a hazardous waste for purposes of RCRA.

The exclusion applies to domestic sewage as well as mixtures of domestic sewage and other wastes that pass through a sewer system to a publicly-owned treatment works (POTW) for treatment (see 40 CFR 261.4(a)(1)). The exclusion thus covers industrial wastes discharged to POTW sewers containing domestic sewage, even if these wastes would be considered hazardous if disposed of by other means.

One effect of the exclusion is that industrial facilities which generate hazardous wastes and discharge such wastes to sewers containing domestic sewage are not subject to RCRA manifest requirements for the transport of those excluded wastes. However, depending on the circumstances, such industrial users may be required to comply with certain other RCRA requirements that apply to generators of hazardous wastes. Some of these requirements are: (1) Determining whether a waste is hazardous (40 CFR 262.11); (2) obtaining an EPA identification number for hazardous wastes not discharged to the sewer (40 CFR 262.12); (3) accumulation of hazardous wastes (40 CFR 262.34); (4) recordkeeping (40 CFR 262.40 (c) and (d)); and (5) reporting (40 CFR 262.43). Additional requirements will usually apply if the wastes are treated or stored prior to discharge to a POTW (see 40 CFR part 264).

Another effect of the Domestic Sewage Exclusion is that POTWs receiving mixtures of hazardous waste and domestic sewage through the sewer system are not deemed to have received hazardous wastes. Therefore, such POTWs are not required to meet the RCRA requirements of 40 CFR part 264 for treating, storing, and disposing of these wastes. However, hazardous wastes delivered directly to a POTW by truck, rail, or dedicated pipe are not covered by the Domestic Sewage

Exclusion. Industries sending their wastes to POTWs in this manner are not covered by the exclusion, and POTWs receiving these wastes are subject to regulation under the RCRA permit-by-rule (see 40 CFR 270.60(c)).

In 1984, Congress enacted the Hazardous and Solid Waste Amendments to RCRA. Section 246 of the Amendments created a new section 3018(a) of RCRA, requiring EPA to prepare:

> * * * a report to the 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, the types and quantities disposed of 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.

EPA submitted its report (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 the specific constituents of hazardous wastes (e.g., benzene, acetone, etc.) rather than estimates for hazardous wastes as they are more generally defined under RCRA (i.e., "characteristic" wastes such as ignitable or reactive wastes, or "listed" wastes such as spent solvents, electroplating baths, etc.). The Study also provided 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*, Nos. 2153–73, 75–172, 75–1698, 75–1267 (D.D.C. June 8, 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 (see Appendix A to 40 CFR part 423).

EPA was able to give estimates in the Study on the types, sources, and quantities of many hazardous constituents discharged to POTWs. The Study provided information on industrial categories ranging from large hazardous waste generators (such as the organic chemicals industry) to the smaller generators (such as laundries and motor vehicle services). The Study also examined the fate of hazardous constituents once they are discharged to POTW collection and treatment systems and discussed the potential for environmental effects resulting from the discharge of these constituents after treatment by POTWs. The Study then discussed the effectiveness of existing government controls in dealing with these discharges, particularly 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 way to control hazardous waste discharges to POTWs. However, the Study also recommended that these authorities should be employed more broadly and effectively to regulate hazardous waste discharges. The Study identified for Agency consideration a number of possible initiatives with a potential for enhancing CWA controls on hazardous wastes entering POTWs.

The legislative history of section 3018 of RCRA displays Congress' understanding that the appropriateness of the Domestic Sewage Exclusion depends largely on an effective pretreatment program under the CWA. The pretreatment program (mandated by sections 307(b) and 402(b)(8) of the CWA) provides that industrial users must pretreat pollutants discharged to POTWs to prevent the discharge of pollutants that would interfere with or pass through the treatment works, or that would be otherwise incompatible with the POTWs.

As a follow-up to the Domestic Sewage Study, section 3018(b) of RCRA requires the Administrator to revise existing regulations and to promulgate such additional regulations as are necessary to assure that hazardous wastes discharged to POTWs are adequately controlled to protect human health and the environment. These regulations are to be promulgated pursuant to subtitle C of RCRA or any other authority of the Administrator, including section 307 of the CWA.

As a first step toward promulgating the regulations called for by section 3018(b), the Agency published an Advance Notice of Proposed Rulemaking (ANPR) in the **Federal Register** on August 22, 1986 (51 FR 30166). In the ANPR, EPA made preliminary suggestions for regulatory changes, which, if promulgated, would improve the control of hazardous wastes discharged to POTWs. The Agency also held three public meetings in Washington, DC, Chicago, and San Francisco to solicit additional comments on the ANPR.

The comments received on the ANPR were summarized and discussed in a **Federal Register** notice published on June 22, 1987 (52 FR 23477). That notice also described many of the activities which EPA is carrying out to address the recommendations of the Study. Most commenters suggested ways to make the pretreatment program more effective in controlling hazardous wastes discharged to municipal wastewater treatment plants. On November 23, 1988 (53 FR 47632), the Agency proposed regulatory changes in response to the recommendations of the Study and the comments received on the ANPR.

EPA believes that today's rule will satisfy the Congressional directive in section 3018(b) of RCRA that EPA revise existing regulations and promulgate such additional regulations "as are necessary to assure that [hazardous wastes] which pass through a sewer system to a publicly owned treatment works are adequately controlled to protect human health and the environment". These rules are designed to assure POTW compliance with water quality standards, including narrative water quality standards preventing the discharge of toxic materials in toxic amounts, and to provide necessary information and regulatory tools to POTWs to address problems that are identified.

States and EPA have invested a great deal of time and resources in developing water quality standards that provide a benchmark for determining whether harmful concentrations of pollutants exist in the nation's waters. Today's rules include important new information collection requirements that will inform POTWs and NPDES permit writers of the likelihood that POTW discharges will violate water quality standards, and also provides new information and regulatory tools with respect to industrial user discharges that may be causing water quality violations through the POTW effluent.

Of particular importance to controlling hazardous waste discharges to POTWs are the following provisions of today's rule. First, under revisions to 40 CFR part 122, POTWs meeting specified criteria will be required to test their effluent for toxicity which may be caused by industrial user discharges of hazardous wastes or other toxic

substances. The results of this testing may indicate that POTWs are violating water quality standards, thereby endangering human health and the environment. Depending on the results of this testing, POTWs may receive new or more stringent permit limits regarding discharges of toxic pollutants. In order to comply with the revised permit limits, POTWs may either alter their operations or impose more stringent local limits on industrial user discharges of hazardous wastes. Imposition of such new or more stringent local limits will be facilitated by another requirement of today's rule: the requirement in 40 CFR 403.12(p) that industrial users notify POTWs, States and EPA of the nature and mass of RCRA hazardous wastes that they introduce into the sewers. In addition, under today's revisions to 40 CFR 122.21(j)(2), POTWs must evaluate in writing, at the same time as they submit the data from toxicity testing to their permit-issuing authority, the need to revise local limits. This new provision will allow the NPDES permit writer to review the POTW's rationale for not imposing more stringent local limits when the results of toxicity testing indicate that such new limits may be necessary to assure attainment of water quality standards. Today's rule also will ban the introduction to POTWs of wastes that exhibit the RCRA characteristic of ignitability. This ban is necessary to prevent explosions in sewer systems that could disrupt POTW operations and lead to releases of hazardous wastes and other toxic or hazardous substances in the sewers. "Midnight dumping" of hazardous wastes to sewers should be substantially curtailed through the ban in 40 CFR 403.5(b)(8) on the introduction of trucked or hauled wastes to POTWs except at discharge points identified for such use by the POTW. Finally, through general improvements in the pretreatment program provided by today's rule, such as industrial user slug control plans, permits for significant industrial users, and POTW enforcement response plans, EPA expects a significant enhancement over the control of hazardous wastes and other toxic and hazardous substances introduced to POTWs. The Agency notes that all pretreatment program changes required by today's rule must be incorporated in POTWs' NPDES permits upon reissuance.

While EPA believes that today's rule satisfies the requirements of section 3018(b), EPA intends to carefully review the effect of today's rule and promulgate in the future any additional regulations that experience reveals are necessary to improve control over hazardous waste and other industrial user discharges to POTWs. In addition, EPA has always recognized that additional categorical pretreatment standards will form an important component of effective controls over pollutants discharged to POTWs. On January 2, 1990, EPA recently issued a plan under section 304(m) of the Clean Water Act under which it will develop regulations for four new technology-based categorical pretreatment standards and will revise three existing standards (55 FR 80). The categories of dischargers selected for the development of new and revised pretreatment standards discharge large amounts of toxic and nonconventional pollutants to POTWs. The Domestic Sewage Study was an important source of data for the section 304(m) plan. While EPA is not obligated to base development of such technology-based categorical standards on findings relating to protection of human health or the environment, EPA believes that pollutant discharge reductions achieved through implementation of new categorical standards will advance the protection of human health and the environment.

It should be noted that today's rule does not directly address potential air emissions from the wastewater collection system or POTWs. EPA's Office of Air and Radiation is evaluating potential air emissions from the collection and treatment of wastewater discharged to POTWs and plans to address these air emissions under the Clean Air Act.

II. Revisions

The Agency received comments in response to its proposal from approximately one hundred and sixty individuals and groups. All significant comments and the Agency's responses to these comments are discussed below. The Agency's responses to minor comments are part of the record to this rulemaking and are available for inspection at the EPA Public Information Reference Unit, Room 2402, 401 M Street SW., Washington, DC 20460.

A. Specific Discharge Prohibitions

1. Ignitability and Explosivity

a. *Proposed change.* The specific prohibitions of the general pretreatment regulations (40 CFR 403.5(b)) forbid the discharge of certain types of materials which may harm POTW systems by creating fire or explosion hazards, causing corrosive structural damage, obstructing flow, or creating heat in a POTW influent which inhibits biological activity. The August 22, 1986 ANPR discussed expanding these prohibitions to forbid the discharge of characteristic wastes under RCRA (i.e., wastes that are defined as hazardous under 40 CFR part 261, subpart C if they possess the characteristics of ignitability, corrosivity, reactivity, or toxicity). This would provide greater specificity to the largely narrative structure of the existing prohibitions in the pretreatment program.

With respect to ignitability, the indirect discharge of ignitable materials has caused many documented cases of explosions and fires in POTW collection systems. These fires and explosions often happen near the point of indirect discharge, when the temperatures (normally above ambient) promote evaporation of ignitable wastes into a relatively fixed volume of air forming vapors which are not dispersed into the atmosphere. These vapors can be ignited by various sources, including electric sparks, frictional heat, hot surfaces such as manhole covers heated by the sun, or chemical heat generated by reactions.

The specific discharge prohibitions (40 CFR 403.5(b)(1)) already prohibit the discharge to sewers of materials creating a fire or explosion hazard. However, this narrative provision lacks specificity. As a result, the prohibition has limited effectiveness as a preventive requirement. The standard is clearly violated if there was an actual fire or explosion in the sewer or if an industrial user violated a local limit designed to implement the prohibition.

To provide for better implementation of these provisions, EPA proposed to revise 40 CFR 403.5(b) to prohibit the introduction into sewer systems of pollutants which create a fire or explosion hazard in the POTW, including but not limited to pollutants with a closed cup flashpoint of less than 140 degrees Fahrenheit (sixty degrees Centigrade), as determined by a Pensky-Martens Closed Cup Tester using the test method specified in ASTM standard D-93-79 or D-93-80, or a Setaflash Closed Cup Tester using the test method specified in ASTM Standard D-3278-78. The Agency also proposed to revise 40 CFR 403.5(b) to prohibit the discharge of pollutants which cause an exceedence of 10% of the lower explosive limit (LEL) at any point within the POTW.

A flashpoint is the minimum temperature at which vapor combustion will spread away from its source of ignition. Below the flashpoint temperature, combustion of the vapor immediately above the liquid will either not occur at all, or will occur only at the point of ignition. A 140 degree Farenheit

flashpoint standard has been used for several years under RCRA to identify liquid wastes that pose a fire hazard. EPA proposed a similar standard for use in a new prohibited discharge standard in the pretreatment program.

The lower explosive limit was proposed to deal with the problems of mixing and dilution in the sewer. The LEL of an organic vapor is the minimum concentration required to form a flammable or explosive vapor to air mixture. The LEL is measured with an explosimeter, an instrument that is commonly used by POTW technicians to protect against combustible vapors in sewers.

In the preamble of the proposed rule, the Agency solicited comments on: (1) Whether or not the flashpoint prohibition would be reasonable, unduly stringent or insufficiently protective of POTWs under worst case conditions and whether it would sufficiently take into account the effects of effluent mixing or dilution in a POTW system; (2) whether another technically feasible and effective alternative exists; (3) whether the regulation should exempt aqueous solutions with less than 24% alcohol by volume from the proposed flashpoint prohibition; (4) whether the LEL prohibition is practical, either alone or in combination with the flashpoint prohibition; (5) whether it is too difficult to link an LEL exceedence to specific discharges; (6) whether vapor phase monitoring (sometimes needed to determine the cause of any exceedence) is too difficult or too expensive; and (7) whether the flashpoint approach or the LEL approach would be sufficient alone to prevent fires and explosions at POTWs.

b. *Response to comments.* Most commenters supported the proposal to adopt limits that would add specificity to the existing narrative prohibition on ignitable and explosive discharges. However, other commenters believed that existing local ordinances and the existing specific prohibition were sufficient and that the proposed regulatory requirements would impose excessive burdens and costs on both municipalities and industrial users.

A majority of the commenters supported the flashpoint prohibition, either alone or in conjunction with the LEL approach. These commenters stated that the flashpoint prohibitions would provide Control Authorities with a quantifiable standard against which to measure compliance. Other commenters believed that because the flashpoint limit is used under RCRA to define which wastes exhibit the characteristic of ignitability, it would have greater credibility and enforceability than other approaches. Many commenters stated that the proposed flashpoint test would be inexpensive and easy to implement.

EPA agrees with those commenters who supported the proposed flashpoint prohibition. The Agency believes that the established flashpoint method is a good measure of fire and explosion hazard and will thus be effective in preventing interference with POTW operations. The flashpoint prohibition will also add specificity to the existing narrative prohibitions, thus facilitating effective prevention and enforcement. The closed cup flashpoint test methods are also relatively simple and inexpensive. For these reasons, EPA is today revising 40 CFR 403.5(b)(1) to prohibit the introduction to POTWs of pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit (sixty degrees Centigrade).

Many commenters pointed out that the language used in the proposed regulation was not consistent with that used in the preamble. The proposed regulation stated that the flashpoint prohibition applies to "pollutants," which could be interpreted to apply both to specific constituents of the waste and to the entire waste mixture generated by indirect discharges. The preamble discussion, however, clearly indicated EPA's intent that the flashpoint prohibition would apply to "wastewater discharge" and not wastewater constituents of the entire discharge or combined wastestream. To clarify the regulatory language, today's final rule has been modified to read, "* * * Pollutants which create a fire or explosion hazard in the POTW, including but not limited to, *wastestreams* with a closed cup flashpoint of less than 140 degrees Fahrenheit (sixty degrees Centigrade) * * *"

Some commenters expressed confusion as to the exact point where the flashpoint should be measured. The modification made to the final rule (discussed above) resolves any possible ambiguity regarding the location where the flashpoint should be measured. Because the flashpoint prohibition applies to the industrial user's wastestream, the measurement should be taken at the point of indirect discharge.

Although most commenters approved of the flashpoint prohibition, some expressed concerns about its limitations. One commenter stated that a majority of POTWs do not have industrial users that would warrant closed cup testing. Another commenter said that flashpoint was not a good indication of fire and explosion hazard because wastewater should not contain enough hazardous constituents to be flammable. In response, the Agency believes that the flashpoint prohibition is relevant because most POTWs do have at least a few industrial users and even one industrial user may sometimes have the potential to cause fire or explosion hazards in a POTW. Also the Study found that hazardous constituents are found in many different types of wastestreams. EPA believes that the flashpoint is an accurate indicator of fire and explosion hazard caused by the presence of toxic and hazardous pollutants in wastestreams.

Several commenters argued that the discussion on the use of existing literature flashpoint values in the preamble was not applicable to the vast majority of wastes. These literature values are only available for discharges of "pure" substances, which are not common.

The Agency suggested the use of available literature values for those "pure" substances believed present in a wastestream. EPA believes that if the flashpoint of a pure substance, or the flashpoint of each known substance in a mixture, is above 140 degrees F, then the flashpoint of the wastestream containing the substance or substances (normally diluted predominantly with water) would usually also be above the limit. If the industrial user is unsure of this correlation, the flashpoint test should be performed on its wastestream or the industrial user should consult the Control Authority.

Several commenters stated that because industrial wastes are usually variable, testing would ideally have to be continuous. Since there are no continuous monitoring methods available, these commenters feared that the discharger would be faced with retaining the entire discharge until a flashpoint determination could be made. At this point if the waste did not pass the test, it would then have to be disposed of under RCRA, although it could be sufficiently treated through the POTW. A few commenters had concerns about sampling methodologies, and one commenter said that sampling methodologies should be specified in addition to test methods. Another commenter said that the reliability of the closed cup test for wastewater was not good.

EPA does not believe that most wastestreams are sufficiently variable to require continuous monitoring. However, if an industrial user's wastestream is determined to be

extremely variable, the industrial user may wish to conduct frequent monitoring if necessary to avoid violating today's rule. When industrial users are uncertain whether their wastestream can be adequately characterized by intermittent monitoring, they should consult the Control Authority for monitoring instructions. If monitoring indicates periodic violations of the prohibition, industrial users may wish to take appropriate measures to pretreat their wastes so that they could be confident that the discharges would not violate the flashpoint prohibition. This would prevent industrial users from the need to retain their wastes pending flashpoint analysis. With respect to sampling methodologies, grab samples taken at the point prior to discharge are generally the appropriate methodology. However, the number of grab samples which are needed to characterize a wastestream will vary. For most wastestreams, one grab sample may be sufficient. For variable wastestreams, a series of grab samples may be appropriate. In order for a waste to meet today's standard, no single grab sample of the waste may be below the 140 degree flashpoint limit. With respect to reliability of the closed cup method, this method has long been in use under RCRA to measure the ignitability of liquid wastes, with few problems brought to EPA's attention. The Agency sees no reason why the method would not be equally useful on wastestreams discharged to POTWs. In support of this view, many commenters supported the test because of its purported reliability.

Some commenters suggested changing either the flashpoint or LEL limits, and one commenter stated that the flashpoint approach alone could result in unnecessary regulation in circumstances where in-sewer dilution would effectively eliminate any hazardous conditions. One commenter urged that the proposed revision be made less stringent by prohibiting only those discharges with a flashpoint of less than 100 degrees F. This commenter noted that EPA had acknowledged that 140 degrees F is considerably above expected wastewater temperatures. The commenter concluded that prohibiting discharges with a flashpoint near this temperature (140 degrees F) would therefore be overly protective. Another commenter urged EPA to allow case-by-case variances from the prohibition where it can be shown that the waste will be rendered non-ignitable upon mixture in the sewer system, and still another suggested that the Agency consider regional variations in flashpoints which would take into account differing temperatures in different parts of the United States.

The Agency is not convinced that prohibiting discharges with a flashpoint of less than 100 degrees F would be sufficiently protective against fires and explosions. Although the commenter stated that such a flashpoint would better reflect the temperatures encountered in most sewer systems under actual conditions, the commenter provided no data in support of this argument. Although it is true that most wastewater temperatures are below 140 degrees F, many industrial users discharge very hot wastestreams to sewers, with wastewater temperatures ranging from 120 to 212 degrees F (e.g., industrial and commercial laundries, oil refineries, food processors, textile manufacturers, power generating facilities, and any facility discharging boiler blowdown). Temperatures of wastewater in the sewer may therefore reach or exceed 140 degrees F for brief periods of time near the point of a very hot discharge. In addition, some sewer use ordinances prohibit the discharge of wastewater hotter than 150 degrees F, which indicates that wastewaters may reach that temperature. Although such discharges are eventually diluted with cooler water in the sewer, combustion could be sustained near the point of discharge if the sewer wastewater reached or exceeded 140 degrees F, a wastestream with a flashpoint below 140 degrees F were discharged, and a source of ignition (such a friction spark or a lighted cigarette) were present. For this reason, EPA does not agree that in-sewer dilution always eliminates hazardous conditions, or that a flashpoint of 140 degrees F is unnecessarily stringent. With respect to case-by-case variances from the flashpoint prohibition, the Agency believes that the largest determinant of sewer temperature at the point of industrial discharge is the temperature of the industrial wastewaters discharged, rather than the temperatures prevailing outside of the sewer. EPA has decided not to allow case-by-case variances based on ability of the waste to be neutralized after mixture in the sewer because such variances would not protect against explosions that may occur prior to such mixing. POTWs may establish more stringent limits than those promulgated today at their discretion.

With respect to the current exclusion under RCRA (40 CFR 261.21(a)(1)) from the ignitability characteristic for aqueous solutions containing less than 24 percent alcohol by volume, some commenters supported extending the exemption to the proposed flashpoint prohibition, indicating that such solutions are quite soluble, readily diluted, effectively treated by POTWs, and pose little threat to POTWs. One commenter stated that such solutions could flash but would not sustain combustion, but acknowledged that the ability to flash is connected to explosiveness. This commenter believed that deficiencies in operating practices and equipment often accounted for explosions. Other commenters did not support such an exemption. One commenter stated that even though such solutions may not be able to sustain combustion because of their high water content, the more critical issue for substances discharged to sewer lines is the ability of the *vapors* above the aqueous solution to sustain combustion.

After evaluating this issue, EPA has concluded that an exemption from the flashpoint prohibition for aqueous solutions containing less than 24 percent alcohol by volume is not appropriate. POTW collection systems are an ideal environment for generation of flammable/ignitable atmospheres; minimal air interchange within collection systems ensures that ignitable vapors once formed cannot easily be dispersed. Promulgation of the exemption would allow the discharge to POTWs of wastewaters otherwise failing the flashpoint test. For example, a flashpoint of 140 degrees F corresponds to an aqueous solution containing only 6 percent ethyl alcohol by volume; an aqueous solution containing 24 percent ethyl alcohol by volume would have a flashpoint of 90 degrees, well below the flashpoint specified in today's rule. Other allowed discharges would include potentially flammable mixtures containing methyl alcohol and isopropyl alcohol. The Agency believes that allowing an exemption from the flashpoint prohibition for aqueous solutions containing less than 24 percent alcohol by volume would not sufficiently protect POTWs, and is not promulgating such an exemption in today's rule. The Agency agrees that deficiencies in operating practices and equipment may often be responsible for explosions, and encourages industrial users to employ the best methods available to ensure compliance with today's prohibition.

One commenter noted that many POTWs use a closed-cup Tagliabue test to determine flammability, and suggested that EPA should consider adding it to its list of closed cup testers. The Agency agrees and notes that 40 CFR 261.21(a)(1), which specifies test

methods for the liquid ignitability characteristic, allows the use of equivalent test methods if approved by the Administrator under the procedures set forth in 40 CFR 260.20 and 260.21. To enable POTWs to use equivalent test methods according to these procedures, the Agency has modified the proposed prohibition to prohibit the discharge of wastestreams with a closed cup flashpoint of less than 140 degrees F using the test methods specified in 40 CFR 261.21.

Many commenters favored keeping both the flashpoint and LEL prohibitions. These commenters included State and local authorities who said that these limits and methodologies were both reasonable and necessary. Other commenters, however, thought it unnecessary to include both types of prohibitions, and favored retention of the flashpoint limitation or the LEL limitation only. One commenter stated that the difficulty of enforcing the LEL approach in no way diminishes the need for this prohibition, because it is a much more sensitive indicator of fire or explosion hazard. Some of the commenters who supported both prohibitions wanted to have the freedom to choose one or the other or both on a case-by-case basis, and one commenter suggested that the flashpoint and LEL approach are better suited to be placed in guidance documents rather than in a regulation.

Few commenters supported use of the LEL approach alone and many pointed out limitations to the LEL methodology. The most common criticisms were: (1) Calibration of instruments is difficult since wastestreams are a mixture of substances; (2) tracing any sort of exceedance in the collection system would be almost impossible, since the LEL reading cannot distinguish which chemicals are causing the exceedence (although some commenters believed that LEL exceedances could be traced by such means as tracking alarms to certain points in the sewer system; (3) unless continuously monitored, the LEL would be an instantaneous measurement and therefore subject to too much variability to accurately represent industrial users' wastestreams; (4) the LEL. of a substance is difficult to measure with portable instruments and depends on many variables that will affect the accuracy of the measurement, such as ambient temperature, VOC, air exchange rate, oxygen concentration, humidity; (5) industrial users would have difficulty ascertaining whether their discharges would cause a violation, due to the uncertainty of conditions that may exist "downstream" in the sewer system from their facilities, and (6) the 10 percent LEL is too stringent, since higher percentages of the LEL are routinely reached. One commenter, however, favored use of the LEL approach, arguing that it was more effective than the flashpoint technique in measuring explosivity of mixtures under actual sewer conditions.

EPA is persuaded by certain of the commenters' arguments against specifying a national prohibition based on the LEL approach. Although the approach has proved very valuable for many POTWs, EPA recognizes that there are certain technical difficulties associated with this approach which make it more suitable for use on a case-by-case basis at the discretion of the particular POTW than as a nationally applicable standard. The principal difficulty is associated with calibration of the instruments. Although one commenter stated that the indicated LEL is accurately represented for the common solvents and does not require knowledge of the substance monitored, other commenters who addressed this issue stated that unless the LEL meter is calibrated using the exact gas that is to be measured, it may not give an accurate reading of the vapors present. As an example, one comenter included a table showing that great variation can occur in LEL readings due to the presence of different chemicals. This would present a problem because the proposed rule would have established an LEL for any point in a POTW's collection system, and the air space in such systems generally contains many different kinds of gases derived from the complex mixtures of substances in the sewerage. EPA has therefore modified proposed 40 CFR 403.5(b)(1) to delete the prohibition on discharges which result in an exceedance of 10 percent of the LEL at any point within the POTW.

In response to the commenters who suggested that EPA allow POTWs to choose either the LEL or the flashpoint approach, the Agency acknowledges that the flashpoint prohibition in today's rule will not necessarily account for the ignitability of mixtures of industrial user discharges when combined in sewers. However, owing to the effect of dilution within the sewer system, the Agency believes that it is generally reasonable to assume that the concentrations of combustible constituents in sewer wastewaters will be well below the concentrations required for ignitability, provided that all industrial users are in compliance with the flashpoint prohibition. Fires and explosions from the discharge of ignitable pollutants often occur in the POTW collection system near the point of discharge, and the temperature in the collection system at that point may be above the ambient temperature, promoting the evaporation of ignitable wastes and the formation of flammable vapor to air mixtures. For these reasons, the Agency believes that today's flashpoint prohibition is necessary to help prevent fires and explosions at sewers, and is not adopting the suggestions that POTWs be allowed to choose between that approach and the LEL or that explosivity problems should be addressed in guidance only.

However, the Agency recognizes that many POTWs have made effective use of the LEL approach in preventing fires and explosions, and encourages POTWs to develop programs which employ this approach, if they deem it appropriate.

Many commenters who addressed vapor phase monitoring used to trace the source of an LEL exceedance stated that such monitoring is too expensive. Some commenters were opposed to a requirement for vapor phase monitoring, stating that most POTWs do not have access to the necessary methodologies, and that POTWs could already track sources without this methodology. One commenter suggested that vapor phase monitoring be done at site-specific points within the POTW. Some commenters argued that the regulation should not require the POTW to identify the compounds responsible for the exceedences, but one commenter stated that the details of a collections system, the location of the LEL exceedence, and the location of the industrial users will make elimination of facilities not causing the problem possible without the specific identification of each industrial user's wastestream.

EPA did not propose, and is not finalizing, requirements that vapor phase monitoring be performed, nor that the identity of the compounds causing the exceedences be revealed through such monitoring. However, many POTWs which adopt the LEL approach may choose to adopt such monitoring on an as-needed basis. In many cases the source of an exceedence can be discovered by other means.

c. *Today's rule.* Today's final rule prohibits the discharge of pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Farenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21.

2. Reactivity and Fume Toxicity

Wastes exhibiting the reactivity characteristic are regulated under RCRA because their extreme instability and tendency to react violently or explode make them a hazard to human health and the environment during waste management. A solid waste exhibits the RCRA characteristic of reactivity if it is normally unstable and readily undergoes violent change without detonating; reacts violently with water; forms potentially explosive mixtures with water; generates potentially harmful quantities of toxic gases, vapors or fumes when mixed with water; is a cyanide or sulfide bearing waste which when exposed to pH conditions between 2 and 12.5 can generate potentially harmful quantities of toxic gases, vapors or fumes; is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement; is capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or is a forbidden, Class A, or Class B explosive pursuant to 49 CFR part 173 (see 40 CFR 261.23(a)).

The health and safety of POTW workers has long been a serious concern of the Agency. There is no question that the generation of toxic gases and vapors can sometimes be dangerous to the health and safety of these workers, thus interfering with operations at the POTW and even endangering human life. In addition, the local general population could also suffer if sufficient quantities of toxic gases and vapors are released from sewer vents or aeration or containment basins. Gases and vapors may be caused by chemical reactions between constituents of the industrial discharge and the receiving sewage, or microbial metabolism. Some toxic gases can be generated as the result of sudden drops in pH. Besides generating toxic gases and vapors when mixed with sewage, industrial discharges may have sufficiently high concentrations of toxic gases and volatile liquids to cause toxic levels of gas or vapor to form above the wastewater even if the discharge is diluted by the sewage. There have been numerous instances of sewer maintenance workers who have been injured or killed from toxic gases formed in sewers. While most accidents have been caused by the formation of hydrogen sulfide gases, more recent incidents have been linked to certain organic pollutants that either volatilized or reacted with hydrogen sulfide within the POTW collection system.

a. *Proposed rule.* The prohibition against the discharge of pollutants which create a fire or explosion hazard, as modified by today's rule to include a prohibition on the discharge of materials with a flashpoint of less than 140 degrees F., will help prevent harm to POTW workers, as will the requirement promulgated today that POTWs evaluate significant industrial users to determine the need for plans to control slug discharges (see part B below). To augment these prohibitions and provide further protection, the Agency proposed on November 23, 1988 to revise 40 CFR 403.5(b) to add a new subsection (6) providing that no discharge to a POTW should result in toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems. EPA also proposed to revise 40 CFR 403.5(c) to require POTWs to implement the proposed narrative prohibition in 40 CFR 403.5(b)(6) by establishing numerical discharge limits or other controls where necessary based on existing human toxicity criteria or other information. Industrial users would then be liable for any violations of these limits or controls.

As possible implementation mechanisms, EPA suggested approaches used by the American Conference of Government Industrial Hygienists (ACGIH) or the Metropolitan Sewer District of Cincinnati. The ACGIH publishes an annual list of threshold limit values (TLVs) for numerous toxic inorganic and organic chemicals. The threshold limit values represent estimated chemical concentrations in air below which harmful health effects in exposed populations are believed to be unlikely to occur. The Metropolitan Sewer District of Cincinnati approach features the use of a vapor headspace gas chromatographic analysis of equilibrated industrial wastewater discharge (one volume of wastewater to one volume of air head space) at room temperature (24 degrees C). The analysis measures the total vapor space organic concentration by calculating the total peak area of the chromatogram expressed as parts per million (ppm) of equivalent hexane.

The Agency solicited comments on the addition of this prohibition to the general pretreatment regulations and on the feasibility of developing local limits from human toxicity criteria or other information such as those discussed above. The Agency requested comments on the practicality of such a prohibition, or alternative regulatory ways to protect worker health and safety, and on whether worker health and safety is adequately protected by the present general and specific discharge prohibitions.

b. *Response to comments.* The Agency received many comments on the proposed rule. Comments were received from States, environmental groups, POTWs and industries. The majority of the commenters supported the narrative prohibition (proposed 40 CFR 403.5(b)(6)) but were against requiring implementation of numerical limits (proposed 40 CFR 403.5(c)). These commenters generally believed that such numerical limits would be too difficult and expensive for POTWs to develop. In general, the commenters believed that the approaches used by ACGIH and the Metropolitan Sewer District of Cincinnati would be useful as guidance or as a screening tool, but that the actual criteria are so imprecise that it would be best not to require POTWs to implement them.

Some commenters pointed out that the Metropolitan Sewer District of Cincinnati approach contained potentially serious flaws in that the 300 ppm equivalent hexane limit might not provide adequate prctection against more toxic compounds. These commenters said that the Cincinnati approach could thus provide workers with a false sense of safety. Other commenters stated that the approach would only be valid if the wastewater in the sewer was at equilibrium with the air above the wastewater and the wastewater acts as an ideal liquid mixture.

Some commenters also expressed concern about the ACGIH list of chemical threshold limit values, stating that the list includes skin and dust hazards as well as vapor hazards. The commenters stated that the list of TLV compounds appears to be very large, but many of the compounds on the list are not applicable to the Agency's purpose. Only 136 compounds on the TLV list are for short term exposure (exposures of less than 8 hours duration within the POTW). The 136 compounds can then be further reduced by the removal of simple asphyxiants (inert gases, vapors and solids (dusts)). Thus, commenters believed that the number of ACGIH listed chemicals that could realistically be limited by POTWs is very small.

These commenters also said that ACGIH specifically disclaims its TLV list for setting environmental standards. ACGIH's basis for this disclaimer is that the averaging process involved in determining the TLVs is inappropriate for establishing such standards.

Some commenters stated that even though EPA has never explicitly required POTWs to develop local limits to prevent pass through or interference due to reactive chemicals and fume

toxicity, almost all POTWs have ordinance prohibitions or local limits to handle common pollutants such as sulfide that have been associated with worker health and safety problems.

After evaluating this issue, the Agency has concluded that the actual methods discussed in the November 23, 1988 proposal (as well as other methods) are not sufficiently precise at the present time to require POTWs to base enforceable local limits upon these methods. None of the approaches currently in use are necessarily suitable for required use at all POTWs, although they may fit the needs of many POTWs after certain modifications. For this reason, EPA is not promulgating a requirement to develop numerical limits to protect worker health and safety based upon specified procedures. The Agency believes that a narrative prohibition coupled with guidance on developing limits would allow POTWs more flexibility to adopt implementation procedures to meet their particular needs while providing adequate protection of worker health and safety. EPA is therefore promulgating the narrative prohibition on reactivity and fume toxicity and plans to issue guidance on developing numerical limits.

One commenter suggested that EPA should require POTWs to use proper confined space entry procedures or to monitor their systems with portable gas chromatographs (GCs) to protect worker health and safety. The commenter also suggested that industrial users causing worker health problems should be required to install activated carbon treatment systems or to perform continuous monitoring using GCs. Another commenter said that POTWs should conduct an extensive investigation of the effects organic compounds have on their system, after which limits could be developed for contributors of organic pollutants. Other commenters suggested requiring POTWs to develop an intensive safety training program for POTW employees, or allowing POTWs to substitute such measures as exposure surveys, engineering controls, or personal safety equipment for numeric limits.

One commenter suggested that EPA should require tests to be used by industrial users to prevent the discharge of wastewaters with high levels of toxic constituents, such as the test used by the Metropolitan Sewer District of Cincinnati. The commenter also suggested forbidding the discharge of any wastewaters containing hazardous constituents at concentrations which could give rise to chronic worker exposures higher than the relevant OSHA Time-Weighted Average Occupational Standard (TWA).

According to the commenter, a simple algorithm could be devised relating TWAs to the concentration of hazardous constituents in the discharge. Industrial users would be prohibited from discharging a wastewater which the algorithm predicted would give rise to vapor concentrations higher than the TWA. As another alternative, the commenter suggested that EPA adopt particular tests for certain types of wastes that can react in low or high pH environments and give off toxic gases. EPA should particularly consider adapting to POTWs the simple scenario it used to quantify the narrative characteristic test used in RCRA for cyanide and sulfide bearing wastes.

EPA encourages POTWs to use any or all of the above approaches (or modifications thereof) which they find necessary to protect worker health and safety at their facilities. However, because the numbers and types of industrial users vary so widely among POTWs, the Agency does not believe that any single test, training program, treatment technology, monitoring approach, or combination thereof is currently suitable for a nationally applicable rule to protect worker health and safety. Today's rule allows POTWs to impose controls on particular industrial users based on numeric limits on specific pollutants *or* through other measures that address their own particular site-specific concerns. Pursuant to 40 CFR 403.5(d), the approach selected by the POTW will be federally enforceable. With respect to the OSHA TWA approach suggested above, the Agency notes that this approach is similar to one suggested by EPA in its *Guidance Manual on the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program.* This approach involves using ACGIH threshold limit value-time weighted averages (TLV–TWAs) which serve as a measure of fume toxicity from which screening levels for all industrial user discharges can be calculated. However, the Agency notes that the TWA levels are the vapor phase concentrations of compounds to which workers may be exposed over long periods of time without adverse effect. In general, POTW workers are not exposed for extended periods of time to sewer atmospheres. The Agency also notes that the algorithm suggested by the commenter did not appear to take into account the effect of possible dilution or mixture with other substances in the sewer. For these reasons, the Agency recommends the use of such approaches as a way to screen industrial users' discharges, but recommends POTW reliance upon site-specific data in developing actual controls for industrial users. In some cases, the use of improved chemical handling or management practices may eliminate any problems. Similarly, regarding the narrative characteristic test under RCRA for cyanide and sulfide bearing wastes, the Agency believes that this test is best adapted by POTWs on a case-by-case basis to address their particular circumstances with respect to acidity or corrosivity which could result in fume toxicity.

One commenter urged that EPA clarify that a specific discharge constituent must itself be a significant source of actual toxic gas, vapor, or fume problems in order to fall within the scope of the prohibition. This commenter said that the proposed regulatory language could prohibit the discharge of biochemical oxygen demand (BOD), which contributes to anaerobic conditions, and otherwise innocuous sulfate (toxic hydrogen sulfide levels can be generated in POTW sewers through the reduction of sulfates by anaerobic bacteria, according to this commenter). Another commenter urged the Agency to limit the applicability of the proposed prohibition to those situations where a POTW interprets the prohibition through adoption of specific numerical discharge limits. In this way, industrial users would not be subject to the prohibition in the absence of numerical limits developed by the POTW. Another suggested that EPA prohibit only those substances discharged in a quantity known to cause worker health and safety problems. This commenter pointed out that the only instance cited in the November 23, 1988 preamble of actual injury to workers involved hydrogen sulfide, and stated that regulation of other substances was unjustified because the existing prohibitions already protect worker health and safety.

In response, the Agency notes that all of the specific discharge prohibitions apply even in the absence of numeric limits developed by the POTW to implement such prohibitions. In addition, EPA does not agree that regulation of other substances besides hydrogen sulfide is unjustified to protect worker health and safety. The Domestic Sewage Study found that adverse health effects on POTW workers have been caused by a variety of pollutants (including toluene, benzene, hexane,

phenol, hexavalent chromium, and chloroform).

However, the Agency agrees that there are certain situations in which industrial users should not be held responsible for a violation of the general pretreatment regulations (including today's prohibition against fume toxicity) because they did not possess the information necessary for them to prevent the causative discharge. To address this concern, EPA is today amending 40 CFR 403.5(a)(2) to provide that an industrial user, in any action brought against it alleging a violation of 40 CFR 403.5(b)(7), shall have an affirmative defense where that user can demonstrate that it did not know or have reason to know that its discharge, alone or in conjunction with a discharge or discharges from other sources, caused pass through or interference. Pursuant to 40 CFR 403.5(a)(2), the affirmative defense would also be available if the industrial user were in compliance with local limits developed to prevent pass through and interference, or (where no such limits for the pollutants in question had been developed) if the industrial user's discharge had not changed substantially in nature or constituents from the user's prior discharge activity when the POTW was in compliance with the POTW's NPDES pemit or applicable requirements for sewage sludge use or disposal.

c. *Today's rule.* Today's rule adds a new requirement (40 CFR 403.5(b)(7) that no discharge to the POTW shall result in toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems. Today's rule also amends 40 CFR 403.5(a)(2) to provide that an industrial user shall have an affirmative defense in any action brought against it alleging a violation of 40 CFR 403.5(b)(7), if it can make the appropriate demonstrations pursuant to 40 CFR 403.5(a)(2)(i) and (ii).

3. RCRA Toxicity

The Study discussed the possibility of developing a specific prohibition to forbid the discharge of waste exhibiting the characteristic of toxicity, as measured by the Extraction Procedure (EP) or Toxicity Characteristic Leaching Procedure (TCLP). This prohibition was not proposed in the November 23, 1988 rule, but was discussed in the ANPR published in the Federal Register on August 22, 1986 (51 FR 30166).

The EP toxicity test and the TCLP are designed to simulate the propensity of metals and organic contaminants to leach from a landfilled or land-applied waste into ground water. The EP toxicity test was used under RCRA to determine which wastes are hazardous by virtue of exhibiting the characteristic of toxicity. On March 29, 1990 (55 FR 11798) the Agency published a final rulemaking which, when effective, will replace the EP with the TCLP, which EPA believes provides a better measure of the propensity of pollutants to leach from a land-disposed waste.

EPA solicited comments in the ANPR on whether the EP toxicity test or the TCLP would be appropriate for determining whether particular pollutants are likely to cause pass through and interference. EPA noted that materials may be subsequently diluted when mixed with large amounts of domestic sewage, and that POTWs are capable of removing many such materials even in small amounts.

Comments in response to the ANPR were overwhelmingly opposed to adding specific prohibitions to the pretreatment regulations based on either the EP or the TCLP tests. Commenters generally asserted that since the tests model the tendency for metals and organic constituents to leach from a landfilled or land-applied waste into ground water, the tests were inappropriate for assessing whether an industrial wastewater discharge would cause pass through or interference at a POTW.

The Agency believes that requiring industrial wastestreams discharged to POTWs to pass either of the RCRA toxicity tests may result in both under-regulation and over-regulation of various pollutants with little technical justification, since application of the tests to industrial effluents does not take into account POTW removal efficiencies nor the potential for adverse impact on POTW collection and treatment systems. The Agency believes that current controls on toxic discharges from industrial users (the interference and pass through prohibition, categorical standards, and local limits) and from POTWs (permit limits, including controls on toxicity) are currently the best way to regulate materials that would warrant special consideration under RCRA due to leachability characteristics. For these reasons, EPA did not propose to change the current specific discharge prohibitions to add a prohibition based on any RCRA toxicity characteristic, nor is the Agency finalizing such a prohibition in today's rule.

One commenter on the ANPR, while agreeing that the RCRA toxicity tests were not necessarily suitable for industrial wastewater discharges, suggested that the Agency develop a leaching test applicable to such discharges because of the likelihood that they would leak from sewers and cause contamination of ground water.

EPA believes that such a test would be premature at the present time because of the lack of available information about the extent of ground water contamination caused by leaky sewers. When more data is available, the Agency may consider developing such a test if appropriate.

4. Corrosivity (403.5(b)(2))

Section 403.5(b)(2) of the general pretreatment regulations currently prohibits the discharge of "pollutants which will cause corrosive structural damage to the POTW, (including) discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges." This prohibition provides a numeric limit on the discharge of acidic wastes, but does not contain a corresponding pH limitation for caustic wastes. The Study reviewed local ordinances and found that many provided numeric limits on the discharge of caustic wastes.

The RCRA corrosivity characteristic is designed to address wastes which could endanger human health or the environment due to their ability to destroy human or animal tissue in the event of inadvertent contact; corrode handling, storage, transportation, and management equipment; or mobilize toxic metals in a landfill environment. Under 40 CFR 261.22, an aqueous waste exhibits the hazardous characteristic of corrosivity if its pH is less than or equal to 2 or greater than or equal to 12.5, or if it is liquid and capable of corroding steel at a rate greater than 0.250 inches per year at a test temperature of 130 degrees F. EPA solicited comments in the ANPR (51 FR 30166) on whether the discharge of such wastes to POTWs should be prohibited.

Almost no comments were received on this issue. One commenter believed that the current specific discharge prohibitions were inadequate to control hazardous wastes which exhibit the corrosivity characteristic as defined under RCRA. The commenter suggested that the prohibition be amended to include a maximum pH, because the Study had found that some local ordinances were setting maximum pH limitations in the range of 9.0 to 11.0.

Virtually all of the reported pH related incidents at POTWs involve corrosion caused by the discharge of acidic wastes, which are already prohibited by the current specific discharge prohibitions. The Agency has no evidence that high pH wastes are a problem for most POTW collection systems. For this reason, the Agency is

not amending 40 CFR 403.5(b)(2) to add a prohibition on high pH wastes at the present time. However, EPA encourages POTWs to address any problems with caustic wastes through their local limits.

5. Oil and Grease

a. *Proposed rule.* There are currently no specific nation-wide prohibitions against disposing of oil and grease in sewers, although the existing prohibitions forbid the discharge of pollutants which cause pass through or interference or which obstruct flow at the POTW.

The Agency is concerned about the possibility that the volume of used oil discharged to sewers is increasing to the point of causing interference or pass through. The likely increase in volume of used oil disposed of in this way is due to several factors, among them lower prices for crude oil which make it less profitable to recycle used oil. In addition, the Agency is developing a regulatory program under RCRA to control the management of used oil, including used oil that is recycled. Such regulations could lead to increased discharges of used oil to sewers if there are no controls imposed under the Clean Water Act.

To address these concerns and to strengthen the current prohibitions against pass through and interference, on November 23, 1988 the Agency solicited comment on revising 40 CFR 403.5(b) to add a new provision prohibiting the discharge of used oil to POTWs. "Used oil" was generally described as any oil that has been refined from crude oil, used, and, as a result of such use, contaminated by physical or chemical impurities. The proposal would have covered automotive lubricating oils, transmission and brake fluid, spent industrial oils such as compressor, turbine, and bearing oils, hydraulic oils, metalworking, gear, electrical, and refrigerator oils, railroad drainings, and spent industrial process oils. EPA solicited comment on the possible advantages and disadvantages of such a prohibition, and on which particular kinds of used oil should be covered by the prohibition.

b. *Response to comments.* The majority of commenters who addressed this issue believed that a complete prohibition of the discharge of used oil would not be practical, but many commenters indicated support for a numerical limitation. Most of these commenters suggested that any prohibition should contain a *de minimis* exemption for small quantities of used oil, since discharges from many industrial users contain small amounts of oil from washdown or cleaning waters that may not be completely removed by a grease trap or oil separator. These commenters generally believed that used oil in such small quantities presented little danger of pass through or interference, and that any prohibition should apply only to bulk dumping of large quantities. Three commenters suggested a limitation of 100 milligrams per liter of fats, oils, and grease as being reasonable and consistent with local limits established by many POTWs. Other commenters were opposed to any kind of prohibition, stating that problems with used oil were already adequately addressed by the general and specific prohibitions against pass through and interference and local limits for oil and grease.

Some commenters pointed out that certain used oils (i.e., animal and vegetable oils and certain oils used in machine cutting and metalworking) are highly biodegradable. These commenters stated that biological digestion in the POTW treatment system is the most appropriate treatment for these substances, and that a complete prohibition would lead to other methods of disposal which would ultimately be less protective of the environment. However, some of these commenters acknowledged that such oils could interfere with POTW operations if discharged in very large quantities. One commenter suggested that the proposed prohibition should include restaurant grease because it has been known to cause interference, and is easily rendered.

Several commenters stated that the discharge of used oil to POTWs should not be completely prohibited until sufficient methods were available for other kinds of disposal. Some of these commenters recommended that EPA encourage alternative mechanisms for the safe, legal, and inexpensive recovery of oil and disposal of the residue, along with incentives for collecting and recycling used oil. One commenter suggested a national educational campaign directed towards do-it-yourself oil changers.

Several commenters supported a complete prohibition on the discharge of used oil to sewers. One POTW stated that such a prohibition would ensure that it would not have to make case-by-case determinations on whether requested discharges of used oil would violate its local limits. Another commenter stated that a prohibition should also include restaurant greases because these can interfere with POTW operations and because current test methods do not distinguish between these oils and oils of other origin.

Another commenter who supported a complete prohibition stated that allowing the discharge of used oil would contradict EPA's pollution prevention policy, which seeks to avoid cross-media transfer of pollutants. This commenter stated that a prohibition would provide the incentive for generators to reduce the amount of used oil they generate as well as to recycle what they produce. A prohibition would also stimulate development of a recycling market that would reduce costs and promote the institutionalization of recycling habits and ethics.

EPA agrees with those commenters who said that a complete prohibition on the discharge of oil is unnecessary. Trace amounts of such oil are very difficult to eliminate from the wastewaters of industrial users. Complete elimination could necessitate costly process or treatment changes which would be difficult to justify given the Agency's assessment that the danger of pass through or interference from small amounts of used oils is slight. Although used oil is an energy resource that might be better collected and recycled than discharged to POTWs, today's rule would go some distance towards accomplishing this goal (as well as the aim of pollution prevention), without incurring the disadvantages of a complete prohibition.

EPA agrees with those commenters who stated that oils of animal or vegetable origin (such as restaurant greases) can be more easily accepted by wastewater treatment systems. These oils (as well as certain synthetic oils such as machine cutting or metalworking oils) can be metabolized by microorganisms in secondary waste treatment facilities and are readily reduced in concentration in aerobic and anaerobic biological treatment systems. For this reason, the Agency believes that a prohibition or a national limitation on such oils would not be appropriate.

However, the Agency believes that the discharge to POTWs of oils of petroleum or mineral origin is of potential concern, since these oils are less biodegradable in secondary treatment plants. Release of such oil thus has more potential to interfere with operations at POTWs, particularly in the case of smaller plants. In addition, these oils can contain a variety of toxic or hazardous constituents such as PCBs, benzene, chromium, arsenic, cadmium, and lead. EPA has analyzed the potential for pass through of these pollutants to surface waters and to sludge. Results showed that when large volumes of used oil are discharged,

there is a potential for pass through and violations of water quality criteria. Some of the constituents in contaminated used oil, such as trichloroethane, are very water soluble and thus are characterized by a high mobility potential. Metals such as cadmium, chromium, and lead are very persistent in the environment when released from the POTW in sludge or in wastewater effluent.

For these reasons, the Agency agrees with those commenters who urged limitations on petroleum and mineral-based oil discharged to POTWs. In light of comments received, EPA considered a complete ban on the discharge of such materials, a nation-wide numeric limit, or a new narrative prohibition. As described above, EPA determined that a complete ban was not necessary because small amounts of such oils are not expected to cause pass through or interference. With respect to the option of promulgating a national numeric limitation on the discharge of such oils to POTWs, EPA does not currently have sufficient information upon which to base a limit of general applicability. For this reason, EPA is not promulgating a numeric limit of national applicability.

EPA is therefore revising the specific discharge prohibitions to add a new provision (40 CFR 403.5(b)(6)) to prohibit the discharge of petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through. Under existing 40 CFR 403.5(c)(1) and (2), POTWs with approved pretreatment programs would then be required to implement this prohibition by developing specific limits for such substances, and other POTWs would be required to develop such limits in cases where pass through or interference had occurred and was likely to recur. Today's rule thus provides more specificity than is provided by the existing general prohibitions against pass through and interference by including a specific prohibition addressing petroleum and mineral-based oils and nonbiodegradable cutting oils.

In response to the commenters who stated that the Agency should not prohibit the discharge of used oil until sufficient methods were available for other kinds of disposal, EPA notes that today's rule does not include a complete prohibition on the discharge of any type of oil to POTWs. For this reason, the Agency is not adopting any specific regulatory measures to incorporate these commenters' suggestions at the present time, although the Agency encourages voluntary efforts in this regard.

As preliminary guidance to POTWs in establishing local limits, EPA reiterates that some commenters mentioned 100 milligrams per liter as an oil and grease limit frequently used by POTWs. Some standard manuals of sewer use practice and some studies have recommended limitations of 25 to 75 milligrams per liter of petroleum oils, nonbiodegradable cutting oils, or products of mineral oil origin. One commenter submitted a list of eight municipalities in which the commenter operated. Of the eight, five had limits of 100 milligrams per liter on oil and grease and two had more stringent limits. Only one had limits which were less stringent. POTWs should adopt limits as stringent as necessary to protect against pass through or interference at their particular facilities.

As discussed earlier in today's notice, some commenters on EPA's proposed fume toxicity prohibition expressed concern about possible liability for violation of the prohibition when they did not possess the information necessary for them to prevent the causative discharge. The Agency believes that this is also a valid concern for potential violators of today's prohibition against the discharge of certain types of oil in amounts that cause pass through or interference. To address this concern, the Agency is today amending 40 CFR 403.5(a)(2) to provide that an industrial user, in any action brought against it alleging a violation of 40 CFR 403.5(b)(6), shall have an affirmative defense where that user can demonstrate that it did not know or have reason to know that its discharge, alone or in conjunction with a discharge or discharges from other sources, caused pass through or interference. Pursuant to 40 CFR 403.(a)(2), the defense would also be available if the industrial user were in compliance with local limits developed to prevent pass through and interference, or (where no such limits for the pollutants in question had been developed) if the industrial user's discharge had not changed substantially in nature or constituents from the user's prior discharge activity when the POTW was in compliance with the POTW's NPDES permit or applicable requirements for sewage sludge use or disposal.

c. *Today's rule.* Today's rule adds a new requirement (40 CFR 403.5(b)(6)) prohibiting the discharge of petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through. Today's rule also amends 40 CFR 403.5(a)(2) to provide that an industrial user shall have an affirmative defense in any action brought against it alleging a violation of 40 CFR 403.5(b)(6), if it can make the appropriate demonstrations pursuant to 40 CFR 403.5(a)(2) (i) and (ii).

6. Solvent Wastes

a. *Proposed rule.* On November 23, 1988, EPA solicited comment on revising the specific discharge prohibitions to prohibit the discharge of listed solvent hazardous wastes from non-specific sources as defined in 40 CFR 261.31 (EPA Hazardous Wastes Nos. F001, F002, F003, F004, and F005). These solvent listings (about 30 organic compounds) encompass spent solvents, spent solvent mixtures and still bottoms from the recovery of spent solvents and spent solvent mixtures. The compounds were listed on the basis of ignitability and/or toxicity.

Discharges of solvent wastes to POTWs have involved actual fires or explosions, or potential fires which caused evacuation of treatment plant buildings or other measures to protect treatment or collection systems. Incidents have also been documented involving hazards to worker health and safety and inhibition or upset of biological treatment systems. In addition, analysis of pollutant fate within POTW systems has shown that significant quantities of solvents pass through to receiving waters where biological treatment systems are not well acclimated to the pollutant in question. For these reasons, the Agency solicited comment on revising the specific discharge prohibitions to prohibit the discharge of certain solvent wastes listed under 40 CFR 261.31. Specifically, EPA solicited comment on whether existing local limits, the proposed revisions to the specific discharge prohibitions concerning ignitability and fume toxicity, and the proposed solvent management component of industrial user spill and batch control plans would address most of the concerns discussed above, possibly making a ban on solvents redundant. The Agency stated that a possible advantage of these proposed revisions is that they would address the discharge of organic ccmpounds not used as solvents. The Agency solicited comment on whether the possible impacts of solvents on receiving waters would justify prohibiting these wastes from being discharged to POTWs, and whether such a prohibition would be appropriate for those highly water-soluble solvent wastes which are more

appropriately treated by biological degradation processes such as those used at POTWs.

b. *Response to comments.* In general, commenters did not support a ban on the discharge of listed solvents. Many commenters pointed out that a complete ban would not be practical because most industries cannot completely eliminate detectable levels of solvents from their discharges. Solvent recovery systems reduce the total amount of hazardous waste present in a wastestream but there is still a need to dispose of the "F" listed still bottoms. Commenters pointed out that some solvent wastes (e.g., acetone, ethyl acetate, and methanol) can be effectively treated at POTWs using secondary treatment. Some commenters stated that the presence of certain organic solvent wastes can be beneficial to a biological treatment system.

Many commenters believed that existing or proposed regulations concerning ignitability, fume toxicity, solvent management plans, categorical standards and sludge control were sufficient (along with local limits) to prevent the discharge of listed solvent wastes from causing interference or pass through at POTWs. These commenters stated that a proposed ban on the discharge of listed solvent wastes would therefore be redundant.

However, several commenters did support a ban on listed solvents. One commenter urged the Agency to make the prohibition constituent-specific so that constituents of concern from the RCRA "K" and "U" lists could also be included. This commenter also urged the prohibition of alcohol and ketone wastes, stating that these wastes pose significant health problems. Other commenters stated that numerical limits should be established, or that an aggregate limit similar to the Total Toxic Organics standard for the electroplating and metal finishing industries be promulgated. One commenter suggested that each significant industrial user be required to institute a Toxics Organics Management Plan.

After reviewing the comments and evaluating this issue, the Agency has decided not to prohibit the discharge of RCRA listed solvents F001–F005 at this time. EPA believes that such a prohibition would not be justified in light of all the existing controls (including those promulgated today) designed to address the problems caused by solvents. For example, the prohibition on the discharge of wastestreams with a flashpoint below 140 degrees Farenheit (the RCRA standard for ignitable liquid waste) should effectively prevent the discharge of substances (including solvents) that could cause fires at POTWs. Similarly, the prohibition of discharges resulting in toxic gases, vapors, or fumes in a quantity that may cause acute worker health and safety problems should go very far towards eliminating any problems occasioned by the volatilization of solvent discharges in POTW collection and treatment systems. As discussed earlier, EPA is preparing guidance for POTWs on how to implement this prohibition through numeric limits.

Today's final rule also contains a requirement that all POTWs with approved pretreatment programs evaluate their significant industrial users to determine if these users need plans for the control and prevention of slug discharges. Such plans must contain any necessary measures for controlling toxic organics (including solvents). EPA believes that this provision will be an effective vehicle for extending solvent management plans to noncategorical significant industrial users. Many categorical users are already covered by Total Toxic Organic and solvent management plan requirements. In light of these requirements, the Agency does not believe that it is necessary to promulgate a total toxics organic management plan requirement as part of the general pretreatment standards.

With respect to establishing numerical, constituent-specific, or aggregate limits for specific solvents or waste constituents of concern, the Agency believes that such limits would not be appropriate at the national level. Such limits could not, of necessity, address the concerns of particular municipalities with their unique combinations of industrial users and site-specific problems. For this reason, the Agency prefers at this time to leave the development of such limits to POTWs.

c. *Today's Rule.* For the reasons discussed above, today's rule does not contain a prohibition against the discharge of listed solvent hazardous wastes to POTWs.

B. Spills and Batch Discharges (Slugs) (40 CFR 403.8(f)(2)(v))

a. Proposed Change

The principal pretreatment regulation addressed specifically to slugs is the existing requirement in 40 CFR 403.12(f) that all industrial users notify POTWs of discharges that could cause problems at their POTW, including any slug loadings that would violate any of the specific prohibitions of 40 CFR 403.5(b).

Spills and batch discharges present special challenges to POTWs. As documented by data on incidents at POTWs, these discharges can cause many problems at the treatment plant, including worker illness, actual or threatened explosion, biological upset or inhibition, toxic fumes, corrosion, and contamination of sludge and receiving waters. A survey undertaken by the Association of Metropolitan Sewerage Agencies (AMSA) indicated that spills to sewer systems were the most common source of hazardous wastes at the respondents' treatment plants.

The current general pretreatment regulations do not address these problems comprehensively. To address this concern and to strengthen the existing prohibitions against pass through and interference, EPA proposed on November 23, 1988, to revise 40 CFR 403.8(f)(2)(v) to provide that POTWs must evaluate each of their significant industrial users to determine whether such users need a plan to prevent and control slug loadings. This evaluation was proposed to be required at the same time that the POTW conducts inspection or sampling of a significant industrial user. POTWs would use the opportunity of an inspection or sampling to examine the operational practices and physical premises of a significant industrial user to decide whether these warranted the development of a plan to handle and prevent accidental spills or non-routine batch discharges.

The proposal would also have revised 40 CFR 403.8(f)(2)(v) to provide that if the POTW decides that such a plan is warranted for a particular significant industrial user, the plan must contain, at a minimum, the following elements:

(1) Description of discharge practices, including nonroutine batch discharges;

(2) Description of stored chemicals;

(3) Procedures for promptly notifying the POTW of slug discharges as defined under 40 CFR 403.5(b), with procedures for follow-up written notification within five days;

(4) Any necessary procedures to prevent accidental spills, including maintenance of storage areas, handling and transfer of materials, loading and unloading operations, and control of plant site run-off;

(5) Any necessary measures for building any containment structures or equipment;

(6) Any necessary measures for controlling toxic organics (including solvents);

(7) Any necessary procedures and equipment for emergency response; and

(8) Any necessary follow-up practices to limit the damage suffered by the treatment plant or the environment.

EPA solicited comments on all aspects of the proposed revisions. Specifically, the Agency requested comments on the following issues: Whether EPA should impose specific spill or batch control requirements directly on industrial users; whether the control plans proposed to be required should be limited to significant industrial users or expanded to cover all industrial users, or limited to other categories such as industrial users who submit notification of the discharge of hazardous wastes under proposed 49 CFR 403.12(p); whether the requirements of 40 CFR 403.12(f), section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and section 304(b) of the Superfund Amendments and Reauthorization Act of 1986 (SARA) are duplicative and unduly burdensome and if so, on how such duplication could be avoided; whether it would be appropriate to establish certain administrative exemptions from the section 103 CERCLA notification requirements for indirect dischargers; and whether industrial users should be exempted from having to notify the POTW of those slug discharges for which they have submitted CERCLA notification.

b. Response to Comments

The Agency received many comments on this aspect of the proposed rule from POTWs, States, private industry, trade associations and environmental groups. In general, commenters supported the proposal because it would increase control of slugs while still retaining POTW flexibility. These commenters indicated that many POTWs have already successfully reduced slugs using similar control plans. A number of commenters stressed such benefits of slug control plans as facilitation of early response and better control and clean-up of accidental discharges. Some supporters offered suggested clarifications or modifications, as described below.

Only a few commenters opposed the proposed rule. Some commenters believed that some POTWs already have procedures and rules even more restrictive than those proposed by the Agency, and that slugs are already adequately regulated under existing pretreatment, CERCLA, SARA, and RCRA requirements. Because of the many different types of industrial users within the regulated community, some commenters indicated concern that general slug control regulations would either be too general or too specific, and thus would be unworkable for most industrial users. Other commenters also expressed concerns about paperwork burdens, available POTW resources, and the technical ability of POTWs to conduct the initial evaluations and subsequent inspections. One commenter said that some POTW systems are so large that they would not be affected by slug discharges, and suggested that slug plan requirements should be optional.

Because of the importance of slug control and prevention in controlling interference and pass through of toxic and hazardous pollutants, EPA is today requiring POTWs to evaluate significant industrial users to determine the need for such plans. EPA believes that the proposed evaluation and minimum plan requirements will provide significant environmental benefits. The Agency also believes that slug loads have the potential to adversely affect even the largest POTWs. Specific comments, and EPA's responses, are set forth below.

Several commenters expressed confusion regarding the definition of slug loading and submitted suggestions for clarifying the definitions and distinctions between slugs and batches. The primary concern expressed by commenters was that batch discharges are not necessarily harmful, that effluent limitations apply to such discharges, and that batch discharges do not always need to be prevented. To clarify the Agency's intent in specifying the type of discharges which should be covered in slug control plans, EPA is modifying the language of proposed 40 CFR 403.8(f)(2)(v) to provide that, for purposes of that subsection, a slug discharge is a discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge. EPA notes that, when evaluating SIUs to determine whether they need to be subject to slug control plans, POTWs may wish to examine the SIUs' batch discharge practices, because batches are not always subject to effluent limitations: Batches may include discharges from industries not covered by categorical standards or local limits, and certain non-routine batch discharges may cause problems for the POTW.

Most commenters stressed the need to retain complete POTW flexibility in determining which industrial users should have plans, and in approving the adequacy of these plans. A number of commenters supported slug discharge controls only as long as POTWs had the discretion to make the needs assessment and significant industrial user determination, and remain the sole arbiter of what is necessary and adequate. Commenters also generally supported the proposed plan elements. They believed that the elements are comprehensive enough to ensure that all the essentials of slug prevention are covered. However, a few commenters were opposed to the listed plan elements. One commenter said that imposing specific requirements for a control plan would be excessive and should not be necessary. Another commenter said that the detail involved in the list of elements would restrict POTW flexibility in implementing slug controls and would discourage POTWs from identifying appropriate industries.

EPA recognizes the need for POTW flexibility in determining which industrial users need to have plans for the control and prevention of slug discharges, and in determining the appropriate elements of slug control and prevention plans. Today's rule leaves much discretion to the POTW. The areas in which POTWs have considerable discretion include POTW designation and designation of significant industrial users and POTW evaluation of each significant industrial user to determine the need for a slug control plan. However, the Agency does not agree that requiring minimal elements for such plans is unnecessary or undesirable. In particular, the first three elements of the plan (the description of discharge practices, the description of stored chemicals, and notification procedures) are essential for the POTW to be aware of actual or potential slug loads from a particular significant industrial user. The remaining plan elements refer to "necessary" measures, procedures, or practices, thus allowing considerable POTW flexibility in deciding which measures are appropriate for a particular industrial user with respect to prevention, containment, emergency response, and follow-up.

On the other hand, some commenters who supported the proposed rule indicated that it did not go far enough in stating which industrial users should be evaluated, and which criteria should be used in the evaluation. A few commenters objected to the lack of regulatory criteria for determining whether a significant industrial user needs a control plan, one commenter fearing that this lack would increase the potential for arbitrary decisionmaking, another fearing that POTWs would not make determinations that such plans are needed in all appropriate cases. Regulatory criteria suggested by one commenter included certain quantities of stored chemicals, potential for slug loadings, and history of slug discharges. These criteria would increase uniformity and reasonableness of decisionmaking,

according to the commenter. Still another commenter suggested that industrial users with diked storage areas or an absence of floor drains be exempted. One commenter stated that the proposed language would not exempt non-significant industrial users from slug control and prevention requirements. Another commenter expressed concern about industrial users who needed slug control plans because of storage of hazardous chemicals, but who had little industrial discharge to sewers.

EPA's "Guidance Manual for Control of Slug Loadings to POTWs" (September 1988), provides guidance on evaluating industrial users for slug potential, criteria for determining whether an industrial user needs a control plan, and guidance in developing slug control requirements. The manual is divided into three parts: (1) Evaluating the need for a POTW slug control program, (2) developing an industrial user control program, and (3) developing a POTW slug response program. Information is provided on identifying potential industrial user slug sources and their risk categories, evaluating or improving the legal authority to regulate slugs, requiring selected industrial users to develop slug control plans or measures, inspecting and monitoring industrial users, and developing emergency response procedures and resources. EPA believes that this guidance will be useful to POTWs in determining which industrial users need slug control plans, and in developing such plans, thereby reducing the potential for arbitrary decisionmaking. However, EPA does not believe that it should develop rigid criteria in its regulation establishing when slug control plans should be required. POTWs are in the best position to make such determinations and, since such requirements will help ensure continued compliance with its NPDES permit, it is in the interest of the POTW to do so. With respect to exempting certain industrial users from slug control requirements, the Agency notes that today's rule requires that POTWs evaluate significant industrial users to determine whether such users need slug control plans. EPA believes that exemptions are best granted by POTWs during the course of such evaluations to allow them to take into account the particular circumstances present at the significant industrial user's facility. Today's rule does not specifically exempt non-significant industrial users from slug control requirements because POTWs may wish to require such users to develop plans on a case-by-case basis to address the potential for adverse impact caused by slug discharges from those facilities. With respect to facilities with little or no industrial discharge, the Agency notes that non-domestic users which typically introduce only sanitary, as opposed to industrial, waste to POTWs are nevertheless subject to the general pretreatment regulations and may be designated as significant industrial users by POTWs for such reasons as the potential of stored chemicals to enter the sewer in an accident. They may also be required to have slug control plans pursuant to POTWs' local authorities.

One commenter suggested including among the elements a timetable for implementation. Still another said plans should contain language requiring the industrial user to immediately take measures to cease the discharge and remedy the damage. Several wanted to see a requirement for plan certification by professional engineers, and one commenter suggested an equalization system requirement for industrial users with a history of slug discharges. Although these elements may sometimes be needed on an individual basis, EPA does not believe that they are necessary elements for all slug control plans issued to significant industrial users and is therefore not promulgating such requirements as part of today's rule. For example, today's rule already specifies that control plans must contain any follow-up measures necessary to limit the damage suffered by the treatment plan or the environment. POTWs may wish to require many industrial users to immediately take measures to cease the discharge as a follow-up measure, but such a requirement may be superfluous for some industrial users because of the nature of their effluent or their discharge practices. Similarly, although POTWs may wish to require certain facilities to have their plans certified by professional engineers, certification may not be needed for smaller, less complex facilities. With respect to equalization systems for facilities with a history of slug discharges, EPA believes that in many cases other measures may be equally as or more appropriate to address the problem. Concerning timetables for implementation, EPA believes that it is preferable for POTWs to decide on a case-by-case basis whether such a timetable is needed in order to address the potential for adverse impact presented by a particular significant industrial user. Today's rule allows POTWs the flexibility to require such timetables, orders to cease discharge, or engineer plan certification as POTWs deem appropriate or necessary. However, the Agency has modified today's rule slightly from the proposal to require that slug control plans must contain any necessary measures for inspection as well as maintenance of storage areas and for any necessary worker training. Inspection and maintenance of storage areas is essential to see that stored materials are not leaking or improperly placed, and worker training is necessary to instruct employees in the most practicable methods to prevent, detect, and respond to spills at the particular facility.

Another commenter suggested that the rule be modified to require that any significant industrial user which discharges a slug loading should not only notify the POTW but also specifically report (within thirty days) what happened and what action would be taken to minimize the possibility of recurrence. However, EPA believes that the commenter's concern will be adequately addressed by the requirement in today's rule that slug control plans contain procedures for prompt notification to the POTW of slug discharges and follow-up written notification within five days. Today's rule also requires follow-up practices to limit damage to the treatment plant or the environment.

Several commenters asked for clarification on how often the need for slug plans should be evaluated by the POTW; i.e., whether the evaluation of significant industrial users is to be a one-time requirement or whether it must be updated at the time of each sampling or inspection. Also, some commenters stated that POTWs need the flexibility to perform frequent inspections without having to evaluate the need for slug plans every time. Another commenter suggested that POTWs be required to evaluate the need for slug plans only when individual significant industrial user permits are reviewed. One commenter suggested implementation of plans over a three-year period by approved pretreatment POTWs. Another commenter suggested that POTWs should be allowed up to two years to complete all of the initial evaluations, even if sampling or inspection is more often than once every two years. The commenter believed that a two-year interval provides adequate time for the POTW to require, review, and evaluate each slug loading control plan.

EPA believes that evaluation of significant industrial users to determine the need for slug prevention and control plans should be more than a one-time requirement. Today's rule therefore requires POTWs to conduct such

evaluations of significant industrial users for purposes of determining the need for a slug prevention and control plan at least once every two years. However, the Agency notes that at least one commenter apparently misconstrued the language of the proposal to require that POTWs review slug control plans every two years. EPA reiterates that under today's rule, POTWs would evaluate significant industrial users to determine the need for a slug control and prevention plan. Actual evaluations of already submitted plans would take place according to a schedule of POTWs' own choosing.

The November 23, 1988 proposal would have required POTWs to evaluate significant industrial users to determine the need for slug control and prevention plans every two years, and would have also required that the evaluation be conducted at the same time that the POTW conducted inspections and sampling of significant industrial users. Under today's rule, POTWs must inspect and sample significant industrial users at least once a year, instead of once every two years as was proposed on November 23, 1988 (see Part G.2 of today's notice). The Agency believes that determining the need for slug control plans need not take place that often, and therefore is maintaining in the final rule the proposed requirement that POTWs make the determination a minimum of once every two years. Under today's rule, the determination need not necessarily be made at the same time as inspections and sampling of the particular significant industrial user, since EPA believes that POTWs should have the flexibility to conduct this evaluation separately if they deem it appropriate. Nevertheless, EPA believes that inspections and sampling of industrial users will generally provide the POTW with the best opportunity for determination of the necessity for slug prevention and control plans, and encourages POTWs to conduct such evaluations at the same time as inspections and sampling are carried out. Although EPA believes that where slug control plans are developed, compliance with the plans should be made a requirement in the significant industrial users' individual control mechanisms, no schedule for implementation of plans is required in today's rule. This will allow POTWs the flexibility to set priorities with respect to their own significant industrial users.

EPA also solicited comments on whether spill or batch control requirements should be imposed directly on industrial users by EPA. In response, some commenters indicated that it would be appropriate for the industrial users to bear the burden of preventing harm to the POTW and its workers. However, the majority of commenters did not support imposing the slug control requirements directly on all industrial users, on the basis that slug control plans must be specific to each industrial user in order to be effective (although one commenter believed that slug control requirements should be uniform for all industrial users who handle hazardous waste). Commenters generally indicated that due to the facility-specific nature of most control plans, the POTW is in the best position to determine whether a control plan contains appropriate measures. One commenter said that the requirements should be imposed directly on only significant industrial users or those industrial users with slug potential for both hazardous and nonhazardous discharges.

EPA agrees that slug control plans should not be imposed directly by EPA because there are almost no requirements that would be uniformly appropriate for all industrial users or all significant industrial users. POTWs will be in the best position to develop slug prevention and control requirements for industrial users because, by fulfilling inspection and sampling requirements, they will be familiar with the operations of their individual industrial users, and they will also know best what types of discharges must be prevented to avoid causing passthrough and interference. Accordingly, today's rule provides that the POTW will develop individual slug control plan requirements as necessary.

With respect to expanding the evaluation requirement to other categories or all industrial users, commenters generally preferred requiring POTWs to evaluate only significant industrial users as a way to conserve POTW resources, especially since POTWs may classify any user as significant. A number of commenters made their approval of the limitation to significant industrial users contingent upon adoption of an appropriate significant industrial user definition. One commenter stated that if POTWs appropriately designate as significant those facilities that have a "reasonable potential to adversely affect the POTW's operation," the significant industrial user limitation would be appropriate. However, one commenter stated that by implication the proposed rule would make any facility that a POTW believes should have a control plan a significant industrial user, and that this should not necessarily be the case. Other commenters opposed to expanding the requirement beyond significant industrial users generally indicated that evaluating all industrial users for slug control plans could result in development of unnecessary plans. Several commenters expressed concern that EPA had not considered the costs of expanding the proposed rule to include all industrial users, especially small facilities.

However, a number of commenters stated that all industrial users should be evaluated for slug control plans. One commenter stated that all dischargers should be covered by slug control requirements to limit incentives for industries to relocate to areas without an approved pretreatment program. Another commenter suggested that the requirement for slug plan evaluations be expanded to include industrial users who submit notification of the discharge of hazardous wastes (as proposed in 40 CFR 403.12(p)) and any incidental user of the POTW who submits notification of the discharge of hazardous waste pursuant to CERCLA, RCRA or SARA requirements.

Under today's rule, POTWs must, at a minimum, evaluate significant industrial users to determine the need for slug control plans. However, POTWs are free to inspect and require slug control plans of other industrial users. Today's rule affords considerable POTW flexibility in designating significant industrial users, and in selecting other appropriate industrial users for slug plan development. However, today's rule also does not require or imply that every industrial user determined by the POTW to need a slug control plan is a significant industrial user, because such users may not fit the criteria for significance found in the definition of significant industrial user promulgated today (for example, they may have the potential for adversely affecting POTW operations only in the event of a spill, in which case the POTW may not wish to designate them as significant for other purposes). Industries that are not significant industrial users, including some that store or discharge hazardous wastes, may sometimes need a slug control plan, but EPA believes it is preferable for POTWs to ascertain whether this is necessary on a case-by-case basis.

With respect to duplication of CERCLA, SARA and/or RCRA requirements, all commenters expressed an interest in administrative efficiency. A number of commenters asked that the rule recognize the potential existence of industrial user plans already prepared for other permit or regulatory

requirements, and partially exempt such industrial users or incorporate their RCRA or other permit elements by reference. Several commenters asked for clarification about whether an industrial user can submit a copy of a document prepared for another agency or regulation to the POTW in lieu of preparing a separate slug control plan. Several commenters stated that the Spill Prevention Control and Countermeasure (SPCC) Plan requirements should suffice for slug control. One commenter requested clarification about whether a facility would be required to have a RCRA management plan which could serve as a slug control plan if the facility generated a sufficient quantity of waste to be subject to the formal reporting requirements (the Agency assumes that the commenter was referring to today's hazardous waste notification requirements).

EPA recognizes that a number of existing requirements under other statutes and regulations could serve as components of slug control plans. If a significant industrial user is covered by such a plan, the POTW may accept such plans in partial or complete fulfillment of the requirements in today's rule, as long as each element set forth in today's rule is addressed in an acceptable manner in some document or collection of documents. POTWs may also impose more rigorous requirements as circumstances warrant. With respect to today's hazardous waste notification requirements for dischargers of hazardous wastes to POTWs, EPA notes that some, but not all, of such dischargers are also subject to RCRA management requirements because they treat, store, or dispose of hazardous waste pursuant to 4 CFR part 264.

With respect to exemptions from slug notification requirements for industrial users who submit CERCLA and SARA notifications, almost no commenters approved of this proposal. Although SARA and CERCLA have notification requirements that may overlap with slug notification, most commenters believed prompt and direct notification of the POTW by the industrial user was essential. These commenters pointed out that prompt POTW response to slugs would be delayed by a second-hand notification from SARA or CERCLA personnel. Another commenter pointed out that the SARA list of Extremely Hazardous Substances does not address many potential POTW hazards. Gasoline, toluene, and other common flammable and explosive chemicals are not included, while certain unusual chemicals and medicines that may not be of concern to POTWs are on the list. One commenter expressed concern that such an exemption would lead industrial users to believe that spills below a CERCLA reportable quantity (RQ) are of no consequence to the POTW, when this is often not the case.

EPA believes that slug loading notification requirements serve different purposes from SARA/CERCLA requirements and are not duplicative. Direct notification to the POTW affected by the slug is critically important because time is essential in formulating an appropriate response. Similarly, the reportable quantities established under CERCLA are not necessarily related to the potential for pass through or interference at the POTW, nor are the hazardous substances required to be reported under SARA necessarily the substances of most concern to POTWs.

In the proposal, EPA requested comment on whether an administrative exemption from CERCLA section 103(a) notification requirements would be appropriate for releases into sewers which pose little or no hazard to the POTW. The Agency received no data indicating that such an exemption would be appropriate. For this reason, EPA is not addressing the issue of administrative exemptions under CERCLA in today's rulemaking.

c. Today's Rule

Today's rule revises 40 CFR 403.8(f) to provide that POTWs with approved pretreatment programs must evaluate, at least once every two years, whether each significant industrial user needs a plan to control slug discharges as defined under 40 CFR 403.5(b). If the POTW decides that such a plan is needed, the plan shall contain at least the following elements:

- Description of discharge practices, including nonroutine batch discharges;
- Description of stored chemicals;
- Procedures for promptly notifying the POTW of slug discharges, including any discharge that would violate a specific prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days;
- If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response; and
- If necessary, follow-up practices to limit the damage suffered by the treatment plant or the environment.

C. Trucked and Hauled Waste (40 CFR 403.5(b)(8))

a. Proposed Change

Many POTWs have expressed concern about discharges from liquid waste haulers. The Study identified the strengthening of controls on these dischargers as potentially deserving of the Agency's attention. In June 1987 the Agency issued guidance to help POTWs control the discharge of hazardous wastes from liquid waste haulers to their systems (*Guidance Manual for the Identification of Hazardous Wastes Delivered to Publicly Owned Treatment Works by Truck, Rail, or Dedicated Pipe*). As a further response to the Study and to further the prevention of pass through and interference, the Agency proposed on November 23, 1988 to add a provision to 40 CFR 403.5(b) prohibiting the introduction to POTWs of any trucked or hauled pollutants except at discharge points designated by the POTW. The Agency requested comments on the proposal and on the following issues: whether to revise 40 CFR 403.8 to require POTWs to specify particular discharge sites; whether the proposed specific discharge prohibition is too extensive and should be limited to non-septic wastes only; and whether to require POTWs to develop and obtain approval of additional procedures to deal with trucked wastes, such as requiring POTWs to monitor and sample such wastes.

b. Response to Comments

The Agency received many comments on the proposed rule from POTWs, States, private industry, trade associations, and environmental groups. Commenters generally favored the rule although many suggested modifications.

The majority of commenters indicated that specific discharge sites would provide better control of trucked and hauled waste, as well as improved accountability for this type of discharger. Commenters generally indicated that the rule would increase POTWs' control without adding burdensome requirements. Additionally, one commenter indicated that the requirement for designation of discharge points gives notice to all waste haulers that the POTW's control authority is backed by federal controls and guidelines. One commenter stated that as the land disposal of untreated hazardous wastes is increasingly prohibited under RCRA, surreptitious disposal of unwanted hazardous wastes might become more commonplace, and therefore better controls on trucked or hauled discharges will be necessary.

However, some commenters stated that there is no need for additional federal requirements for liquid waste haulers. Some commenters said that current requirements established by POTWs with approved pretreatment programs for sampling, testing, and manifesting are adequate to control the discharge of non-septic trucked wastes. Some commenters opposed to the rule stated that RCRA is the appropriate primary vehicle for control of trucked or hauled hazardous waste in order to avoid confusion, duplicative requirements, and uncertainty. These commenters stated that it would not be productive to require duplicative requirements under the pretreatment program, since liquid waste haulers are not covered by the domestic sewage exclusion and are therefore subject to RCRA transporter requirements.

The Agency does not agree with the assertions that the proposed requirement is redundant with existing RCRA or pretreatment requirements or that trucked or hauled wastes should not be subject to specific regulation. Because hazardous waste haulers must comply with RCRA manifest requirements (including transport of the waste to a designated RCRA facility), the principal new legal effect of today's requirement will be to prohibit the discharge of trucked non-hazardous wastes to POTWs except at designated discharge points. Practically, however, this requirement will give POTWs better control of all wastes entering their systems (including hazardous wastes) by encouraging POTWs to designate certain discharge points that they can monitor to prevent the introduction of undesirable wastes into the sewer system.

EPA believes that designation of discharge points is an essential tool to improve POTW control of trucked or hauled wastes. Therefore, EPA is revising 40 CFR 403.5(b) to add paragraph (8) which prohibits the introduction to POTWs of any trucked or hauled pollutants except at discharge points designated by the POTW. The rule allows POTW flexibility in implementing this prohibition.

Commenters were generally opposed to requiring POTWs to specify particular discharge sites. One commenter noted that only POTWs accepting such waste should designate discharge points. The commenter concluded that requiring POTWs to designate discharge points would cause confusion because many POTWs do not accept hauled waste. EPA agrees that requiring all POTWs to designate discharge points would not be appropriate; not all POTWs are equipped to handle additional loads and/or types of pollutants which may be introduced to their facilities by liquid waste haulers. It is not EPA's intent to require the designation of discharge points by POTWs. Rather, EPA intends that today's rule be interpreted as prohibiting the discharge of hauled waste to a POTW except to the extent that the POTW allows such discharges and they occur at locations designated for such purposes by the POTW.

A number of commenters suggested specific modifications to the rule. One commenter stated that POTWs should have explicit authority to refuse to accept such wastes in order to protect the plant, including a rejection because proper analyses and certification were not met. This commenter indicated that POTWs should also be able to specify location of disposal, time and other conditions deemed necessary, including local limits. The commenter favored adding statements defining conditions POTWs can impose prior to accepting such wastes, including the use of local limits. Two commenters suggested POTW performance standards for establishing discharge points, stating that POTWs with a wide distribution of industrial users should provide multiple locations to minimize transportation expenses and the risks inherent in all transportation for industrial users who haul their wastes to the POTW. One commenter suggested requiring that designated discharge points be supervised by POTW personnel at all times when discharging is permitted.

EPA believes that the conditions and restrictions suggested by these commenters are sometimes necessary on an individual basis, but would necessarily vary according to different POTWs and their circumstances and therefore are not appropriate for inclusion in a uniform national rule. The Agency notes that today's rule provides POTWs with the flexibility to adopt specific conditions or restrictions such as those suggested by the above commenters. For example, POTWs may designate multiple discharge points for non-hazardous waste at any sites they deem appropriate for particular types of industrial users and they may provide supervision at some or all of these sites as appropriate. Similarly, POTWs may refuse to accept any trucked or hauled waste if proper procedures have not been followed, or they may set specific limits for such wastes. EPA's "Guidance Manual for the Identification of Hazardous Wastes Delivered to Publicly Owned Treatment Works by Truck, Rail, or Dedicated Pipe" (Office of Water Enforcement and Permits, June 1987), suggests numerous specific means to ensure that hazardous wastes are not being discharged to POTWs, including permits, waste tracking systems, inspection and sampling analysis, surveillance and investigative techniques, and restricted discharge permits. Because the need for such measures will vary, today's rule leaves it up to the POTW to adopt them when necessary.

A few commenters requested guidance on what specific tests to perform on trucked waste, or suggested the use of simple tests to determine the hazardousness of wastes. EPA's above-cited "Guidance Manual for the Identification of Hazardous Wastes Delivered to Publicly Owned Treatment Works by Truck, Rail, or Dedicated Pipe" contains detailed guidance on such testing, including how to determine if a waste is hazardous and how to establish a waste monitoring program tailored to the POTW's needs.

One commenter suggested that the regulations should prohibit acceptance of trucked or hauled materials which may result in interference or pass through of pollutants. Another commenter stated that categorical limits should not apply to trucked wastes, since this would unduly complicate the process. Still another commenter stated that establishment of dump sites away from the treatment facility could create a control problem for the POTW, and that the most effective control method would allow discharge only at the POTW headworks.

In response, EPA notes that trucked and hauled wastes are already subject to both EPA's general pretreatment regulations (including the general prohibition against pass through and interference) *and* to any categorical pretreatment standards applicable to the wastes. EPA agrees that in many instances the most effective control method may be to allow discharges of trucked or hauled wastes only at POTW headworks, and encourages POTWs to adopt this method if they deem it appropriate. In designating discharge points, and establishing procedures to ensure that wastes introduced to the POTW comply with all applicable federal requirements, EPA suggests that POTWs keep two critical issues in mind. First, facilities generating wastes covered by categorical pretreatment standards may not avoid pretreatment requirements simply by arranging for waste removal by liquid waste haulers. Accordingly, wastes generated by such facilities may not be introduced to a POTW by a liquid waste hauler unless they have been pretreated in accordance

with the categorical pretreatment standard(s) applicable to the waste. Second, POTWs may not designate discharge points outside of the POTW facility boundary for the introduction of hazardous wastes to the sewer system. Under the RCRA regulations, hazardous wastes may only be transported to designated facilities permitted to handle the waste described in the manifest (see 40 CFR 262.20, 263.21). For POTWs operating under a RCRA permit-by-rule, the area outside the POTW property boundary, including most of the sewer collection system, is not part of the permitted facility, so cannot be used as a location for accepting hazardous waste. See EPA's 1987 "Guidance for Implementing RCRA Permit-by-Rule Requirements at POTWs," p. 11. For POTWs operating under or considering applying for a RCRA permit, EPA has stated that "manifested wastes may only be delivered to an approved (hazardous waste management facility), and sewer systems will not be approved for that purpose". 45 FR 33320 (May 19, 1980).

Many commenters supported limiting the prohibited discharge standard to non-septic wastes, stating that designating discharge points for all trucked or hauled wastes could potentially put an undue burden on small POTWs because of supervising discharges at these points, and that limiting the prohibition to non-septic wastes would not prevent a POTW from specifying specific discharge points for septic waste if deemed appropriate by the POTW.

However, other commenters believed that both septic and non-septic wastes should be included in the prohibition. These commenters indicated that the prohibition would be difficult to enforce if septic wastes are excluded, since it is sometimes difficult to ascertain without sampling whether a truck is carrying septic or non-septic wastes.

EPA agrees with those commenters who expressed concerns about the potential presence of toxic and hazardous pollutants from non-domestic sources in septic wastes. For this reason, the Agency is today prohibiting the discharge of all trucked and hauled wastes except at designated discharge points. This will give POTWs better control of all such wastes potentially containing toxic and hazardous pollutants.

One commenter stated that the prohibition does not distinguish between a liquid waste hauler's off-site discharge to a POTW and an on-site discharge from a truck which is used to transport waste from one industrial plant building to another, then rinsed out and the residue discharged to the sewer at the industrial user's site. In response, EPA notes that the intent of today's rule was to regulate the discharge of wastes trucked or hauled off-site to the POTW from an industrial facility. Wastes discharged from a truck to the collection system at an industrial user's facility are not covered by today's prohibition, since such waste would not normally differ from that discharged by the facility during its usual operations. The purpose of today's prohibition, on the other hand, is to give POTWs better control of potentially harmful wastes which may be difficult to identify or which may have no easily ascertainable origin.

Most commenters did not support requiring other procedures for trucked and hauled wastes, although a few commenters recommended requiring additional sampling and monitoring procedures. However, most commenters generally indicated that while monitoring and sampling of truck loads are important, specific procedures should be developed by each POTW on a case-by-case basis to address its own particular situation. A number of POTWs discussed their own procedures for controlling trucked and hauled wastes, such as a certification or manifest requirement to track wastes entering the treatment plant, continuous supervision of designated discharge points, inspection of wastes (visual or through chemical and/or physical analysis) prior to acceptance by the POTW, requiring that trucked wastes be subjected to a minimum annual characterization and compatibility testing, and individual truck load sampling. Commenters believed that the extent of discharge management control exercised by the POTW should be tailored to facility-specific conditions, such as volume of specific material which the treatment process can accommodate over a period of time without loss of treatment effectiveness.

EPA believes that requiring uniform POTW procedures for handling trucked and hauled waste is not appropriate at the present time, since such procedures are very dependent on site-specific situations which POTWs are generally best equipped to address on their own. For this reason, EPA is not requiring POTWs to develop any particular measures to deal with trucked or hauled wastes, other than the prohibition on discharges except at locations designated by the POTW.

c. Today's Rule

Today's rule adds a new provision (40 CFR 403.5(b)(8)) prohibiting the discharge of trucked or hauled pollutants except at discharge points designated by the POTW.

D. Notification Requirements (40 CFR 403.12(p))

a. Proposed Change

Section 3010 of RCRA requires that any person who generates or transports hazardous waste, or who owns or operates a facility for the treatment, storage, or disposal of hazardous waste must file a notification with EPA or with a State with an authorized hazardous waste management program. Pursuant to the Domestic Sewage Exclusion in 40 CFR 261.4(a)(1), any material mixed with domestic sewage that passes through a sewer system to a publicly-owned treatment works for treatment is not a solid waste, and therefore cannot be a hazardous waste. However, section 3018(d) of RCRA (enacted as part of the Hazardous and Solid Waste Amendments in 1984) provides that the notification requirements of RCRA section 3010 "shall apply to solid or dissolved materials in domestic sewage to the same extent and in the same manner as such provisions apply to hazardous waste." There is currently no regulatory requirement that industrial users report the discharge of all hazardous wastes to sewers. The Study therefore identified the implementation of section 3018(d) as a potentially useful component of an improved pretreatment program. The Agency believes that the information provided by such notification is needed for the ultimate development by POTWs of controls to prevent pass through and interference.

On November 23, 1988, EPA proposed to revise 40 CFR 403.12 to add a new paragraph (p) that would require all industrial users to notify EPA Regional Waste Management Division Directors, State Hazardous Waste authorities, and their POTW of any discharge into a POTW of a substance which is a listed or characteristic hazardous waste under section 3001 of RCRA. Such notification would include a description of any such wastes discharged, specifying the volume and concentrations of the wastes, the type of discharge (continuous, batch, or other) and identifying the hazardous constituents contained in the listed wastes. The notification would also include an estimate of the volume of hazardous wastes expected to be discharged during the following twelve months. The notification would take place within six months of the effective date of the final rules.

To further ensure control of hazardous wastes discharged to sewers, the

proposed rule would require all industrial users who submit notification of the discharge of hazardous wastes to certify that they have a program in place to reduce the volume and toxicity of wastes generated to the degree they have determined to be economically practicable, and that they have selected the practicable methods of treatment, storage, and/or disposal currently available to them which minimize the present and future threat to human health and the environment. A similar certification requirement already applies to all generators of hazardous wastes (other than those that discharge their wastes to sewers) under section 3002(b) of RCRA.

In the October 17, 1988 revisions to the general pretreatment regulations (53 FR 40562, 40614) EPA added a requirement at 40 CFR 403.12(j)) that all industrial users promptly notify the POTW in advance of any substantial change in the volume or character of pollutants in their discharge. To clarify that 40 CFR 403.12(j) also applies to the discharge of hazardous wastes, the Agency also proposed to require that all industrial users promptly notify the POTW in advance of any substantial change in the volume or character of pollutants in their discharge, including changes in the volume or character of any listed or characteristic hazardous wastes for which the industrial user has submitted initial notification under 40 CFR 403.12(p).

Under proposed 40 CFR 403.12(p) generators would have been exempt from notification requirements during any calendar month in which they generated not more than 100 kilograms of hazardous waste, except for those wastes identified under 40 CFR 261.5 (e), (f), (g) and (j). Generators of more than 100 kilograms of hazardous wastes in any given month would be required to file the one-time notification.

In the proposed rule, the Agency solicited comments on the small quantity generator exemption and on whether any of the existing RCRA forms might be suitable for submission of the proposed notification requirements. EPA also requested comment on whether those industrial users required to submit Form R (a Toxic Release Inventory form required under section 313 of SARA to be submitted annually by industrial users with over ten employees who discharge certain listed toxic chemicals) should send a copy of Form R to the POTW, in lieu of the proposed hazardous waste notification requirements, if the toxic chemicals reported by the industrial user on Form R include those RCRA hazardous wastes for which notification would be required. The Agency also requested comments on whether additional (or more specific) management requirements should be imposed to control wastes for which notification would be submitted under the proposal.

b. Response to Comments

The majority of the commenters expressed strong support for notifying at least the POTW of hazardous waste discharged into its system. Supporting comments were that such notification would augment existing controls on spills and accidental discharges and give the POTW more knowledge of and control over previously unreported discharges.

Other commenters opposed any additional notification requirements, stating they would be duplicative and burdensome for all parties concerned. Several commenters stated that the requirement was not necessary because the discharge of hazardous waste was already prohibited in their sewer ordinances and therefore did not occur unless it was an uncontrolled spill. Still other commenters believed that the information needed by the POTW should be available through the State and Federal RCRA or SARA databases for them to obtain as necessary.

Because the proposal would impose only a one-time notification requirement which can frequently be fulfilled with available information, EPA does not believe it to be burdensome for industrial users. The information will also be useful to POTWs in developing programs to better control the introduction of hazardous wastes into treatment and collection systems. Sewer ordinances do not generally contain a prohibition against the discharge of hazardous waste, and these wastes are frequently present in part because of the Domestic Sewage Exemption provided under RCRA. Although some of the information in the proposed notifications is accessible through State and Federal databases, much of it is not. For example, hazardous substances for which notification is required under SARA are not necessarily the same as the listed and characteristic hazardous wastes for which notification would be provided under today's rule.

Most of the POTWs and States who commented believed that POTWs, State authorities, and EPA should receive the notification. But many commenters (mostly industries) supported notification of the POTW only. They stated that notifying the State hazardous waste management authorities, as well as EPA, would be redundant.

Section 3018(d) of RCRA makes the requirements of section 3010 applicable to solid or dissolved materials in domestic sewage "to the same extent and in the same manner as such provisions apply to hazardous waste." Section 3010(a) states that "any person generating or transporting [hazardous waste] or owning or operating a facility for treatment, storage, or disposal of such substance shall file with the Administrator (or with States having authorized hazardous waste permit programs under section 3006) a notification stating the location and general description of such activity and the identified or listed hazardous wastes handled by such person" (emphasis added). The statute thus mandates that, at the least, State or EPA hazardous waste personnel be notified. However, EPA does not interpret section 3018(d) as limiting the recipients of notification provided for under that section to the recipients specified under 3010(a). EPA's authority to tailor notification requirements to meet the needs of the pretreatment program is based in section 307(b) of the Act, authorizing EPA to promulgate such standards as are necessary to prevent pass through and interference. Also, RCRA section 3018(b) directs EPA to revise existing regulations "to assure that substances identified or listed under (RCRA section 3001) which pass through a sewer system to a publicly owned treatment works are adequately controlled to protect human health and the environment." As described below, EPA believes that proper control of materials identified or listed under RCRA will be facilitated by a requirement that notifications required by today's rule be submitted to POTWs, State authorities and EPA.

EPA agrees with the commenters who support notification of the POTW because it is directly affected by the discharge of such wastes. POTWs need to fully understand the nature of influent wastes to their plants to ensure proper treatment at the plant, establish appropriate local limits, and meet permit requirements. EPA believes that it is important for States to receive the notification so that they may use it in issuing NPDES permits, implementing State pretreatment programs, and protecting public health and welfare. In addition, submission of the notification requirements to EPA may assist the Agency in issuing NPDES permits to POTWs where it is the permitting authority and in establishing pretreatment requirements where it is the Control Authority. Notification of EPA will make possible the

development of a national data base or tracking system that would organize the information into a useful format for all interested parties.

Several commenters suggested that the information received could be summarized by States and EPA and be made available to POTWs. One commenter suggested that only the POTWs be notified and that the State and EPA could get the information from the POTW. However, other commenters suggested that other parties be notified, such as EPA Headquarters, State pretreatment program personnel, State water quality (NPDES) personnel and Regional as well as State Water Division Directors.

Summarization of the information received by the States and EPA and subsequent distribution to the appropriate POTW would, in most cases, be a cumbersome notification method. The Agency believes that the required information should be made available to the POTW as soon as possible. Although the suggestion of notifying EPA Headquarters, pretreatment personnel, water quality personnel and Water Division Directors is reasonable, EPA believes that today's rule, in providing for receipt of the notification by the most important representatives of local, State and Federal governments, will allow other personnel from these respective branches of government to easily obtain copies of the information. As mentioned above, the Agency is considering the development of a data base or tracking system that would organize the information into a useable format.

Several commenters pointed out that much of the required information was already submitted to regulatory agencies in indirect discharger permit applications, notices of process changes, through local ordinances, or is already reported under 40 CFR 403.12 and SARA section 313.

Although some information may be submitted pursuant to these authorities, EPA emphasizes that none of these provisions specifically requires submittal of information to POTWs, States, and EPA about all RCRA hazardous wastes discharged to sewers.

Several commenters, while agreeing with the need for a notification requirement, believed that the POTW should have the flexibility to determine the appropriate reporting. This would eliminate some of the redundancy, since POTWs have different programs and ordinances and could then choose that information which would best suit their needs.

Today's rule requires a minimum amount of information that is to be reported by all industrial users discharging hazardous wastes to sewers, except for dischargers of less than fifteen kilograms per month of non-acute hazardous wastes. EPA believes that these minimum requirements will be very useful to POTWs, States and EPA. POTWs have the flexibility to request additional information to suit the needs of their specific programs.

Several commenters expressed concern about the requirement to estimate the volumes of hazardous waste that would be discharged over a 12 month period. Commenters believed that the estimates would be unreliable and would result in possible liabilities (possibly from failure to report accurately). They questioned how to account for dramatic variation in discharges over the twelve-month estimation period and also questioned the purpose of the requirement. One commenter stated that although this kind of information might be useful, POTWs could not enforce a failure to report accurately. Another commenter suggested that an estimation over 30 days might be more useful.

The Agency believes that the information received through this requirement will be useful for POTW planning purposes. The information requested from industrial users is only an estimate of what they know or have reason to believe will be discharged over the next 12 month period, taking any variability into account. The estimation is not intended to constitute an enforceable limit. Industrial users are reminded that under 40 CFR 403.12(j) of today's rule, POTWs must be notified in advance of any substantial change in the volume or character of pollutants in their discharge. POTWs may choose to develop enforceable local limits based on the information submitted.

One commenter mentioned that the last line of 40 CFR 403.12(p)(1) allows an exemption from the notification requirement for pollutants already listed under the self-monitoring requirements. The commenter stated that self-monitoring information alone would not be sufficient to prevent pass through or interference.

The purpose of this proposed exemption is to avoid duplicative requirements, since in some instances information required under the hazardous waste notification provisions will have already been submitted under 40 CFR 403.12. The Agency notes that neither the self-monitoring requirements nor the hazardous waste notification requirements are intended primarily to prevent immediate pass through or interference. The purpose of the 40 CFR 403.12 requirements is to monitor compliance with categorical standards. The primary purpose of the hazardous waste notification requirements is to gather as much information as is needed to assess the potential effects of hazardous and toxic waste discharged to POTWs. It should be noted that the exemption for pollutants reported under the 40 CFR 403.12 self-monitoring requirements applies even though such reporting may not necessarily include all elements submitted under today's notification requirements, such as an estimate of the wastes expected to be discharged over the next twelve months. Since the 40 CFR 403.12 provisions require the submission of actual sampling results and periodic reporting every six months, the Agency believes that such reports are an adequate substitute for the section 3018(d) requirements. Although self-monitoring reports under 40 CFR 403.12 are submitted only to the Control Authority and not to EPA and the States as are today's section 3018(d) notifications, EPA believes that the existence of an already established, easily accessible data base for 40 CFR 403.12 self-monitoring requirements obviates the need to notify additional parties, as is required for one-time notifications of hazardous waste discharges under section 3018(d).

One commenter stated that notification should extend to all pollutants of concern in addition to hazardous wastes. This commenter supported notification of the discharge of hazardous constituents listed in 40 CFR part 261, appendix VIII. The commenter stated that this would keep the focus of the notification on the chemistry of the discharge rather than the legal status of the wastestream, and would also assure more equitable treatment of different types of dischargers. Some commenters also indicated that the notification requirements should be oriented toward volumes and types of waste based on their chemistry after treatment, rather than using the RCRA codes to describe the waste. The rationale was that the RCRA "derived from" and "mixture" rules fail to provide information about the waste after treatment, other than to define the status of the waste as hazardous up until the point of discharge into a domestic sewage system.

The Agency believes that notification of the discharge of all appendix VIII constituents is not routinely necessary. EPA believes it is preferable for the POTW to require such information on a case-by-case basis when appropriate to protect against potential pass through or

interference. The Agency also notes that today's rule requires the industrial user to report hazardous constituents discharged, if known. If an industrial user is not aware of the hazardous constituents contained in its hazardous waste discharge, EPA believes that POTWs, after receipt of notifications received under today's rule, will be in the best position to institute requirements for follow-up information on an as-needed basis based on the data already acquired about the industrial user's hazardous waste. Such additional information may provide more detail on the chemistry of the discharge, and thus fill in any data gaps that may result from use of RCRA waste codes and RCRA definitional constructs such as the mixture and derived from rules.

Some commenters objected to the requirement that industrial users notify the POTW of "any discharge into the POTW" and questioned whether the presence of a section 3001 RCRA waste in levels below the detection limits would require notification. One commenter opposed requiring that constituents be identified in the notification, stating that it would be burdensome to identify all constituents and calculate their volumes. Another commenter believed that such a requirement would be redundant because the constituents are already reported under section 313 of SARA. Some commenters also stated that the presence of a hazardous waste does not mean that certain constituents are always present, nor does the presence of constituents indicate that a waste is hazardous.

EPA notes that under 40 CFR 261.11, any person generating a solid waste is responsible for determining whether that waste is a listed or characteristic hazardous waste. Thus, industrial users who are generators of hazardous wastes are already required to have knowledge of such wastes. Today's rule requires all parties discharging hazardous wastes to POTWs to file a one-time notification. The notification must include a description of any such wastes discharged. To clarify this requirement and make description easier, today's rule requires that industrial users include the name of the hazardous waste and the EPA hazardous waste number for each hazardous waste discharged (these numbers are found in 40 CFR part 261, subpart D). Today's rule also requires an identification of the constituents discharged, along with their mass and concentration in the wastestream, but only to the extent that these constituents and their mass and concentrations are known and readily available to the user. The Agency is requiring notification of mass rather than volume (as was proposed) because mass is a more useful measure of the quantity of chemicals discharged. Where a discharger has knowledge that such constituents are present in its discharge, the discharger should identify such constituents in its required section 3018(d) notification, notwithstanding inability to detect the exact levels of such constituents in its discharge (e.g., because constituent levels are below analytical detection limits).

In response to concerns expressed by commenters, the Agency has clarified in the language of today's rule that identification of the constituents of hazardous waste and their mass and concentration need only be made if these are known by the industrial user (unlike the notification of the discharge of the hazardous waste and its description by name and EPA hazardous waste number). Monitoring for the presence of these constituents is not specifically required. It is not correct that all of these constituents are reported under SARA section 313, since the list of toxic chemicals required to be reported under that provision does not include all hazardous constituents under RCRA. The Agency believes that many industrial users will already have information about the constituents of their waste and that this information is often useful to POTWs. If the information is not available, the POTW may request additional monitoring on an as-needed basis.

Under the proposed rule, generators would have been exempt from the notification requirements during any calendar month in which they generate no more than 100 kilograms of hazardous wastes, except for certain acute hazardous wastes.

Many commenters supported this exemption. The commenters suggested that by retaining the exclusion, EPA would provide regulatory relief for small industries while not jeopardizing the protection of human health and the environment.

A few commenters who supported the small quantity generator exemption suggested that the exemption be widened to include generators of volumes between 100 to 1000 kilograms per month. These commenters stated that section 3001(d) of RCRA specifically discusses the regulation of these generators, and that during evaluation of an appropriate regulatory scheme for such generators, EPA paid special attention to minimizing paperwork burdens. Commenters stated that by proposing to impose notification requirements on these generators, EPA was ignoring its previous position on minimizing the burdens associated with recordkeeping and reporting.

In response, EPA notes that no POTWs suggested widening the 100 kilogram per month exemption to 1000 kilograms per month. In fact, several POTWs were concerned that the 100 kilogram per month exemption was unjustified and believed that such an exemption could jeopardize human health and the environment, since a discharge of 100 kilograms of certain substances would be very likely to cause pass through or interference.

The majority of the commenters who opposed the small quantity generator exemption were POTWs and State governments. They believed that discharges of less than 100 kilograms per month could at times have a serious impact on collection systems, POTWs and worker health or safety, and that POTWs would be interested in ascertaining all quantities of hazardous wastes discharged to sewers.

Some commenters who opposed the small quantity generator exemption stated that the Agency's proposal to exempt such generators from notification was not supported by the evidence cited in the preamble. These commenters also pointed out that EPA acknowledged that a 100 kilogram discharge of some RCRA hazardous wastes could be problematic for a POTW (particularly small and/or unacclimated ones). Another commenter pointed out that any exemption should be tied to the discharge, rather than the generation, of a hazardous waste.

After evaluation of these comments, EPA believes that a complete exemption from the notification requirements for many dischargers of less than 100 kilograms per month would not be environmentally justified. The Agency also agrees that any exemptions should be tied to the discharge rather than the generation of hazardous wastes, since only wastes actually discharged will usually be of concern to the POTW.

The Agency believes that a discharge of less than 100 kilograms of certain types of hazardous wastes may cause problems for POTWs (particularly small and unacclimated ones) if discharged at once or over a short period of time (e.g., spent electroplating baths, certain spent solvents such as benzene, or discarded unused formulations containing tri-, tetra-, or pentaclorophenol). Although one or two dischargers of approximately one hundred kilograms per month may have little potential for adverse impact on a POTW (depending on the wastes discharged) many POTWs have a

significant number of such generators discharging hazardous waste to the sewer system, which cumulatively pose a potential for causing pass through or interference. EPA believes that some degree of notification from these dischargers is the only way for POTWs to be aware of which hazardous wastes are entering their collection and treatment systems. On the other hand, the Agency believes that most dischargers of considerably smaller amounts of hazardous wastes will not, as a general rule, present the potential for adverse impact at the POTW.

As a general rule, the Agency believes that dischargers of less than fifteen kilograms per month (the equivalent of about one pound per day) of hazardous waste to POTWs present little danger of adverse impact to such POTWs. For this reason, today's rule provides an exemption for such dischargers, unless the hazardous wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Today's rule also provides that all non-exempt dischargers of hazardous wastes must submit the name of the hazardous waste discharged, the EPA hazardous waste number, and the type of discharge (whether batch or continuous). The Agency believes that this is the essential information which is needed to enable POTWs to be aware of which hazardous wastes are entering their systems and to enable them to decide whether to request further data from a particular discharger. Today's rule also requires those industrial users discharging more than 100 kilograms per month of a hazardous waste to a POTW to submit additional information, to the extent such information is known and readily available to the user. The additional information consists of an identification of the hazardous constituents contained in the listed wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that month, and an estimation of the mass of such constituents in the wastestream expected to be discharged during the following twelve months. POTWs may decide to require more detailed information from any discharger on a case-by-case basis in the exercise of authorities granted under local law. POTWs may also decide, in the exercise of local authorities, not to provide any of the above exemptions or reduced reporting requirements if they do not deem them appropriate for their particular systems.

Two commenters stated that because of the application of the "mixture rule" in 40 CFR 261.3(a)(2)(iii), facilities discharging wastewater containing any amount of hazardous waste would be subject to the proposed notification requirements, regardless of the proposed exemption for small quantity generators.

The regulation cited by the commenters provides that waste mixtures that include a hazardous waste that is classified as hazardous solely by virtue of exhibiting a hazardous characteristic identified in 40 CFR 261.20–261.24 are hazardous only if the mixtures themselves exhibit a hazardous characteristic. A companion rule, 40 CFR 261.3(a)(2)(iv), provides that mixtures that include a hazardous waste listed in 40 CFR 261.30–261.33 (other than one which is hazardous solely because it exhibits a characteristic identified in 40 CFR 261.20–261.24) are hazardous unless the resultant mixture is "delisted" pursuant to 40 CFR 260.20, 260.22, or one of the exceptions in 40 CFR 261.3(a)(2)(iv)(A)–(E) applies. The result of these rules is that mixtures of small quantities of certain hazardous wastes with large quantities of process or other solid wastes render the entire mixture a hazardous waste. These rules apply to industrial users covered by today's rule; accordingly, for purposes of ascertaining whether an industrial user discharges between 0 and 15 kilograms per month, 15 to 100 kilograms per month or over 100 kilograms per month of hazardous waste, the industrial user must apply the RCA mixture rules to calculate the volume of hazardous waste being introduced to the sewer.

Two commenters stated that the Agency should limit the notification requirement to significant industrial users as defined in proposed 40 CFR 403.3(u) who have never before notified EPA of their hazardous waste activities. This commenter stated that less than one percent of all hazardous wastes generated is associated with non-significant industrial users.

The Agency believes that limiting the notification requirement to significant industrial users would not be adequate to fulfill the statutory requirement of section 3018(d), since the definition of significant industrial user does not necessarily include the dischargers of hazardous wastes covered under RCRA section 3010. In addition, EPA believes that notification by all hazardous waste dischargers will assist POTWs in ascertaining whether the cumulative effect of many small discharges of hazardous waste may cause pass through or interference. Prior notification to EPA of hazardous waste activities under RCRA does not constitute compliance with today's rule, since the notification would not necessarily include all the items of information specified in this rule.

Some commenters suggested that EPA provide an exemption for the discharges described in 40 CFR 261.3(a)(2)(A)–(E) and an exemption from notification requirements for acute hazardous wastes. They recommended that the exclusion should specify a level for each characteristic waste as well as for total listed wastes.

The Agency notes that 40 CFR 261.3(a)(2)(iv) (A)–(E) describes certain wastes that are not classified as hazardous waste. Discharge of such materials to a POTW would not, therefore, trigger today's notification requirements. In addition, the Agency believes that such discharges present little potential danger of pass-through or interference at POTWs. However, POTWs may require notification of these discharges on a case-by-case basis pursuant to local authorities.

Today's rule does not grant an exemption for acute hazardous wastes. Such wastes have been identified under the RCRA program as meriting controls more stringent than for other types of hazardous waste (e.g., there is a less extensive small quantity generator exemption), and EPA believes that information on the discharge of any quantities of such wastes to a POTW is important for POTW planning to prevent pass through or interference.

Some commenters questioned the requirement that industrial users provide notification to the POTW of any substantial change in the volume or character of hazardous wastes discharged. Notification of substantial changes in pollutants discharged is already required pursuant to 40 CFR 403.12(j), and will be modified by today's rule to specifically provide for notification with regard to substantial changes in hazardous waste discharges. These commenters requested clarification about the definition of "substantial change in the volume or character of pollutants" as well as the means of notification. Another commenter felt that the language should be deleted because it implied continuous monitoring.

The possibility of providing a regulatory definition for "substantial change" in the volume or character of pollutants in an industrial user discharge was specifically addressed in the preamble to the final PIRT rule (53 FR 40562), which was promulgated on October 17, 1988. The preamble discussion of 40 CFR 403.12(j) stated that EPA has determined that a regulatory definition of "substantial change" in the volume or character of

pollutants discharged is inadvisable because what is substantial in a given situation will depend on several variables (53 FR 40599). The Agency stated that substantial change should be determined by the comparable notice requirements for direct dischargers under the NPDES regulations and supplemental, or more stringent, notice requirements adopted by the POTW or required by the permitting authority in the POTW's NPDES permit. With respect to substantial changes in the volume or character of pollutants discharged, the Agency stated that these should include a substantial change in any characteristic of the industrial user's wastewater discharge, including volume, flow, the amount or concentration of pollutants, and the discharge of new pollutants not previously reported to the POTW. Only changes which the industrial user expects to occur on a regular basis over an extended period of time (three months or more) need to be reported. Sporadic or episodic changes in the volume or character of a discharge are not ordinarily covered by the changed discharge notification. However, depending on the circumstances, the industrial user may have to report these discharges in accordance with other pretreatment requirements, e.g., the "slug load" notification requirements (40 CFR 403.12(f)), the upset provision (40 CFR 403.16), or bypass provision (40 CFR 403.17)). In most cases, a substantial change in the volume or character of a user's discharge will result from a deliberate or planned change to the user's facility or operations. "Substantial" should be based on the magnitude of change to the industrial user's existing discharge and not on the anticipated effect of the changed discharge on the POTW. Therefore, a regulation specifying absolute numbers, such as an increase or decrease of X gallons of flow discharged, would not be appropriate. Although the approach taken today may result in notifications about changed discharges which will not have a demonstrable effect on the POTW's influent, effluent or sludge quality, EPA has determined that any incidental "over notification" is justified by the need of the POTW (and NPDES permitting authority) to have information on a timely basis to determine whether, considering other changes to the POTW's system or pollutant control requirements, new limits on pollutant discharges are necessary, or should be further evaluated to prevent pass through or interference (see 53 FR 40600).

One commenter inquired about the mechanism that would be used to ensure that all industrial users were made aware of the one-time notification requirement. Another commenter suggested that the regulations should require POTWs to develop procedures for notification of changes in a user's discharge.

The principal mechanism used to ensure that industrial users are made aware of the notification requirement is through the publication of this notice in the **Federal Register**. In addition, POTWs may wish to send notices to their industrial users on the procedures that they wish them to follow. With respect to requiring POTWs to develop procedures for notification of discharge changes, EPA prefers to leave this question to the discretion of the specific POTW.

Some commenters stated that the certification requirements seemed inappropriate for wastewater effluents. EPA disagrees with these commenters. The Agency believes that a certification requirement is appropriate for industrial users because waste minimization will improve the quality of the effluent which enters the POTW and, eventually, the discharge that enters navigable waters through the POTW. The certification requirement will also further EPA's stated goal of pollution prevention by helping to reduce loadings of hazardous wastes to sewers.

However, the Agency has modified the language of the certification requirement somewhat from the November 23, 1988 proposal in order to make the requirement more appropriate to discharges of hazardous wastes to POTWs. Today's language clarifies that the requirements apply only to hazardous wastes for which notification was submitted under 40 CFR 403.12(p). In addition, the language now requires the industrial user to certify that it has a program in place to reduce the volume and toxicity of wastes generated to the degree it has determined to be economically practical. The Agency has substituted the phrase "economically practical" for "economically practicable" because it believes the former phrase more accurately conveys that generators should choose those means of reducing the volume and toxicity of their wastes that are feasible and cost-effective.

EPA has also deleted the proposed language requiring notifiers to certify that they have selected the treatment, storage, and/or disposal methods currently available to the user which minimize the present and future threat to human health and the environment. By recommending retention of the Domestic Sewage Exclusion, the Agency has made a determination that disposal of hazardous wastes to sewers in compliance with pretreatment requirements is an environmentally acceptable disposal method. In addition, many industrial users discharging hazardous waste to sewers also treat, store, or dispose of hazardous waste by other means and are already subject to the waste minimization certification requirements of 40 CFR 264.73. This deletion will therefore eliminate duplicative paperwork requirements for those facilities while still protecting POTWs and fulfilling Congressional intent to encourage the selection of optimal waste management techniques to reduce or eliminate the generation of hazardous waste.

One commenter suggested that the waste minimization certification requirement should allow POTWs or industries to focus on alternative control mechanisms such as source control and best management practices.

In response, the Agency notes that the requirement that industrial users certify that a program is in place to reduce the volume and toxicity of wastes to the degree that the user has determined to be economically practical allows complete flexibility to the industrial user, including the use of source controls and best management practices to minimize the generation of hazardous wastes.

One commenter suggested that the regulations include a requirement that all industrial users be placed on a 5-year schedule to eliminate hazardous wastes discharged under the Domestic Sewage Exclusion. However, the Study demonstrated that in general, POTWs are capable of accepting a certain amount of hazardous waste without threatening the POTW, human health or the environment. The Agency therefore believes that with proper controls, such as those in today's rule, elimination of all hazardous waste discharges from industrial users is unnecessary at the present time.

With respect to the use of supplemented EPA Form R or RCRA Forms to fulfill the proposed notification requirement, the majority of the commenters who addressed this issue supported the use of such forms. The commenters believed that the use of these forms would lessen duplicative and burdensome paperwork requirements. Other commenters opposed the use of these forms, stating that the use of such forms would lead to extraneous or misleading information that would create an administrative

burden for POTWs. They stated that Form R might simplify the reporting requirement for some industrial users, but would not simplify POTWs' task of evaluating the form and sorting out unnecessary information.

In response to these comments, the Agency is clarifying today that EPA Form R and existing RCRA forms may be used to fulfill the notification requirement as long as the industrial user submits all information required in today's rule. However, POTWs may require industrial users to use other forms if they wish. Industrial users may also submit the required information by other means, such as a letter.

Two commenters stated that the information on Form R would be based on pure estimates on the part of the discharger. In response, EPA points out that today's notification requirement also requires estimates for the mass and concentration of hazardous waste constituents, as well as the mass of constituents discharged over the following twelve months. These estimates should be based on the best available data.

Commenters stated that Form R would not cover a sufficient range of pollutants and that the list of SARA compounds was very different from the list of hazardous wastes under section 3001 of RCRA. In the case of substances which are listed or characteristic wastes under section 3001 of RCRA which do not appear on Form R, the industrial user must submit the required information on those wastes to EPA, the States, and the POTW. In addition, although section 313 of SARA only requires notification for industrial users with more than ten employees, today's rule does not include any exemptions based on the number of employees at the facility.

A commenter suggested that the reporting requirements under 40 CFR 403.12 be used to fulfill the notification requirement. In response, the Agency notes that pollutants reported under 40 CFR 403.12 (b), (d), or (e) need not be reported under today's notification requirement. However, the reporting requirements under the above-mentioned provisions of 40 CFR 403.12 apply to pollutants regulated under applicable categorical pretreatment standards. Thus the reporting requirements under 40 CFR 403.12 may not necessarily address hazardous wastes and would fulfill today's requirements only if such wastes had been reported under 40 CFR 403.12 (b), (d), or (e).

To clarify that today's rule applies to new industrial users or to existing industrial users which will discharge hazardous waste only in the future, EPA has added a provision requiring industrial users who commence discharging after the effective date of today's rule to provide the notification no later than 180 days after the discharge of the hazardous waste.

c. Today's Rule

Today's rule provides that the industrial user shall notify the POTW, the EPA Regional Waste Management Division Director, and State hazardous waste authorities in writing of any discharge into the POTW of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the industrial user discharges more than 100 kilograms of such waste per calendar month to the POTW, the notification shall also contain the following information to the extent such information is known and readily available to the industrial user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following twelve months. All notifications must take place within 180 days of the effective date of this rule. Industrial users who commence discharging after the effective date of this rule shall provide the notification no later than 180 days after the discharge of the hazardous waste. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notifications of changed discharges must be submitted under 40 CFR 403.12(j). The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements of 40 CFR 403.12 (b), (d), and (e).

Industrial users are exempt from the above requirements during a calendar month in which they discharge no more than fifteen kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification. Subsequent months during which the industrial user discharges additional quantities of such hazardous waste do not require additional notification.

In the case of new regulations under section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the industrial user must notify the POTW, the EPA Regional Waste Management Division Director, and State hazardous waste authorities of the discharge of such substance within 90 days of the effective date of such regulations.

In the case of any notification made under today's rule, the industrial user shall certify that it has a program in place to reduce the volume or toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

E. Individual Control Mechanisms for Industrial Users (40 CFR 403.8(f)(1)(iii))

a. Proposed Change

The existing pretreatment regulations require POTWs with approved pretreatment programs to have the legal authority to control, through permit, order, or similar means, the contribution to the POTW by each industrial user to ensure compliance with pretreatment standards and requirements. EPA's experience in developing and overseeing the pretreatment program has led it to believe that individual control mechanisms are the best way to ensure compliance with applicable pretreatment standards and requirements. Such a system gives the industrial user individual notice of all of the pretreatment requirements to which it is subject, thus making it easier for such users to understand their obligations before a violation occurs and ensuring more effective prevention of pass through and interference.

For these reasons, the Agency proposed on November 23, 1988 to revise 40 CFR 403.8(f) to require that POTWs with approved pretreatment programs issue discharge permits or equivalent individual control mechanisms to industrial users identified as significant under proposed 40 CFR 403.3(u). Under the proposal, such control mechanisms would contain, at a minimum, the following elements:

(1) Statement of duration (in no case more than five years);

(2) Statement of non-transferability without prior POTW approval;

(3) Applicable effluent limits based on categorical pretreatment standards and local limits;

(4) Applicable monitoring, sampling, and reporting requirements;

(5) Notification requirements for slug discharges as defined in 40 CFR 403.5(b); and

(6) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements.

The Agency solicited comment on the merits of the proposed revision. Specifically, the Agency requested comment on: (1) The appropriateness of limiting the requirement to industrial users defined as significant under proposed 40 CFR 403.3(u), or the appropriateness of additional or alternative targets, such as categorical users or notifiers of hazardous waste discharges under proposed 40 CFR 403.12(p); (2) whether the requirement should apply only to POTWs with more than a specified number of industrial users (and, if so, what number would be appropriate as a cut-off point); and (3) whether the list of conditions proposed should be reduced, expanded, or modified.

b. Response to Comments

The Agency received many comments on this issue. Commenters included States, POTWs, trade associations, industries and environmental groups. Of these, most supported the proposal in some form and many supported it as proposed.

Several commenters suggested that some instruments other than permits, such as contracts or administrative orders, might serve as equivalent control mechanisms. Most of those opposing the requirement stated that the POTW should have the flexibility to choose whether or not to implement a system of individual control mechanisms. One commenter stated that the requirement was redundant, because every POTW with an approved program is already required to notify users of pretreatment requirements and to have the authority to prohibit harmful pollutants from entering the POTW.

POTWs are required under the existing pretreatment regulations to have and exercise the authority to control through permit, order, or similar means, the contribution of individual industrial users to the POTW (40 CFR 403.8(f)(iii)). It is also true that, under the existing regulations, POTWs are required to notify users of applicable pretreatment standards and requirements and to ensure compliance with such standards and requirements. The Agency does not believe, however, that POTWs have consistently exercised their discretion under the existing regulations to develop adequate industrial user control mechanisms. Audits conducted of local pretreatment programs have led the Agency to conclude that many existing control mechanisms are inadequate to ensure compliance with pretreatment requirements and that industrial users should often be provided with better notice of pretreatment requirements. The Agency continues to believe that individual control mechanisms are the best way to accomplish these objectives. For this reason, EPA proposed to require POTWs to issue permits or other individual control mechanisms to significant industrial users.

Today's rule will provide substantial benefits to the POTW, to the industrial user, and to the pretreatment program as a whole. For instance, a user subject to both categorical standards and local limits would receive individual notice of which limits are applicable (i.e., the most stringent of the two) for each regulated pollutant in its discharge. Similarly, a user with equivalent mass- or concentration-based limits or alternative limits derived by the combined wastestream formula would be informed of such limits in its permit or other individual control mechanism. Users would also be individually notified of sampling and reporting requirements, including any requirements more stringent than the applicable Federal minimum requirements. An individual control mechanism also benefits the user by providing notice of applicable requirements before a violation occurs, rather than afterwards. In addition, individual control mechanisms provide a mechanism for the POTW to impose individualized pretreatment requirements (e.g., for sampling and reporting) on an industrial user. Finally, as some commenters pointed out, this requirement would bring greater consistency to administration and implementation of the national pretreatment program across the country. Some commenters also felt that uniform Federal requirements were necessary to ensure fairness in the administration of the program.

Several commenters stated that mandatory individual control mechanisms would be costly for POTWs. One commenter said that the rule would require POTWs to "scrap" existing and approved pretreatment programs. Some POTWs stated that they were unnecessary because they already had effective ordinances.

Although the Agency is sensitive to concerns regarding costs, EPA notes that many POTWs already issue permits or other individual control mechanisms to some or all of their users and will probably need little or no modification to their existing program to meet these requirements. POTWs which heretofore have relied entirely on ordinances to ensure compliance will require greater modification of their programs to comply with today's rule. However, EPA believes that the long-term benefits of this approach will justify the costs, even for POTWs that now rely on ordinances as their only control mechanism.

POTWs will be able to reduce their costs by utilizing existing data and by incorporating some existing requirements into the new system. Substantive requirements of the POTW's program (such as prohibited discharges, monitoring and reporting requirements, and penalty provisions) should be self-implementing under the POTW's ordinance. Many of these requirements could simply be written into the individual control mechanism, while others could be adjusted with slight modifications to reflect the particular circumstances of the user. Where the POTW already possesses all necessary data from its users to enable it to identify the character and volume of pollutants contributed by each user to the POTW, there would be no need to collect that information again. In support of its view, EPA points out that one POTW commented that it was initially reluctant when required to implement a permit system by its State Approval Authority. However, it found that implementation was fairly simple when standardized forms were developed, and its users preferred to have all of their requirements listed in one document.

One POTW commented that its State law prohibits municipalities with a population of greater than 500,000 from using permits to control individual discharges to the POTW. The commenter did not indicate whether all individual control mechanisms were similarly prohibited. If not, under the rule as promulgated, the commenter may use some other equivalent individual control mechanism. Alternatively, the commenter would have to seek a revision in its State law. In another context, a commenter requested that the Agency clarify the meaning of "equivalent control mechanisms" which could be used in place of permits. Another commenter stated that, if approaches other than permits have been approved and found effective, they should be allowed to continue and that EPA should not limit the definition of individual control mechanisms to permits only.

In this regard, the Agency would like to clarify both what it considers to be an acceptable "permit" under today's rule, and what may constitute "equivalent

control mechanisms". Where possible, analogies or distinctions are drawn between pretreatment permits and NPDES permits because most POTWs are very familiar (as NPDES permittees) with the NPDES program. First, unlike federal requirements applicable to direct dischargers, industrial users are not required under today's rule to obtain a permit prior to discharging to a POTW. (However, POTWs may establish such a requirement pursuant to their own legal authorities). Second, industrial users must comply with all applicable pretreatment requirements under federal law, whether or not they are contained in the permit or equivalent individual control mechanism. As a corollary, compliance by the industrial user with the terms of the permit does not shield it from liability for failure to comply with federal pretreatment requirements not set forth in the permit. However, EPA expects that the POTW will do everything possible to ensure that the limits and other requirements in the permit are as accurate and complete as possible, and will notify the user of any changes in applicable pretreatment requirements which become effective subsequent to the issuance of the permit.

As stated in the preamble to the proposed rule, the Agency will require issuance of "individual discharge permits or equivalent control mechanisms." An adequate equivalent control mechanism is one which ensures the same degree of specificity and control as a permit. To clarify that the conditions of the individual control mechanism must be enforceable against the significant industrial user through the usual remedies for noncompliance (set forth in 40 CFR 403.8(f)(1)(vi)(A)), EPA has amended the language of 40 CFR 403.8(f)(1)(vi)(B) to provide that pretreatment requirements enforced through the remedies of 40 CFR 403.8(f)(1)(vi)(A) shall include the requirements set forth in individual control mechanisms. In addition, the Agency has added to proposed 40 CFR 403.8(f)(1)(iii) a statement that individual control mechanisms must be enforceable.

EPA notes that the most effective control mechanisms should also be "strictly enforceable" under local law. Generally, for an individual control mechanism to be strictly enforceable, the local ordinance must specify that the terms and conditions of the control mechanism can be challenged (administratively and/or in court) only within a very limited time period after the control mechanism becomes effective. If the control mechanism is not challenged within the alloted time period, it cannot later be challenged in an enforcement proceeding (for guidance on this and other issues concerning individual control mechanisms, see EPA's *Industrial User Permitting Guidance Manual,* (September 1989)).

Commenters suggested several alternatives to the use of permits as individual control mechanisms. These included ordinances, administrative orders, and contracts. Although only two commenters discussed the use of an ordinance as a control mechanism, some POTWs rely on ordinances as their principal control mechanism. An ordinance may offer fairness and consistency in its application, but it does not provide specificity and individual notice to significant industrial users. One POTW stated that its ordinance, together with notice by mail to individual users, was sufficient. In response, the Agency emphasizes that, although a letter provides notice to the individual user of applicable limits and other requirements, an ordinance system contains the same limits for all industrial users and does not provide for POTW evaluation of significant industrial users to determine whether individual requirements are necessary for that user. Accordingly, an ordinance will not be considered an equivalent control mechanism under today's rule.

Two commenters discussed the use of administrative orders as an alternative control mechanism. One commenter stated that administrative orders are an effective method of imposing pretreatment and reporting requirements on industrial users and are less paperwork-intensive than permits. One POTW commented that it modified its administrative orders to attempt to comply with EPA's oversight requests, but did not succeed in meeting all requirements. This commenter also stated that it is necessary for the Agency to clearly specify the requirements for individual control mechanisms.

The Agency agrees that detailed administrative orders may be an equivalent individual control mechanism. In order to completely satisfy today's requirement with an administrative order system, the POTW must issue administrative orders to its significant industrial users whether or not they are complying with all applicable pretreatment standards and requirements. In addition, such orders must contain all of the minimum elements of an individual control mechanism specified in today's rule. The use of administrative orders therefore may not be necessarily less paperwork-intensive than other individual control mechanisms. Finally, administrative orders that are typically issued only in the context of an enforcement action may not meet one or more of the criteria for an adequate control mechanism described above and thus would not satisfy today's requirements. POTWs may, of course, use a mix of appropriate administrative orders, permits, and other equivalent individual control mechanisms to satisfy today's rule.

Several commenters mentioned the use of contracts as a control mechanism. One stated that the successful use of contracts precluded the need for permits, and two others equated the use of contracts with the use of permits. Two commenters stated that the permit should be signed by the permittee and "act [as a] legal contract between the POTW and the permittee."

The use of contracts as a control mechanism was addressed in a previous rulemaking (53 FR 40562, October 17, 1988). In that rulemaking, EPA stated that contracts do not provide a POTW with the requisite penalty authority for an approved program and are not an adequate control mechanism for POTWs with an approved pretreatment program. As a result, all references to the use of contracts as a control mechanism were deleted from the general pretreatment regulations (for a discussion of this issue, see the above-mentioned **Federal Register** notice at 53 FR 40574 *et seq.*). A "permit" signed by the permittee (i.e., the industrial user) may be deemed a contract and thus lose its effectiveness as a control mechanism. POTWs that currently use contracts as control mechanisms may incorporate most of the terms of such contracts into their newly issued non-contractual individual control mechanisms if such terms are current, reflect applicable pretreatment standards and requirements, and otherwise meet the requirements of today's rule.

Several commenters appeared to be confused about the meaning of the statement in the preamble to the proposed rulemaking that the Agency was proposing to require POTWs with approved programs to have "the legal authority to issue individual discharge permits or equivalent control mechanisms." Several POTWs commented that they supported the proposal, as some of them already had the authority to issue permits. One State commented that the proposal was not adequate unless the POTW is also required to actually issue the control mechanism. One POTW supported a requirement that POTWs have permit authority, but not a requirement to issue

permits. Finally, one trade association commented that the Agency should remove the word "permits" from the requirement if permit issuance was not intended to be a mandatory requirement.

EPA intended that the proposed rule be interpreted consistently with the Agency's interpretation of other requirements of 40 CFR 403.8(f)(1), i.e., the requirement that the POTW have the authority to undertake various activities means that the POTW must, in fact, engage in those activities. EPA is revising the language of 40 CFR 403.8(f) to clarify that POTW pretreatment programs must be implemented to exercise the authorities in 40 CFR 403.8(f)(1).

In the proposed rulemaking, the Agency also requested comments on (1) the appropriateness of limiting the requirement to industrial users defined as significant under proposed 40 CFR 403.3(u), or the appropriateness of additional or alternative targets, such as categorical users or notifiers of hazardous waste discharges under proposed 40 CFR 403.12(p); (2) whether the requirement should apply only to POTWs with more than a specified number of industrial users (and, if so, what number would be appropriate as a cut-off point); and (3) whether the list of proposed conditions should be contracted, expanded, or modified. The Agency received a number of comments in response to these questions.

Roughly half of the commenters on the proposal responded to the question of which industrial users should be required to have individual control mechanisms. Several commenters stated that the POTW should have the flexibility to decide which users should be covered. However, most commenters who supported the proposal agreed that EPA should specify certain classes of industrial users for which POTWs would be required to issue individual control mechanisms. Most of these supported the proposal to require the use of individual control mechanisms for significant industrial users. With respect to dischargers other than significant users, including dischargers of hazardous wastes, most commenters stated that the use of control mechanisms for such users should be at the discretion of the Control Authority. However, other commenters suggested that the Agency extend the requirement to include dischargers of hazardous wastes or to include all industrial users. Finally, a few commenters wanted the requirement limited to categorical users.

None of these comments provided a compelling reason for the Agency to change the proposed requirement that permits or equivalent individual control mechanisms be issued to all significant industrial users. The Agency agrees with those commenters who supported limiting the requirement to significant users, including categorical users. The Agency also agrees with those commenters who believed that the definition of significant industrial user is sufficiently inclusive and flexible to ensure that the necessary users are regulated by individual control mechanisms. The definition of significant industrial user, as promulgated in today's rulemaking, includes all categorical dischargers and all noncategorical dischargers meeting certain criteria, except to the extent that the Control Authority, with the approval of the Approval Authority, modifies the list of significant industrial users in accordance with criteria specified in 40 CFR 403.3(t)(1)(ii).

EPA believes that issuing individual control mechanisms to non-significant users should be at the discretion of the POTW because this class of users does not typically have sufficient potential to cause pass through or interference to warrant a requirement for individual control mechanisms. For this reason, today's rule does not require that POTWs issue individual control mechanisms to all industrial users. A POTW may, however, require non-significant users to have permits or other individual control mechanisms. One POTW commented that there should be two classes of industrial user permits. In response, EPA points out that POTWs are free to implement this approach if they wish, although the Agency does not believe that a two-class approach would be appropriate for all POTWs in a national rule.

EPA disagrees with those commenters who stated that the requirement for individual control mechanisms should be limited to categorical users. Such a requirement would fail to include many users whose discharges significantly affect POTWs. One commenter stated that the Agency should not require permits for small dischargers, but supported requiring permits for categoricals. However, the Agency believes that even small dischargers should be required to obtain individual control mechanisms if they qualify as significant industrial users because they may have a significant effect on a POTW. On the other hand, if a non-categorical user is not classified as a significant industrial user, it would not be required to obtain an individual control mechanism under today's rule.

A few commenters addressed the question of whether the requirement should apply only to POTWs with more than a specified number of industrial users. Several commenters stated that the requirement should apply to all POTWs with approved programs.

One stated that even a small POTW may need to issue individual control mechanisms to significant dischargers. Another commenter stated that small POTWs (less than 5 million gallons per day) with a small number of significant users (less than ten) should not be required to issue such control mechanisms to their significant users. However, one large POTW commented that this requirement should only apply to smaller POTWs (under 20 mgd).

In response to the commenter who wanted to limit the applicability of the requirement to smaller POTWs, the Agency believes that the larger the POTW (and the greater the number of industrial users), the greater the benefit to be derived from individual control mechanisms. On the other hand, the Agency does not believe that POTWs with a small number of significant users should be categorically exempted from this requirement. Even a small number of significant users may have a substantial impact on a POTW, particularly where their discharges represent a large percentage of the flow. In addition, industrial users will benefit from individualized notification of the limits and monitoring requirements that apply to them, regardless of the size of the POTW.

Several commenters addressed the minimum elements to be included in an individual control mechanism. A POTW opposed to the proposal commented that there should be no minimum elements if permits were to be required because the POTW is in the best position to determine the necessary contents of a permit, and none of the elements would be appropriate under all circumstances. Another commenter recommended that the Agency allow incorporation by reference as an alternative to listing conditions in the permit or alternative individual control mechanism. Most commenters, however, appeared to be satisfied with the list of conditions in the proposal. One POTW commented that the requirements concerning non-transferability, slug load notification, and penalties be dropped from the list, because these are already set forth in its local requirements.

The Agency believes that there should be minimum requirements for individual control mechanisms. Otherwise, the requirement that POTWs issue such mechanisms would be ineffective. The Agency believes that incorporation by reference is generally not appropriate because of the importance of effective

notice to the significant industrial user of all pretreatment requirements contained in the individual control mechanism.

Several commenters stated that the list of minimum requirements for individual control mechanisms should be expanded. Two commenters said that the list should include (any required) compliance schedules. One commenter suggested that the list should include a statement of severability. One POTW described its own additional requirements, which included: A regularly updated spill prevention program; a water and wasteload balance calculation; a wastewater characterization data base; a schematic flow diagram; a building layout diagram, including all drains to the collection system; and a description of the pretreatment systen

The requirements listed in the proposed rule were intended to be minimum requirements. This leaves the POTW much flexibility in adding other elements. Elements such as water and wasteload calculations, flow diagrams, building layouts, etc., are more suitable for inclusion on a case-by-case basis rather than through a national rule. POTWs may also include a statement of severability, but the Agency is not requiring such a statement because even if a control mechanism is found to be invalid under local law because of a single provision, the user is nonetheless required to comply with all applicable pretreatment standards and requirements.

The Agency has issued detailed guidance on the development of industrial user permits (see the EPA *Industrial User Permitting Guidance Manual*, September 1989). The information in this manual should be of use to all POTWs in utilizing individual control mechanisms to implement pretreatment requirements.

The Agency agrees that where a compliance schedule is required it should be included in the individual control mechanism. For this reason, today's rule includes such a requirement. The Agency points out that such compliance schedules cannot relieve an industrial user of its federal obligation to comply with categorical pretreatment standards or any other federal pretreatment requirements in a timely manner, and language to this effect has also been added to today's rule. Compliance schedules placed in individual control mechanisms are those necessary for the attainment of new or revised categorical pretreatment standards or more stringent local limits, rather than those which are the result of enforcement actions against the significant industrial user.

Several commenters opposed the proposal that individual control mechanisms have a duration of no more than five years. One POTW commented that locking a user into a set of standards based on the combined wastestream formula would result in annual changes to the control mechanism as flow conditions change. Two other POTWs commented that a five-year limit would be unduly burdensome for POTWs. One stated that permits should only need to be renewed or amended when there are changes in the quality or quantity of the user's discharge. The other stated that there is no need to modify the user's control mechanism as long as the user is in compliance.

In the first instance, the Agency does not believe that a user is "locked" into a particular set of standards with any individual control mechanism. The municipality may structure its permit program to allow the use of reopener clauses which would allow the individual control mechanisms to be modified if and when the POTW revises its local limits. In addition, where production rates or flow rates are highly variable, effluent limits can be written to reflect such variability. The Agency has provided some guidance on how this may be accomplished (see the above-mentioned *Industrial User Permitting Guidance Manual*). The Agency believes that a five-year maximum period is reasonable, due to the inevitability of changes to the POTW's program and changes in the characteristics of wastewater discharged to the POTW. This is consistent with the requirement promulgated in today's rulemaking that all POTWs must evaluate the need to revise their local limits every five years when they apply for renewal of their NPDES permits. There are many reasons for changing the control mechanism requirements, whether or not the user has changed the quality or quantity of its discharge, and the Agency believes that each control mechanism should be reevaluated at least once every five years to ensure that it is up to date.

The Agency also proposed to require a statement prohibiting transferability to a new owner or operator without prior POTW approval. Only one commenter specifically addressed this issue. This commenter stated that so long as compliance has been maintained under the conditions of a permit, the POTW should have ample authority to enforce the permit, although notification to the new owner or operator would be appropriate. The Agency agrees with this commenter. POTWs may have authority to enforce permits that have been transferred. However, the individual control mechanism is based upon information provided to the POTW by a particular owner or operator. The POTW must, at a minimum, know of the change in ownership or operation to be able to learn of any forthcoming major changes to the industrial user's operations. Similarly, the new owner or operator should have a copy of the existing control mechanism in order to have adequate notice of applicable pretreatment requirements. To ensure that this occurs, the Agency believes that prior notification of the POTW and of the new owner or operator is needed and is therefore promulgating 40 CFR 403.8(f)(1)(iii)(B) to provide that each individual control mechanism must include a statement of nontransferability without, at a minimum, prior notification to the POTW of the change in ownership or operation and without, at a minimum, provision of a copy of the existing individual control mechanism to the new owner or operator. Today's rule does not, however, require prior approval by the POTW. POTWs may decide to require such prior approval in the permits they issue.

The Agency also received several comments on the proposed requirement that individual control mechanisms should include applicable effluent limits based upon categorical standards and local limits. Two POTWs sought to limit this requirement. One of these commenters stated that, due to the inherent variability of certain effluent limits, incorporation of such limits by reference is preferred. The other commented that permit limits should only include end-of-process limits and incorporate by reference local limits and the combined wastestream formula. It is unclear to the Agency why this commenter believed that only end-of-process limits should be included in individual control mechanisms, but the Agency assumes that this commenter was also concerned about variability of certain effluent limits. As discussed above, EPA does not believe that variability of flow and production should prevent the inclusion of appropriate limits in individual control mechanisms. EPA's policy is that POTWs should develop, and place in individual control mechanisms, case-by-case individual end-of-pipe limits for significant industrial users pursuant either to 40 CFR 403.5(c) and/or limits reflecting the application of categorical standards to the permittee's specific operations.

A State suggested that "applicable State standards" be added to the category. The Agency agrees that where these standards apply, they should be included as elements in permits or equivalent control mechanisms. Early calculation of all end-of-pipe limits, including those based on state law, will result in better compliance with applicable standards. Today's rule therefore includes a requirement in 40 CFR 403.8(f)(1)(iii) to include in the individual control mechanism effluent limits based on any applicable State or local law. The Agency has also added a requirement that the individual control mechanism include effluent limits based on applicable pretreatment standards in part 403.

Finally, the Agency received two comments on the requirement that applicable monitoring, sampling, and reporting requirements be included in individual control mechanisms. A State commented that control mechanisms should also include sampling location(s) to ensure that compliance is assessed at the point where the limits are applied. A POTW suggested that the requirement be modified in order to clarify that the requirement refers to self-monitoring instead of the POTW's own compliance monitoring activities.

The Agency agrees with both of these commenters. Sampling requirements should normally specify sampling location(s), and the location(s) should be point(s) at which the limitations set forth in the individual control mechanism apply. Moreover, the Agency intended in the proposal to require that individual control mechanisms contain self-monitoring requirements. The final rule requires that individual control mechanisms specify an identification of the pollutants to be monitored, sampling location and self-monitoring requirements, as well as sampling frequency and sample type. The Agency is also adding a requirement that the control mechanism contain recordkeeping requirements where applicable, since recordkeeping may be very useful in tracking compliance and in otherwise enabling the POTW to obtain needed information about significant industrial users. In addition, EPA has deleted from the proposed rule a separate requirement for notification of slug discharges, since such a requirement might imply that other types of notification should not be included in individual control mechanisms. Instead, the Agency is requiring that such mechanisms contain "applicable" notification requirements, which should include, as well as slug discharges, other notification requirements contained in part 403 such as non-compliance reporting and notification of changed discharge.

c. Today's Rule

Today's rule requires POTWs with approved pretreatment programs to issue permits or equivalent individual control mechanisms to each significant industrial user. The mechanisms shall be enforceable and shall contain, at a minimum, the following elements:

- Statement of duration (in no case more than five years);
- Statement of non-transferability of the individual control mechanism without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
- Effluent limits based on applicable general pretreatment standards in part 403 of this title, categorical pretreatment standards, local limits, and State and local law;
- Self-monitoring, sampling, reporting, notification, and recordkeeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on applicable general pretreatment standards in part 403 of this title, categorical pretreatment standards, local limits, and State and local law; and
- Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements and, where required, any applicable compliance schedules. Such schedules may not extend the compliance date beyond applicable federal deadlines.

F. Implementing the General Prohibitions Against Pass Through and Interference

1. Toxicity-Based Permit Limits (40 CFR 122.21(j)(1)(2) and (3))

a. *Proposed rule.* To supplement numerical NPDES permit limits for specific chemicals, EPA has strongly encouraged NPDES permitting authorities to establish toxicity testing requirements in municipal permits and to develop whole effluent toxicity-based permit limitations to control toxicity to aquatic life. Expanded use of toxicity testing and water quality-based permitting for POTWs was also one of the principal recommendations of the Domestic Sewage Study. EPA has encouraged this approach to controlling toxic effluents because it allows POTWs and permit writers to better control pass through by identifying certain toxic effects (such as lethality and effects on growth and reproduction) of a complex mixture with one measurement. Toxicity-based permit limits can also be useful where national categorical pretreatment standards do not adequately address pollutants that cause local toxicity or where there are no current numerical water quality criteria for individual chemicals, as is the case for many toxic and hazardous constituents. In such cases, toxicity-based permit limits provide a numeric measure of the narrative water quality "no toxics in toxic amounts" standard. When such a toxicity-based limit is violated, a toxicity reduction evaluation (TRE) can be used to investigate the causes, sources, and methods to control the toxicity. A TRE is a procedure used to find control methods to reduce or eliminate toxicity. A TRE provides systematic methods for locating sources of POTW whole effluent toxicity and/or assessing the treatability of the toxicity, whether through pretreatment (source control) or through improved treatment at the POTW. A toxicity identification evaluation (TIE) is part of a TRE which uses toxicity tests to characterize, identify, and confirm the specific causative agents of effluent toxicity. EPA recently enacted regulations requiring that whole effluent toxicity limits be placed in NPDES permits in appropriate circumstances. See 40 CFR 122.44(d)).

On November 23, 1988, EPA proposed to revise 40 CFR 122.21(j) to require that all existing POTWs conduct whole effluent toxicity testing and submit the results of such testing in their NPDES permit applications. The information would be used by permit writers to justify permit limitations and toxicity reduction evaluations (TREs) when the testing reveals a potential for violations of water quality standards. The toxicity testing information could also form the basis for monitoring requirements and other permit conditions when needed to ensure ongoing compliance with water quality standards.

In encouraging the use of toxicity testing, EPA has recommended that testing requirements be based on the technical recommendations and principles found in the *Technical Support Document for Water Quality-based Toxics Control* (TSD) (EPA/440/4-85-032, September 1985, revised edition to be published in 1990), and EPA's toxicity testing protocols, or equivalent procedures designated by the Director (i.e., the EPA Regional Administrator or the NPDES permitting authority in a State that is federally approved to administer the NPDES program). The TSD describes the rationale for whole effluent toxicity

controls and the assessment of receiving water effects.

b. *Response to comments.* EPA received approximately 90 comments on the topic of toxicity testing. Most of the comments focused on the need for toxicity testing at all POTWs and the test procedures outlined in the proposal. The majority of the commenters asserted that toxicity testing at all existing POTWs was unnecessary and in some cases redundant. In addition, a majority of commenters objected to the testing procedures and the frequency of testing required on the basis of cost and the possibility that they may conflict with state toxic control strategies already in place. The various comments are discussed in more detail below.

Several commenters stated that EPA or the permitting authority should demonstrate that toxicity is a problem before requiring whole effluent toxicity testing.

Section 101(a) of the Clean Water Act establishes a national policy of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. In addition, section 101(a)(3) clearly states the national policy that the discharge of toxic pollutants in toxic amounts is prohibited. Dischargers with NPDES permits must meet all of the technology-based requirements of the CWA as well as any more stringent requirements necessary to achieve water quality standards established under section 303. Section 301(b)(1)(C) and section 402(a)(1) of the CWA require that NPDES permittees achieve the effluent limitations necessary to attain and maintain the numeric and narrative water quality standards set by the states or, in appropriate instances, by EPA. EPA also has authority under sections 308 and 402(a) (1)–(2) to require such monitoring as is necessary to develop effluent limitations consistent with the Act.

Many POTWs have been found to discharge toxic substances in toxic amounts. Effluent toxicity testing allows permitting authorities to assess whether a discharger is complying with state water quality standards and provides a justification for establishment, where necessary, of permit limitations to achieve those standards. EPA's surface water toxics control program uses both chemical and biological methods to assess and protect water quality. Whole effluent toxicity testing is especially appropriate where, as for POTWs, complex chemical interactions may occur and where a chemical specific evaluation alone cannot fully assess the toxic effects of the effluent or attainment or nonattainment of the narrative water quality standard for toxicity.

One commenter stated that these regulations should require that water quality modeling and comprehensive water quality studies be completed before toxicity testing is required.

The toxicity testing required by today's rule is designed to reveal if a POTW is causing or contributing to instream toxicity. Toxicity tests are necessary in assessing the toxicity of an effluent. The results of such tests in conjunction with any applicable water quality modeling information can lead to decisions concerning appropriate water quality-based limits on whole effluent toxicity. However, EPA does not believe that water quality modeling should be a precondition for toxicity testing.

Many commenters stated that it would be more appropriate to use toxicity testing as an optional monitoring tool rather than as the basis for an enforceable limit.

EPA emphasizes that today's rule does not explicitly require the establishment of permit limits based on the results of toxicity tests. Instead, it requires certain POTWs to submit the results of toxicity tests with their permit applications. EPA's regulations at 40 CFR 122.44(d)(1)(iv), however, already require whole effluent toxicity limits where a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a numeric criterion for whole effluent toxicity. A similar requirement exists regarding excursions above narrative criteria, except that limits on whole effluent toxicity may not be necessary if the permitting authority demonstrates that chemical-specific limits for the effluent are sufficient to attain and maintain the applicable state standard. EPA will continue to use the results of effluent toxicity testing and other data to establish permitting priorities, to assess whether a discharger is in compliance with state water quality standards, and to develop permit limitations to achieve those standards.

Several commenters said that toxicity tests cannot distinguish between toxicity caused by "common materials," such as ammonia and chlorine, and toxicity caused by section 307(a) priority pollutants and therefore such tests are of limited use in controlling priority pollutants.

In response, the Agency points out that state narrative standards prohibiting the discharge of toxics in toxic amounts are not limited to section 307(a) priority pollutants. Toxicity tests will account for toxicity caused by any pollutant, whether priority, conventional or nonconventional. Any effluent that causes unacceptable toxicity in the receiving waters would violate general prohibitions on the discharge of toxic pollutants in toxic amounts and controls must be established accordingly.

In addition, a few commenters stated that state disinfection requirements would often cause failure of a toxicity test due to the presence of chlorine, and therefore toxicity testing should be conducted before disinfection.

Residual chlorine and other byproducts of chlorination (i.e. mono- and dichloroamines) can be highly toxic to aquatic life. Therefore, EPA recommends that any use of chlorine for disinfection be carefully evaluated. If unacceptable effluent toxicity is found to be caused by excessive chlorine, either a reduction in the amount of chlorine used for disinfection, dechlorination after disinfection, or use of alternative disinfection technologies may be necessary. Whole effluent toxicity tests are an appropriate means to identify whether excessive toxic chlorine discharges are occurring.

Several commenters suggested the use of only acute tests to verify the need for further testing and toxicity reduction. In response, the Agency notes that today's rule does not specifically require either acute or chronic tests for any particular POTW. However, after reviewing a permit application containing the results of any testing conducted, the Director may choose to require additional testing (acute, chronic, or both) as he deems necessary to assess the toxicity of the discharge pursuant to his authority under sections 402(a) (1)–(2) of the Clean Water Act. The characteristics of instream dilution, effluent variability, and species sensitivity differ from one POTW to the next, as do the types of pollutants discharged. Sometimes chronic tests are more appropriate, sometimes acute tests are sufficient, and at other times a combination of both acute and chronic tests are necessary to accurately assess the toxicity of an effluent to aquatic life.

One commenter stated that the industrial pretreatment program has adequately screened and identified toxicity problems so that in smaller systems (where the pretreatment program does not indicate a potential for toxic discharges) it is unnecessary for POTWs to conduct toxicity testing.

EPA has found that POTWs with pretreatment programs receive the majority of indirect industrial discharges and therefore have a significant potential for effluent toxicity. Even in smaller POTWs with pretreatment

programs, all the toxics in a complex effluent cannot, as a practical matter, be measured or limited singly and, as stated previously, chemical-specific testing methods may not address the interactive effects of the mixture. Toxicity testing provides a way to characterize and ultimately to limit, if necessary, whole effluent toxicity where necessary to meet water quality standards. It may also help identify the presence of particular pollutants of concern so that chemical-specific local limits or other controls can be developed.

One commenter suggested using a priority pollutant scan in lieu of toxicity testing to screen a POTW's influent for the presence of toxic wastes in concentrations which would cause damage to the POTW.

EPA agrees that POTWs should generally test their influent for the presence of individual toxic pollutants. However, a POTW's effluent may be toxic due to non-priority pollutants, complex mixtures of pollutants, or chemicals added or created during the treatment process at the POTW. The revisions to 40 CFR 122.21(j) require POTWs to conduct whole effluent toxicity testing to determine the impact of the effluent on water quality.

Several commenters suggested that toxicity testing should not be required for wastewater discharged to dry creek beds, ephemeral drainages, sloughs, ditches, etc. because these places have no aquatic life to protect and do not affect waterways. One commenter recommended the use of only chemical-specific controls in such circumstances.

In response, EPA notes that narrative water quality criteria apply to all designated uses at all flows unless otherwise specified in state water quality standards. It is EPA's policy that no acutely toxic conditions may exist in any state waters, regardless of designated use. Likewise, criteria for protection against chronic effects must be met at the edge of the mixing zone, where the state water quality standard allows a mixing zone. Dry creek beds, ephemeral drainage areas, intermittent streams, sloughs, or ditches may act as reservoirs for pollutants which can be flushed into larger permanent waters, causing toxic impact.

Many commenters stated that the requirements for toxicity testing in the proposed rule conflict with existing state toxic control strategies. Some commenters wanted EPA to be more specific in setting toxicity testing procedures, while others wanted states to have more flexibility.

EPA intended in the proposed rule to provide flexibility for the states by allowing the use of testing procedures equivalent to EPA's protocols if they are accepted by the Director. This provision was apparently misunderstood by many of the commenters. The proposal, at 50 FR 47653 (proposed 40 CFR 122.21(j)(1)) provided that the Director may require alternative test procedures and may require the submission of definitive testing data generated according to procedures specified by the Director to replace or supplement the test data specified in the proposal. Today's rule also provides much flexibility to the Director in specifying test methods. For example, paragraph 122.21(j)(3) allows the use of EPA's methods or other established protocols which are scientifically defensible and sufficiently sensitive to detect aquatic toxicity. To clarify this requirement, the Agency has deleted the provisions in the proposed rule which referred to the use of specific protocols and dilution criteria.

A number of commenters stated that biomonitoring has already been completed or will be completed for their facilities as part of the toxics control programs required under section 304(1) of the CWA. In response, EPA points out that if a POTW has submitted the results of toxicity tests with its permit application to meet water quality-based permitting requirements established by the CWA section 304(1) regulations (40 CFR 122.44(d)), then the POTW has met the toxicity testing requirements in today's rule. Whenever that POTW's permit is up for renewal, the POTW will again be required to submit the results of toxicity tests with its permit application pursuant to today's rule. The tests must be conducted since the last NPDES permit reissuance or permit modification under 40 CFR 122.62(a), whichever occurred latest. For more detail on the relationship between the regulations at 40 CFR 122.44(d)(1)(ii) and the testing required by today's rule, see the discussion on the requirements of 40 CFR 122.44(d) below.

Some commenters suggested that any proposal affecting application requirements for municipalities should be included in the new municipal NPDES application form currently being developed by EPA.

EPA plans to propose new application requirements for POTWs in the near future, along with a form to be used in submitting the application. The final application forms, when promulgated, will reflect the requirements of today's rule.

Two commenters suggested that EPA should formally promulgate whole effluent toxicity testing procedures pursuant to section 304(h) of the CWA.

Although toxicity test procedures have not yet been promulgated under section 304(h) of the CWA, EPA has proposed new biological measurements and test procedures for the analysis of pollutants under section 304(h) (54 FR 50216, December 4, 1989). The proposal would amend 40 CFR part 136 by adding methods to measure the toxicity of pollutants in effluents and receiving waters, by adding methods to measure mutagenicity and to monitor viruses, and by updating citations to microbiological methods. In addition, EPA and States have routinely used certain other test methods. EPA's published guidance documents on acute and chronic toxicity test methods have undergone extensive public comment and peer review prior to their publication, following the standard Office of Research and Development public comment and peer review process. In 1984, the Agency concluded that "* * * toxicity testing is sufficiently refined to be used in setting effluent limitations * * *" (49 FR 38009 (1984)). EPA's studies since 1984 reinforce this conclusion. The absence of promulgated guidelines under section 304(h) does not affect EPA's authority to require toxicity testing, nor does it affect the reliability of the Agency's toxicity testing protocols.

A number of commenters objected to a perceived objective of the proposal to "codify elements of the TSD" because that document is intended only as technical guidance and is currently being revised. These commenters apparently misunderstood EPA's intent. EPA recommends the use of the technical methods and principles presented in the TSD because this document is in wide use and has proven to be a useful tool for conducting toxicity protocols. However, in the proposed and final rules, EPA has provided a considerable degree of flexibility to states desiring to use other testing procedures.

Some commenters stated that toxicity test procedures are still in the developmental stage and are not reliable or precise enough for purposes of enforcement.

EPA studies indicate that toxicity test methods are comparable in accuracy and precision to chemical analytical measurements in common use. The TSD discusses the precision of toxicity test methods and cites various studies that have led EPA to conclude that toxicity test methods, where properly followed, exhibit an acceptable range of variability. EPA recently conducted two interlaboratory studies of chronic toxicity testing using *Ceriodaphnia.*

These studies showed that a high percentage of the 21 participating laboratories met the survival and reproduction criteria for acceptability of test results. Furthermore, EPA has demonstrated a direct correlation between effluent toxicity (where exposure is adequately assessed) and actual instream impact. The Agency began a series of eight studies in 1981 to determine whether effluent toxicity correlates to an impact on receiving waters. At eight water quality impacted sites around the country, EPA conducted extensive biosurveys, calculated actual instream waste concentrations, and compared the results to measured effluent toxicities. Final reports for these studies are presently available from EPA. These reports reveal that if an effluent is found to be toxic at a certain concentration using standard toxicity tests, a toxic effect can be expected in the receiving water if that concentration is met or exceeded instream.

Several commenters stated that POTWs are not equipped to handle certain chemicals that may cause toxicity. One commenter also stated that the proposed rule does not address how to develop local limits for toxics control when specific chemicals cannot be readily identified as the causative toxicants during a TRE. One commenter stated that POTWs would not be able to identify sources of toxicity and would therefore impose arbitrary local limits on industrial users.

EPA recognizes that many POTWs are not designed to treat certain toxics and that therefore these pollutants tend to pass through or interfere with the treatment system at the POTW. The national pretreatment program and today's regulations are intended to identify and control these effects. POTWs with approved local pretreatment programs often require industrial users who are identified as the source of pass through or interference to conduct toxicity monitoring or take other measures to help identify the specific chemicals causing toxicity. Industrial users are often able to easily identify potential toxics used in or created by their processes. The POTW can then derive local limits, if necessary, from those results. The Agency anticipates that in most cases POTWs will be able to determine the source of any toxicity and will be able to develop appropriate local limits if needed to address the problem. EPA has also developed TRE and TIE protocols to help address problematic discharges where causative agents are not readily identified (see, e.g., *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures*, U.S. EPA, September 1988, EPA 600/3–88/034; *Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures*, U.S. EPA, February 1989, EPA 600/3–88/035; *Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures*, U.S. EPA, February 1989, EPA 600/3–88/036; *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs)*, U.S. EPA, March 1989, EPA 600/2–88/070; and *Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants*, U.S. EPA, April 1989, EPA 600/2–88/062).

Several commenters were concerned about the reliability of TREs because they are allegedly in the developmental stage and because TREs do not identify specific causes of toxicity or chemical constituents causing acute or chronic toxicity.

EPA has found the TRE and TIE methods currently available to be useful in helping dischargers to achieve their NPDES permit limits and comply with State water quality standards. TRE's often do identify specific chemical causes of toxicity. EPA will continue to develop and refine TRE methods and provide technical assistance to permittees. EPA anticipates that there may be a few cases where a POTW will be unable to attain or maintain compliance with toxicity-based limits despite implementing an exhaustive TRE, applying appropriate influent and effluent controls, vigorously enforcing existing pretreatment requirements against industrial users, and maintaining continued compliance with all other permit limits and requirements. In such cases, EPA will work with the permittee to resolve the problem and will exercise its enforcement discretion when considering unusual problems faced by certain POTWs in complying with toxicity-based limits.

A majority of the commenters strongly opposed the requirement that all existing POTWs conduct toxicity testing. Most of these wanted to see testing procedures applied on a case-by-case basis, after considering a number of different factors.

EPA was persuaded by these comments to reconsider the requirement that all existing POTWs be required to conduct toxicity testing as part of their NPDES permit applications. The Agency agrees that not all POTWs can be anticipated to exhibit toxicity and that toxicity testing for such POTWs could create an unnecessary burden. However, EPA expects that with few exceptions, all POTWs with design influent flows greater than one million gallons per day and POTWs with pretreatment programs will need to be evaluated to determine whether they have a reasonable potential to cause in-stream excursions that violate a State water quality standard. As stated above, POTWs with pretreatment programs receive the majority of indirect industrial discharges and therefore have a significant potential for effluent toxicity. In addition, one million gallons per day is the point at which the flow of the wastewater usually begins to reach critical instream waste concentrations that are more likely to result in impacts caused by effluent toxicity. The Agency believes that design influent flow is a more appropriate criterion than actual effluent flow because of the possibility that POTWs with a design influent flow of one million gallons per day will reach that capacity during a five-year permit term due to the addition of new industrial users. For these reasons, in lieu of the requirement that all POTWs submit the results of toxicity tests with their permit applications, EPA is today requiring valid toxicity testing results to be submitted as part of the permit application requirements for: (1) Any POTW with a design influent flow exceeding one million gallons per day, or, (2) any POTW with an approved pretreatment program or that is required to develop a pretreatment program. Today's regulations also provide that the Director has the discretion to require additional POTWs to submit the results of toxicity tests with their permit applications based on consideration of one or more of the following factors found at 40 CFR 122.44(j)(2): Existing controls on point and nonpoint source pollution (including total maximum daily load calculations for the waterbody segment and relative contribution of the POTW), the variability of pollutants or pollutant parameters in the effluent (including existing chemical-specific information and type of treatment facility), the dilution of the effluent in the receiving water (ratio of effluent flow to receiving stream flow), receiving stream characteristics, and other considerations. Any tests submitted under today's rule must have been conducted since the last NPDES permit reissuance or permit modification under § 122.62(a), whichever occurred later.

If toxicity tests follow established protocols and quality assurance requirements are followed, the validity of the test will be assured. An invalid test will not meet the requirements of today's rule. Testing protocols that

adhere to the principles presented in the TSD and EPA's test methods will meet the requirements of today's rule; however, other valid procedures may also be used. While today's rule requires larger POTWs to conduct toxicity testing, it also provides the Director the flexibility to require small POTWs located on small stream segments where available dilution is minimal to conduct toxicity tests, or to require POTWs discharging to near coastal waters to conduct such tests.

In making the determination that the categories of POTWs listed in 40 CFR 122.21(j)(1) shall conduct toxicity tests as part of the permit application process, EPA was influenced by the findings of the Domestic Sewage Study and the conclusion in that Study that EPA should consider expanding the use of biomonitoring techniques and water quality-based permitting to improve controls over hazardous waste discharged to POTWs. To strengthen its water quality-based permitting program, EPA recently revised its permitting regulations at 40 CFR 122.44(d) (54 FR 23868, June 2, 1989). These regulations now require, with limited exceptions, permit limits on whole effluent toxicity where the Director determines, using toxicity testing or other information, that a discharge causes or has the potential to cause excursions above State water quality standards for toxicity. But 40 CFR 122.44(d) does not explicitly require the discharger to generate toxicity testing data, nor does it require dischargers to submit such data with their permit applications. EPA believes that it is necessary to require toxicity testing data from certain POTWs with their permit application so that at the time of application the Director will have sufficient information to determine whether limits on whole effluent toxicity are required in the POTW's permit. EPA recognizes that toxicity testing data will not be necessary for certain categories of POTWs. While EPA maintains the authority to require toxicity testing data from all POTWs, it would not be appropriate to require POTWs that have little or no chance of causing excursions above State water quality standards for toxicity to conduct toxicity tests and submit the results with their permit applications.

Based on the results of the Study, and in conjunction with EPA's ongoing integrated approach to water quality-based toxics control, the Agency has determined that toxicity testing data is necessary and is required to be submitted by POTWs described in 40 CFR 122.21(j)(1) and by POTWs designated by the Director under paragraph (j)(2). Furthermore, under 40 CFR 122.44(d) (iv) and (v), the Director must use this data in determining whether limits on whole effluent toxicity are required in the POTW's permit.

Paragraph (j)(2) provides the Director with the flexibility to require additional POTWs to submit toxicity data with their applications. In exercising this option, the Director is to consider the factors listed in paragraphs (j)(2)(i)–(v). These factors are general principles which EPA has consistently recommended that permitting authorities consider when assessing a discharger's potential to cause or contribute to instream toxicity. These principles are compatible with EPA's "Policy on Development of Water Quality-Based Permit Limitations for Toxic Pollutants" (49 FR 9016, March 1984), *The Technical Support Document for Water Quality-Based Toxics Controls*, and EPA's revisions to 40 CFR 122.44(d) to implement CWA section 304(l).

Once the Director has determined that a POTW meets any of the criteria in paragraph (j)(1) or has designated a POTW under paragraph (j)(2), and that POTW must therefore submit the results of toxicity testing as part of the permit application process, paragraph (j)(3) provides that POTWs shall use a toxicity testing protocol that is scientifically defensible and sufficiently sensitive to detect aquatic toxicity.

Approved State NPDES programs that do not presently allow permitting authorities to require POTWs in the categories described in paragraphs (j)(1) and (2) to submit toxicity test results with their permit applications will need to revise their applicable law to conform to today's requirements. Under 40 CFR 123.62(e), regulatory revisions must occur within one year of the effective date of today's rule, unless statutory changes are necessary, in which case such revisions must take place within two years.

One commenter suggested that the requirement that all POTWs conduct toxicity testing is inequitable when the proposal does not require such testing for private dischargers. As stated above, 40 CFR 122.21(j) no longer requires all POTWs to conduct toxicity testing. Instead, POTWs that meet any of the criteria listed in 40 CFR 122.21(j)(1) or are designated by the Director under paragraph (j)(2) are required to conduct such testing. Moreover, the new amendments to 40 CFR 122.44(d) require the Director to determine whether any discharge causes, has the reasonable potential to cause, or contributes to an excursion above a narrative or numeric criteria within a State water quality standard. Such procedures will include toxicity tests by direct industrial dischargers in many cases.

One commenter stated that toxicity-based limits in NPDES permits are not an effective way of preventing toxicity because nonpoint sources may also be significant contributors to toxicity. EPA reiterates that today's regulations do not explicitly require the establishment of toxicity limits.

However, the Agency disagrees with the argument that POTWs should not monitor or limit toxicity because nonpoint sources may also contribute to such toxicity. If a POTW's effluent is found to cause instream toxicity (after consideration of any applicable mixing zone allowances) then discharge of such effluent is in violation of State water quality standards that prohibit discharges of toxic pollutants in toxic amounts. In such instances, appropriate limits aimed at achieving compliance with State standards must be established.

One commenter stated that permit limits on toxicity should be required in the permit when the results of testing indicate that there is or may be a problem with toxicity in the discharge. As a general rule, EPA agrees with this statement. For further details on appropriate measures to be taken, see EPA's section 304(1) regulations (54 FR 23868, June 2, 1989) at 40 CFR 122.44(d). The regulations at 40 CFR 122.44(d) describe the procedures that permitting authorities must use when determining whether a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above a narrative or numeric toxicity criterion within a State water quality standard.

Many commenters expressed concern over the cost of toxicity testing and the lack of qualified laboratory facilities available to perform the tests. EPA has found that costs for toxicity testing range from a few hundred dollars for a simple one time screening analysis to one or two thousand dollars per month for a monthly chronic toxicity analysis. Typical monthly or quarterly testing costs are comparable to many other types of chemical monitoring costs.

EPA has also found that there are many competent labs around the country capable of performing these tests. The Agency recently contracted with several labs to perform toxicity tests in support of each EPA Region's toxics control program. It is the responsibility of the permittee to find an appropriate facility and have its samples shipped, if necessary, and

analyzed. EPA's Environmental Monitoring and Support Lab in Cincinnati is currently developing guidance for lab certification which States can use to certify competent labs and to provide permittees with lists of labs capable of conducting toxicity tests.

One commenter stated that the regulations should allow time for the solicitation and subsequent awarding of contracts to conduct toxicity tests and that the proposed deadline for submission of test results would be unreasonably burdensome.

In response, the Agency points out that the regulations do not require POTWs to solicit contracts for the performance of toxicity tests. Since toxicity testing is only required every five years as part of certain POTWs' NPDES permit applications, these POTWs should have ample time to find suitable laboratories.

One commenter noted that the added workload to permitting authorities for reviewing the screening data has not been addressed. EPA has estimated these and other costs associated with implementing the proposed requirements and they are available as part of the public record of this rulemaking. The Agency believes that improved control of toxic and hazardous pollutants occasioned by today's toxicity testing requirements justifies the added workload to permitting authorities.

c. Today's Rule

Today's rule provides that any POTW with a design influent flow equal to or greater than one million gallons per day and any POTW with an approved pretreatment program or which is required to have such a program must provide the results of whole effluent biological toxicity testing to the Director as part of their NPDES permit applications. Tests submitted under today's rule must have been conducted since the last NPDES permit reissuance or permit modification under § 122.62(a), whichever occurred later. The Director may also require other POTWs to submit the results of toxicity tests with their applications, based on consideration of the variability of pollutants in the effluent, the dilution of the effluent in the receiving water, existing controls on point and nonpoint sources, receiving stream characteristics, and other considerations. In conducting the testing, POTWs must use EPA's methods or other protocols which are scientifically defensible and sufficiently sensitive to detect aquatic toxicity.

2. Sludge Control

The provisions of the amended CWA dealing with the regulation of sewage sludge have far-reaching implications for the pretreatment program. The amendments mandate the promulgation of specific numeric limits for toxic pollutants in sewage sludge and/or the specification of acceptable sludge management practices, and require that these standards be implemented through permits. To carry out these requirements, EPA has proposed technical standards for an initial group of toxic pollutants for the five major sludge use and disposal methods: agricultural and non-agricultural land application, distribution and marketing, incineration, sludge-only landfills, and surface disposal sites. These standards were proposed on February 6, 1989 (54 FR 5746). EPA earlier proposed regulations governing sludge disposal in municipal solid waste landfills (MSWLFs) on August 30, 1988 (53 FR 33314).

In addition to calling for the promulgation of technical criteria for the use and disposal of sewage sludge, the 1987 amendments to section 405 also contain a significant departure from previous statutory provisions regarding implementation. The amendment prohibits the use or disposal of sludge except in compliance with EPA's regulations and requires the implementation of the standards through a permitting system. This means that, for the first time, federal technical standards will be implemented through permits issued to treatment works treating domestic sewage. When the sludge standards are promulgated, NPDES permits issued to POTWs or other treatment works treating domestic sewage must include these requirements unless they are included in another permit under listed federal permit programs or an approved state sludge management program. On May 2, 1989, EPA promulgated final regulations for implementing sludge standards into NPDES permits and for developing approvable State sludge permitting programs.

Section 405(d)(4) as amended also requires that, before promulgation of the criteria, the Administrator shall include sludge conditions in permits issued to POTWs under section 402 or take such other measures as the Administrator deems appropriate to protect public health and the environment from adverse effects which may occur from toxic pollutants in sewage sludge. To incorporate sludge conditions into permits before promulgation of the standards, such conditions will have to be developed on a case-by-case basis. To implement this requirement, the Agency has developed a "Sewage Sludge Interim Permitting Strategy" which explains EPA's strategy in implementing this CWA provision. EPA has also completed guidance (signed in December 1989) which will be distributed in early 1990 to EPA Regions, States, and interested parties. This "Guidance for Writing Case-by-Case Permit Requirements for Municipal Sewage Sludge" is designed to assist permit writers in developing "best professional judgment" permit conditions prior to promulgation of the technical standards. In September 1989, EPA also issued the "POTW Sludge Sampling and Analysis Document" for use in sewage sludge monitoring. In addition, the Agency conducts workshops several times a year on writing sludge permit conditions.

This improved regulation of sewage sludge quality will drive the development of local limits to keep pollutants that could contaminate the sludge and interfere with its proper use and disposal from entering the treatment plant. Thus, this effort will further the development of effective pretreatment programs and will help to identify and control the discharge of hazardous wastes and hazardous constituents to POTWs.

3. Control of Indirect Dischargers: Commercial Centralized Waste Treaters (40 CFR 403.3 (e) and (o), 403.5(c), 403.6(e), 403.8))

a. *Proposed change.* Commercial centralized waste treaters (referred to herein as CWTs) are facilities that treat wastes received from off-site generators of those wastes. The Agency first proposed to specifically address CWTs that discharge to POTWs as part of the proposal, published on June 12, 1986 (51 FR 21456), to implement the recommendations of the Pretreatment Implementation Review Taskforce ("PIRT"). The preamble to that proposal clarified that under the current requirements, categorical pretreatment standards apply to the wastewaters generated by certain industrial processes and discharged to a POTW, regardless of whether they are finally discharged by an industrial generator or some intermediate entity such as a CWT. For those CWTs that mix process categorical wastewater with other wastes prior to pretreatment, the preamble indicated that the combined wastestream formula (CWF) in 40 CFR 403.6(e) should be used to calculate alternate discharge limits. The proposed rule would have codified this

requirement and would have required generators of wastes to supply the information necessary for calculating the limits. Three other alternatives were discussed in the June 12, 1986 proposal: (1) Promulgating national categorical standards for CWTs, (2) relying solely on POTW-developed local limits, and (3) limiting each pollutant discharged from the CWT by applying the most stringent parameter for that pollutant taken from all the categorical standards applicable to the wastes received by the CWT. EPA did not amend its regulations, or current requirements applicable to CWTs, in the final PIRT rule. Instead the issue was deferred and again addressed in the proposal to today's rule (November 23, 1988, 53 FR 47632). That proposal solicited comment on the same alternatives, but proposed an additional one: POTWs would be required to obtain and implement authority to regulate CWTs by developing local limits based on the best available technology economically achievable (BAT), which would be determined by each POTW for its CWTs using best professional judgment (BPJ). If the POTW determined that the combined removal by the CWT and the POTW was less than the removal that would be achieved by BAT, the POTW would set a limit equal to the BAT limits, but adjusted for removal by the POTW.

b. *Response to comments.* The Agency received numerous comments in support of and opposing each alternative and recommending additional alternatives. These comments raised technical, legal and economic concerns. The Agency has decided to collect additional data before deciding whether to finalize any of the alternatives. Data that would assist in the decision include more information on the types, variability, environmental effects, and treatability of wastes received and discharged by CWTs. Such data would also assist the Agency in providing guidance on how to implement its decision. Once the data are obtained, the Agency may determine that it is necessary to consider options not within the current proposals, and to make additional proposals. Otherwise it will base its decision on the proposals currently outstanding and the comments received thereon.

The Agency reiterates its previously stated position (see 51 FR 21456) that any national categorical standard that would apply to a waste if discharged by its generator continues to apply if the waste is shipped off-site to a CWT that is an industrial user of a POTW. Where such wastes are mixed with other process wastestreams prior to discharge, the combined wastestream formula may be used to determine the applicable limit. The Agency recognizes the practical difficulties in applying the CWF faced by CWTs that receive categorical wastes in substantial or highly variable quantities. CWTs experiencing difficulties in applying the CWF may wish to either: (1) Segregate categorical wastes and provide batch treatment to the levels required by applicable categorical standards, or (2) treat a mixture of categorical and other wastes such that each pollutant discharged is in compliance (after correction for dilution flows) with the most stringent numerical limit prescribed for that pollutant in any of the categorical standards applicable to the wastes being treated. EPA believes that either of these options has the potential for substantially reducing the paperwork of CWTs that would otherwise be required to use the CWF, while still assuring treatment of categorical wastes in accordance with categorical standards.

As discussed in section H.1 below, today's rule requires POTWs to determine the necessity of developing local limits to prevent pass through and interference. The Agency encourages POTWs to pay particular attention to the effluent from CWTs in developing those limits.

c. *Today's rule.* The Agency is postponing promulgation of any additional regulations pursuant to the proposals regarding CWTs.

4. Categorical Standards for Other Industries

Section 304(m) of the Clean Water Act, added by the Water Quality Act of 1987, requires the Agency to establish a schedule for the annual review and revision of promulgated effluent guidelines, and to establish a schedule for promulgation of new BAT guidelines and new source performance standards for industries discharging toxic or nonconventional pollutants. On August 25, 1988 (53 FR 32584), the Agency published a notice of its proposed plan to implement section 304(m). That notice contained a discussion of the Agency's proposed decision-making process to set priorities for the development of new or revised effluent guidelines. Although not required by section 304(m), that notice said that EPA would develop categorical pretreatment standards whenever appropriate when developing guidelines for categories of dischargers. Some of the categories which the Agency said it would consider as candidates for new or revised guidelines were identified in the Study as significant contributors of hazardous constituents to POTWs.

One commenter on the November 23, 1988 proposal criticized EPA for not moving swiftly enough to promulgate new or revised categorical pretreatment standards in accordance with the recommendations of the Study and the mandate of section 304(m). This commenter stated that existing categorical standards cover an insufficient number of toxic and hazardous pollutants, and that many industries discharging large amounts of such pollutants are not covered by categorical standards at all.

On January 2, 1990, the Agency published a final notice announcing the Agency's initial plan for reviewing existing guidelines and promulgation of new effluent guidelines to implement section 304(m). This notice established a schedule for reviewing existing regulations and for selecting categories of dischargers of toxic or nonconventional pollutants for which guidelines have not previously been published. Many of the industries for which the Agency has established schedules were recommended by the Study as potential candidates for new or revised categorical pretreatment standards.

G. Enforcement Issues

1. Revision to Local Limits (40 CFR 122.21(j)(2))

a. *Proposed change.* The existing pretreatment regulations provide that the development of local limits (or a demonstration that they are not necessary) is a prerequisite to approval of a POTW pretreatment program and the continuing legal acceptability of an approved program. Although the existing regulatory language does not explicitly require POTWs to update local limits, EPA has previously stated that local limits must be updated as necessary to reflect changing conditions at the POTW (51 FR 21459, June 12, 1986). Because of the importance of up-to-date local limits in controlling pass through and interference from toxic and hazardous pollutants, EPA proposed on November 23, 1988 to revise 40 CFR 122.21(j)(2) to require POTWs to evaluate in writing the need to update their local limits as part of their NPDES permit application (i.e., once every five years at a minimum). If the Director determines that a particular POTW should evaluate the need for revision more often, it may so specify in the NPDES permit or approved pretreatment program (as incorporated by reference in the permit).

This provision would not require POTWs to update their local limits

when such revision is not needed. Instead, EPA is establishing a minimum frequency for formal evaluation of the need for revised limits. Examples of events that might indicate the need for such a revision include changes in the POTW's NPDES permit, changes in sludge disposal standards or POTW sludge disposal methods, modifications to the treatment plant, addition or deletion of significant industrial users, and changes in industrial users' processes or pretreatment operations. These events could all affect the likelihood of interference with POTW operations or possible lack of compliance with the POTW's NPDES permit. The minimum frequency for formal evaluations will give the POTWs more precise notice of their legal responsibilities and should facilitate EPA enforcement actions in some situations where POTWs are not fulfilling their obligations to develop and update local limits. Regular evaluation of the need for revised limits should also lead to more effective limits on the discharge of toxic and hazardous wastes, thereby preventing pass through and interference.

The Agency solicited comments on whether POTWs should be required to conduct the evaluation more often. For example, POTWs might be required to conduct the evaluation whenever multiple instances of pass through or interference had occurred (such as two or more violations in a quarter), in order to determine if existing local limits were adequate to prevent these occurrences. POTWs could also be required to submit such evaluations annually as part of the annual reports required under 40 CFR 403.8(i).

b. *Response to comments.* The Agency received many comments on the proposed rule from States, POTWs, environmental groups, and industry. The vast majority of the commenters favored the rule as proposed. A small minority of commenters expressed concern over the proposed provision.

One area of concern involved the level of POTW discretion in the timing and performance of local limits evaluations. One commenter stated that the frequency for evaluation of local limits should be left entirely to the POTW since the POTW is in the best position to know the nature and effect of the discharges into its system. Another commenter observed that development of local limits should already have taken into account changes in a POTW's system (e.g., projected increase in the number of industrial users, etc.). Therefore, it was believed that the POTW should determine when changes to local limits should be made.

EPA is not persuaded by the argument that no mimimum frequency for evaluating the need for revision is necessary. The Agency believes that the evaluation of local limits at least every five years is necessary to address any changes in the POTW's NPDES permit, any problems in compliance with the permit, changes in sludge disposal methods, or changes to the treatment plant. However, actual changes to local limits would be made only when the evaluation indicates the need for updating the local limit, or when otherwise required by applicable provisions in POTW's approved programs or NPDES permits.

One commenter inquired as to what was meant by a "formal evaluation" of local limits. The Agency intends the formal evaluation to be a written technical evaluation by the Control Authority determining whether or not there is a need to revise the existing local limits at the time of permit application, and the reasons for this determination. To clarify this requirement, today's rule requires a written technical evaluation of the need to revise local limits, rather than a "formal" evaluation.

There was almost universal opposition to the suggestion that local limits should be evaluated annually. The Agency agrees that annual evaluation of local limits is not routinely necessary and therefore is not promulgating that requirement as part of today's final rule.

c. *Today's rule.* Today's rule provides that all POTWs must provide a written technical evaluation of the need to revise local limits as part of their NPDES permit applications.

2. Inspections and Sampling (40 CFR 403.8(f)(2)(v))

a. *Proposed change.* The existing regulations (40 CFR 403.8(f)(2)(v)) require that POTWs with approved pretreatment programs must be able to randomly sample and analyze the effluent from their industrial users and conduct surveillance and inspections to identify noncompliance with pretreatment requirements. However, these regulations do not specify how often such POTWs must perform the sampling analysis and surveillance.

In the 1986 "Pretreatment Compliance Monitoring and Enforcement Guidance," the Agency recommended that POTWs conduct at least one inspection and/or sampling visit annually to all "significant industrial users." EPA emphasized in the Guidance that more frequent monitoring should probably be conducted in certain cases: e.g., where an industrial facility has exhibited a marked inability to achieve and maintain compliance with pretreatment standards.

In order to facilitate implementation of existing requirements by specifying a standard for how often POTWs must inspect and sample the effluent of their significant industrial users, EPA proposed on November 23, 1988 to modify 40 CFR 403.8(f)(2)(v) to require POTWs with approved pretreatment programs to inspect and sample all "significant industrial users" at least once every two years. EPA believes that inspection and sampling of these users at least this often should help POTWs avert pass through and interference by keeping better track of the more significant industrial dischargers into their treatment and collection systems (especially dischargers of toxic and hazardous pollutants). The proposed revisions should also provide a uniform program requirement that EPA can readily enforce if necessary.

The Agency solicited comments on whether the biennial inspections and sampling requirement was sufficient or if annual inspections and sampling should be required. EPA also requested comment on whether the proposed regulation represented a redundant requirement in the face of existing reporting and monitoring requirements and whether to require POTWs to target certain compounds (such as RCRA appendix VIII hazardous constituents) in their sampling of significant industrial user discharges.

b. *Response to comments.* The Agency received many comments on the proposed rule. Comments were submitted by States, POTWs, environmental groups, and private industry. The commenters were evenly split with regard to favoring or opposing the proposed rule. Many commenters stated that the rule should specify annual inspections and sampling while others stated that a minimum of biennial inspections and sampling was adequate. A few of the commenters believed that the frequency of inspections and sampling should be left entirely to the POTW's discretion. Some of the commenters stated that the proposed rule was redundant in light of existing requirements for self-monitoring and reporting by categorical industrial users and proposed requirements for significant non-categorical industrial users.

The Agency does not agree with the assertion that these requirements are redundant. One of the principal purposes and benefits of an annual compliance monitoring program is the

independent verification of the compliance status of the industrial user by the Control Authority. This annual presence provides a means to determine whether the information the POTW receives is adequate in terms of sampling techniques and lab procedures. It also provides a way to evaluate the recordkeeping procedures of the industrial user as well as the operation and maintenance of the pretreatment facility. This annual presence also provides a deterrent value by encouraging the industrial user to maintain appropriate operation and maintenance procedures as well as helping to ensure proper recordkeeping and lab procedures. These benefits are not possible through the review of self-monitoring reports alone. Therefore, the Agency disagrees with the claim that this is a redundant requirement, because the goal of this provision is not simply to receive data but also to provide effective oversight of industrial user operations.

One commenter stated that any specification of inspection and monitoring frequency would limit the ability of the POTW to make rational determinations based on local considerations. It was felt that any more stringent frequency would excessively limit the needed flexibility of the POTW in planning for inspections and sampling of its industrial users. Another commenter was of the opinion that more frequent than biennial inspections and sampling might become so demanding as to prevent a POTW from focusing its attention on actual cases of effluent violations.

However, other commenters did not believe that a minimum frequency of biennial inspections and sampling was sufficient to oversee industrial user compliance. One POTW stated that it supported a minimum frequency, but it believed that it would be difficult to maintain, in the face of competing programs, its current level of two to eight visits per year in the face of regulations which allow for a significantly reduced effort. Many commenters pointed out that the proposed rule was inconsistent with existing EPA guidance regarding inspections and sampling of significant industrial users. These commenters stated that previous instructions from EPA during audits and inspections as well as in workshops directed Control Authorities to establish annual monitoring frequencies for their significant industrial users. Another commenter expressed concern over allowing biennial monitoring and stated its belief that annual oversight provided greater credibility to the reported self-monitoring information. A final commenter said that this proposal ran counter to the recommendations found in the Domestic Sewage Study and that the intent of these recommendations was to provide a stronger effort in pollution control.

EPA is persuaded by these arguments in favor of a requirement for annual inspections and sampling of significant industrial users. The purpose of the rule is to ensure consistent tracking of industrial users with the potential to adversely affect the operation of the treatment works. Requiring annual inspections and sampling will provide for more effective oversight of industrial user compliance, consistent with EPA Guidance. For these reasons, EPA is today requiring that POTWs with approved pretreatment programs sample and inspect all significant industrial users at least once a year.

The Agency does not agree with those commenters who said that specifying a minimum inspections and sampling frequency would excessively limit the POTW in planning for inspections and sampling of industrial users. The Agency, in its 1986 "Pretreatment Compliance Monitoring and Enforcement Guidance" recommended that Control Authorities conduct at least one inspection and/or sampling visit annually for all significant industrial users. This recommendation has also been made during pretreatment inspections and program audits. By specifying a minimum compliance monitoring frequency, the Agency is establishing uniform program requirements to assist in program oversight and which can be readily enforced if necessary. In addition, the Agency points out that this requirement applies only to significant industrial users. EPA has allowed considerable flexibility and discretion for non-significant industrial users with regard to effluent sampling and other regulatory requirements. EPA does not believe that implementation of today's rule will prevent POTWs from dealing with actual cases of effluent violations or from adequately implementing other requirements of their approved programs. Many POTWs are already implementing an inspections and sampling scheme with frequencies far greater than required by today's rule, and there have been no observed difficulties in addressing violations or maintaining compliance with other requirements of approved programs.

Finally, the Agency solicited comments on whether to require that POTWs target certain compounds in their sampling, such as RCRA appendix VIII hazardous constituents. There was universal opposition to this proposal and many commenters indicated that it would be excessively burdensome without producing environmental benefits. Upon evaluation of the comments submitted, EPA has determined that routine monitoring for RCRA appendix VIII hazardous constituents is not nationally necessary for preventing interference or pass through or for preventing sludge contamination. The POTW has the flexibility to require monitoring of these substances if they pose potential problems for the operation of the POTW. The POTW should, however, sample for all regulated pollutants discharged to the treatment works.

c. *Today's rule.* Today's rule requires POTWs with approved pretreatment programs to conduct at least one inspection and sampling visit annually for each significant industrial user.

3. Definition of Significant Industrial User (40 CFR 403.3(t))

a. *Proposed change.* All industrial users which discharge wastes to POTWs are required to comply with the general pretreatment regulations found in 40 CFR part 403. While the general pretreatment regulations include very specific requirements for categorical industries, the regulations are less clear about certain obligations for noncategorical industries. In the 1986 "Pretreatment Compliance Monitoring and Enforcement Guidance", the Agency established a definition for what would constitute a significant industrial user. This definition was in part designed to identify those non-categorical industrial users which are likely to have the most significant impact on the POTW, and for which additional pretreatment requirements might be justified.

In order to provide national consistency in the application of pretreatment requirements and to enhance program enforceability, the Agency proposed on November 23, 1988 to amend 40 CFR 403.3 to add a new definition of "Significant Industrial User" which was generally consistent with the 1986 Guidance. Under the proposal, a "significant industrial user" was defined as: (1) All dischargers subject to categorical pretreatment standards; (2) all noncategorical dischargers that, in the opinion of the Control Authority, have a reasonable potential to adversely affect the POTW's operation; (3) all noncategorical dischargers that contribute a process wastestream which makes up 5 percent or more of the

average dry weather capacity of the POTW treatment plant, or that discharge an average of 25,000 gallons per day or more of process wastewater to the POTW. Under the proposal, the Control Authority need not designate as significant any noncategorical industrial user in category (3) above that, in the opinion of the Control Authority and with the agreement of the Approval Authority, had no potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement. The agreement of the Approval Authority would not be necessary in cases where the noncategorical discharger would have been designated as significant only because of an average discharge of 25,000 gallons per day or more of process wastewater. The proposal also would have allowed any noncategorical industrial user designated as significant to petition the Control Authority to be deleted from the list of significant industrial users on the grounds that it had no potential for adversely affecting the POTW's operation or violating any pretreatment standard or requirement.

The Agency intended to provide with this definition a means for POTWs to set priorities for monitoring and enforcement activities, including self-monitoring by the industrial user. In addition, the definition would provide a basis for establishing reporting requirements for non-categorical industrial users and for Control Authority reporting to the Approval Authority regarding industrial user compliance. The definition would also provide national consistency in the implementation and reporting of pretreatment requirements and would assist Control Authorities in identifying the effective use of permitting, monitoring and enforcement resources. In addition to these benefits, the proposed regulatory definition would provide better notice to POTWs of what constitutes a well-structured pretreatment program. One basic goal was to require that similar industrial facilities be treated consistently with regard to reporting and monitoring requirements.

EPA solicited comments on the Noveber 23, 1988 proposal, and also invited comments and suggestions on the following issues: whether to allow POTWs to delete categorical users from the significant industrial user list; the appropriateness of the 25,000 gallons per day criteria; the role of the Approval Authority in designating significant industrial users; expanding the definition of significant industrial user to include notifiers of hazardous waste dischargers; and requiring POTWs to estimate in annual reports whether the amount of hazardous waste received during the last calendar year has increased significantly and whether any change has affected operations at the POTW.

b. *Response to comments.* The Agency received many comments on the proposed rule which were submitted by States, local POTWs, environmental groups and private industry. The majority of the commenters generally favored the rule, although many suggested modifications. Some commenters were of the opinion that there should not be any regulatory definition for significant industrial user. As explained above and in the preamble to the proposed rule, the purpose behind the proposed definition is to provide national consistency and program enforceability, as well as to provide notice of what constitutes a well-structured pretreatment program and to ensure equity in program implementation. It is EPA's belief that this definition is necessary since several parts of today's rule impose requirements applicable only to significant industrial users.

i. *Role of the approval authority in identifying significant industrial users.* The largest number of comments received on the proposed definition addressed the procedures for listing or delisting industrial users and the role which the Approval Authority would play in this process. All commenters seemed to agree that the POTW should be allowed to add or delete certain industrial users from the significant industrial user list, but there was disagreement on whether and under what circumstances to require the agreement of the Approval Authority in this process. Two comments from POTWs stated that there should not be a requirement to seek prior consent from the Approval Authority to delete or add an industrial user from the list of significant industrial users because the Approval Authority can review these changes in the POTW's annual pretreatment report and during other oversight functions. Another commenter stated that the Approval Authority is not in a position to evaluate a discharger's potential to adversely affect a POTW's operation. It was stated that the Approval Authority must rely on the recommendation and data supplied by the Control Authority in designating significant industrial users and that requiring the agreement of the Approval Authority would create an unnecessary bureaucratic step which would lead to delays. It was recommended that the Control Authority be allowed to simply notify the Approval Authority of its intent not to include, or remove, an industrial user from the list and to have that decision stand unless the Control Authority was in violation of its NPDES permit requirements.

Some of the commenters, on the other hand, favored a strong role for the Approval Authority in designating the universe of significant industrial users. One commenter believed that the political influence often exercised by significant industrial users was sufficient to require a strong oversight presence by the Approval Authority. It was stated that the independent evaluation of the Approval Authority was necessary as an important check on the POTW's exercise of its discretion, especially in cases where there might be pressure exerted by the industry to be removed from the list of significant industrial users (and the subsequent regulatory requirements for such industrial users). In addition, it was stated that if the Control Authority fails to place a significant industrial user on the list, the Approval Authority should have the power to require the listing of that industrial user.

The Agency does not agree that adequate oversight can be achieved through a simple review of the POTW's annual pretreatment report or through other routine compliance monitoring activities on the part of the Approval Authority. The Agency believes that notification should be required to make the Approval Authority aware of any changes to the approved program. Prompt notification is necessary for proper oversight of approved programs and to ensure proper enforcement of program requirements. The Approval Authority has the obligation to evaluate compliance, and therefore needs to be made aware of any changes to the scope of the program as soon as possible, rather than in an annual report. For example, the Approval Authority needs to know if the numbers of industrial users subject to permitting, monitoring, and reporting are undergoing a significant change. If the Approval Authority is not made aware of these changes, tracking program implementation would become extremely difficult. In addition, if the Approval Authority does not have the opportunity to object to unjustified designations or de-designations of significant industrial users, then the Control Authority might be subsequently liable to enforcement action from the Approval Authority.

There was also some stated confusion regarding at what point Approval Authority consent would be necessary, including whether the POTW should use the procedures for non-substantial program modifications promulgated in 40 CFR 403.18(b)(2). One commenter believed that the rule should explicitly state that listing and delisting of SIUs constitutes a minor program modification.

To address these concerns and avoid possible confusion, the Agency has modified the language of the proposal concerning consent of the Approval Authority. Today's rule adds a new provision, 40 CFR 403.8(f)(6), which requires the POTW to prepare a list of its significant industrial users. The list shall identify the criteria for significance applicable to each industrial user. For non-categorical users meeting the criteria for significance, the list shall indicate whether the POTW has made a determination that such industrial user has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement. This list, and any subsequent modifications thereto, shall be submitted to the Approval Authority as a minor program modification pursuant to 40 CFR 403.18(b)(2). EPA believes that this language gives clearer notice to POTWs of their responsibilities and of the role of the Approval Authority in approving significant industrial user lists and subsequent modifications. 40 CFR 403.8(f)(6) replaces the proposed revisions to 40 CFR 403.12(i)(1) that would have required updating lists of significant industrial users in POTW annual reports and an explanation of why certain noncategorical users were not designated as significant. Today's rule requires that any modifications to the list of significant industrial users be submitted to the Approval Authority as a minor program modification. Since modifications to the list will normally take place at a minimum of once a year in most pretreatment cities, the Agency believes that requiring an update of significant industrial users in the annual report is not necessary. EPA notes that 40 CFR 12(i)((4) provides that the annual reports shall contain "any other relevant information requested by the Approval Authority". Approval Authorities may therefore request additional information or more frequent updating of a particular POTW's significant industrial user list if they believe it appropriate.

Today's rule also makes a conforming change to proposed 40 CFR 403.8(f)(2)(iii) to provide that, within 30 days of approval pursuant to 40 CFR 403.8(f)(6) of a list of significant industrial users, the POTW must notify each significant industrial user of its status as such and of all pretreatment requirements applicable to it as a result of such status.

ii. *Use of flow in determining significance.* The use of the 25,000 gallon per day flow criterion received considerable comment from States, POTWs, environmental groups, and private industry. In general, the commenters were of the opinion that the 25,000 gallon per day criterion was either too low or that no flow criterion should be included in the definition at all. One commenter believed that the flow criterion served no purpose because the proposed definition allows the Control Authority to fail to designate or to delete these industrial users without the consent of the Approval Authority. Another commenter stated that relative, not absolute size is important in determining significance and that size is adequately covered in the 5 percent criterion in the existing definition. One POTW suggested that a two-tiered approach be used with POTWs with less than 5 million gallons per day design flow using 25,000 gallons per day and POTWs with a design flow greater than 5 million gallons per day using 50,000 gallons per day.

The major purpose of defining significant industrial user is to provide a means by which EPA can set priorities in its general pretreatment standards and Control Authorities can set priorities for permitting, monitoring and enforcement. The Agency believes that the flow criterion can be used as a screen by the POTW to set priorities for permit applications in their initial evaluation of industrial users, and for updating the significant industrial user list annually. The 25,000 gallon per day measure will provide a general cutoff point for consideration in determining whether a facility should be targeted for compliance monitoring and enforcement activities. Under 40 CFR 403.8(a), the Regional Administrator or Director may, at his discretion, require that a POTW with a design flow of 5 million gallons per day or less develop a pretreatment program in order to prevent pass through or interference. The smallest POTWs generally required by the Regional Administrator or Director to have a pretreatment program under the discretionary authority of 40 CFR 403.8(a) have a design flow of 500,000 gallons per day. EPA chose 25,000 gallons per day as a flow criterion for significant industrial users in part because that figure represents five percent of the flow of the smallest POTWs required to have a pretreatment program. The Agency believes that a 50,000 gallons per day criterion would not capture many non-categorical significant industrial users with a potential to adversely affect smaller POTWs. POTWs may, in their discretion, and subject only to review by the Approval Authority as a minor modification, delete any or all of the facilities which were placed on the significant industrial user list based solely on flow. EPA does not wish to overrule POTWs on a routine basis when it comes to the designation of industrial users as significant. The purpose of the notification requirement is to provide the Approval Authority with information necessary to prevent the deletion of significant industrial users by POTWs without justification. It is EPA's position that this notification is necessary for proper and appropriate oversight of program implementation.

One commenter believed that the new regulatory definition would impose an increased paperwork and administrative burden on the POTW. The proposed definition of significant industrial user is closely related to the recommended definition provided in the 1986 "Pretreatment Compliance Monitoring and Enforcement Guidance," and as such, has been available to POTWs for over three years. Many Control Authorities have already adopted the definition found in the Guidance. EPA believes that most Control Authorities are familiar with the definition and have already incorporated it in their implementation activities.

iii. *Other.* The Agency also solicited comment on whether to allow deletion of categorical users from the list of significant industrial users. A majority of the commenters favored a procedure for deleting categorical industrial users from the lists, but one Approval Authority stated its strong objection to any procedure for deregulating categorical industrial users. There was a suggestion that a de minimis limit of 1000 gallons per day could be used for delisting categorical industrial users from the list of SIUs. Another commenter suggested that only the Approval Authority should be allowed to delete a categorical industrial user from the list of SIUs.

After reviewing these comments, EPA is not persuaded that a POTW should be able to delete categorical industrial users which, in the opinion of the POTW, have no reasonable potential to adversely affect the operation of the POTW. In the development of categorical standards, EPA made a determination that these standards were

necessary in the case of certain industries to prevent pass through and interference. Based on this determination, the Agency promulgated standards which restrict the discharge of pollutants by these industries. It is therefore important that the compliance of these industries with categorical standards be assured. Therefore, today's rule does not allow categorical industrial users to be deleted from the list of significant industrial users.

Some commenters expressed concern over the burden required to prove that an industrial user had "no potential" to adversely affect the operation of the POTW. It was suggested that EPA provide guidance regarding this issue if the current language is maintained in the final rule. In the 1986 "Pretreatment Compliance Monitoring and Enforcement Guidance," the Agency stated that the Control Authority may remove any noncategorical industrial user from the SIU list if it has "no reasonable potential" to violate any pretreatment standards. Under today's rule, the Control Authority may remove an industrial user (subject to the consent of the Approval Authority) based on whether it has a reasonable potential to adversely affect the operation of the POTW or to violate any pretreatment standard or requirement. The determination of reasonable potential should be based on the best professional judgment of the POTW and should take into account the compliance history of the facility, the nature and character of the effluent, and the flow of the facility.

One commenter from a State Approval Authority stated that the proposed definition lacks sufficient objective criteria for determining significance. It was suggested that objective criteria are needed regarding potential impact of an industrial user in terms of the design capacity of the treatment works. In relation to this, another commenter noted that the 1986 Guidance provides that a facility "contribut[ing] a process wastewater which makes up 5 percent or more of the average dry weather hydraulic *or organic* capacity of the treatment plant" would be considered significant. This commenter suggested that the final rule should conform to the Guidance definition. EPA agrees that facilities contributing 5 per cent or more of the average organic capacity of the treatment plant may have significant potential to adversely affect the POTW, since large concentrations of Biochemical Oxygen Demand (BOD) or Total Suspended Solids (TSS) could impair the biological capacity of the plant to treat all incoming wastes. The final rule will therefore incorporate organic capacity as part of the regulatory definition.

One industry commenter objected to the proposed definition of significant industrial user on the grounds that it created additional reporting and monitoring requirements for categorical industrial users. However, today's rule places no additional reporting or monitoring requirements on categorical significant industrial users.

A final issue raised by the proposed rule was whether to expand the definition of significant industrial user to include notifiers of hazardous waste discharges under proposed 40 CFR 403.12(p). There was almost unanimous opposition to this proposal from the commenters. In light of this opposition and upon reviewing this issue, it is EPA's position that notifiers of hazardous waste discharges should not be automatically considered significant industrial users for purposes of pretreatment, since the discharge of small amounts of hazardous waste do not necessarily have the potential to adversely affect the POTW. The POTW, of course, may designate such facilities as significant if a particular facility has the potential to cause interference, pass-through, or sludge contamination at the POTW, or pursuant to state or local law.

c. *Today's rule.* Under today's rule, a significant industrial user is: (1) Any discharger subject to categorical pretreatment standards; (2) any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, noncontact cooling and boiler blowdown wastewaters) to the POTW or that contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or (3) that is designated as such by the Control Authority on the basis that the industrial user has a reasonable for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement. Upon a finding that a noncategorical user has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority may at any time, upon its own initiative or in response to a petition received from a noncategorical industrial user or POTW and with the consent of the Approval Authority, determine that such industrial user is not a significant industrial user. Today's rule also requires POTWs to prepare a list of their significant industrial users, identify the criteria applicable to such users, and indicate whether the POTW has made a determination that any noncategorical user meeting the criteria in 40 CFR 403.3(t)(1)(ii) should not be a significant industrial user. This list, and any subsequent modifications thereto, shall be submitted to the Approval Authority as a minor program modification pursuant to 40 CFR 403.18(b)(2). Within 30 days of approval of the list, the POTW shall notify each significant industrial user of its status as such and of all pretreatment requirements applicable to it as a result of such status.

4. Enforcement Response Plans for POTWs (40 CFR 403.8(f)(5))

a. *Proposed change.* The existing general pretreatment regulations do not specify detailed enforcement requirements applicable to POTWs with approved pretreatment programs. Specific enforcement sanctions identified in the general pretreatment regulations are the requirement to annually publish the names of significant violators in the largest daily newspaper, and the requirement that POTWs have authority to seek or assess minimum civil or criminal penalties of $1000 per day. The existing regulations require POTW program submissions to identify how the POTW intends to ensure compliance, and also require POTWs to enforce all pretreatment standards and requirements and obtain remedies for noncompliance (40 CFR 403.8(f)(1)). However, POTWs are not further informed what their legal responsibilities are in carrying out enforcement actions.

In the 1986 "Pretreatment Compliance Monitoring and Enforcement Guidance", the Agency encouraged each POTW to develop an Enforcement Response Guide, which is a set of procedures describing how the POTW will investigate industrial user violations and which corrective or enforcement actions the POTW will take to respond to such violations (the Guidance suggested certain procedures). In order to ensure that POTWs develop and implement specific enforcement procedures, EPA proposed on November 23, 1988 to add 40 CFR 403.8(f)(5) to require all POTWs with approved pretreatment programs to develop and implement an enforcement response plan describing how the POTW will investigate and respond to instances of industrial user noncompliance, including time frames within which the responses will take place.

The Agency believes that the process of developing these plans will be very valuable in helping POTWs decide what

resources are needed to enforce their pretreatment standards and how they will actually deal with industrial user violations. Such plans will also make it easier for EPA to determine whether a POTW is complying with its pretreatment implementation requirements for enforcement. The rule will not interfere with the ability of the POTW to carry out their programs in a manner suited to their needs, nor should such a plan be difficult to develop. The POTW should use the 1986 Guidance, EPA's recently issued *Guidance for Developing Control Authority Response Plans* (September 1989) and its own expertise to develop a reasonable plan to address and remedy noncompliance. The Agency solicited comments on whether to include more specific elements in the regulation.

b. *Response to comments.* EPA received many comments on the proposed rule. Comments were submitted by States, POTWs, private industry and environmental groups. The commenters were generally evenly divided with regard to favoring or opposing the proposed rule. Several commenters were of the opinion that there should not be any regulatory requirement to develop enforcement response plans and that any such provision should be developed as guidance only.

EPA believes that enforcement response plans will help POTWs decide what resources are needed to enforce their pretreatment standards and assist in dealing with industrial user violations. In addition, a clearly defined enforcement response plan will provide notice to industrial users of what to expect if they violate any pretreatment requirement. By alerting industrial users to the possible response they may face in the event of noncompliance, the Control Authority will demonstrate that it is serious about its compliance expectations and is ready to respond to violations with firm measures. This heightened awareness by industrial users should improve their compliance status. Therefore, the Agency is of the opinion that it is appropriate to define these enforcement response plans in the regulation. For this reason, the Agency is today requiring all POTWs with pretreatment programs to develop and implement enforcement response plans.

The majority of the comments against the rule claimed that the procedures outlined in the proposed rule would prevent the POTW from exercising its enforcement discretion by locking the POTW into a cookbook approach to addressing violations. One commenter from private industry believed that the rule would force the POTW to address all instances of noncompliance with equal vigor, regardless of the magnitude of the violation. A POTW commented that rigid enforcement response plan requirements could result in less vigorous POTW pretreatment program implementation. Another POTW stated that establishing standardized national elements for the enforcement response plans would remove necessary flexibility in program implementation. A third commenter believed that the current rule would inhibit innovative means of enforcement. In general, these commenters believed that the rule would hinder rather than help the POTW in its efforts to promote industrial user compliance.

An effective enforcement response plan should provide that similar violations will be dealt with in a similar manner, and that more serious violations will be addressed with more stringent enforcement responses. Therefore, it is incorrect to think that the enforcement response plans will address all instances of noncompliance with equal vigor. With regard to the issue of flexibility, the Agency understands that enforcement strategies will be different from jurisdiction to jurisdiction and that the responses selected by each Control Authority will depend on their legal authority and local circumstances. EPA is defining the principles for enforcement in the regulation, but it is up to the local Control Authority to decide how to incorporate these principles into a functional enforcement strategy, taking into account local circumstances. The Agency does not believe that the use of such plans precludes innovative enforcement strategies.

Even those commenters who favored the rule were concerned that EPA provide enough flexibility to the POTW to decide the details of response procedures appropriate for a particular situation. One commenter believed that the rule as written provided enough flexibility to accommodate the differences in the enforcement process for each community. Most commenters, however, felt that requiring the specification of time frames within the rule itself would place an unreasonable restraint on the POTW's enforcement discretion. Another commenter stated that time frames necessarily vary from case to case.

Enforcement is the necessary driving force that makes environmental laws work. One of the foundations of effective enforcement is the timely response upon discovery of a violation. The Agency is not persuaded by the argument that requiring the development of time frames in the regulation will place an unreasonable restraint on the POTW's enforcement discretion. The actual time frames to be incorporated into the enforcement response plan are being left to the discretion of the POTW (with the agreement of the Approval Authority). EPA understands and appreciates the need for local flexibility in determining appropriate responses, but the Agency believes that requiring the establishment of time frames is an appropriate condition for effective enforcement. The Agency emphasizes that both the proposal and today's rule would not require the same time frames for different types of industrial user noncompliance.

Many of the POTWs that commented stated concern that this rule would make them easier targets for EPA enforcement action. One POTW asserted that the rule was an attempt by EPA to fit local programs into the federal mold and to improve EPA's enforcement capabilities against POTWs. It was thought that a more appropriate requirement would be to make these enforcement response plans a permit requirement for POTWs with interference or pass through problems due to inadequate enforcement.

One of the legitimate purposes of this requirement is to provide EPA with a means to evaluate program implementation by the Control Authority. The present general pretreatment regulations already require POTWs to ensure compliance by industrial users with all pretreatment standards and requirements. Today's revision to the regulations serves to make this requirement more explicit. One of the difficulties in implementing and enforcing pretreatment programs for POTWs has stemmed from a lack of clearly defined policies and procedures. The process of developing enforcement response plans will compel the POTW to lay out its enforcement rationale and will therefore serve to minimize or eliminate the uncertainties concerning enforcement. The Agency is requiring that POTWs lay out a clearly defined strategy to be used in addressing violations. One of the benefits of such an approach is that when the Control Authority discovers that its local enforcement authority has been insufficient to return a recalcitrant industrial user to compliance, the Control Authority may wish to report that situation to the Approval Authority as a possible candidate for joint enforcement action. This partnership between the local Control Authority and the Approval Authority is an anticipated

consequence of this requirement. To provide the Approval Authority with knowledge of who is responsible for the various levels of response, the Agency is today adding a new provision (40 CFR 403.8(f)(5)(iii)), requiring the POTW to identify in enforcement response plans the official(s) responsible for implementing each type of enforcement response.

One commenter was uncertain whether the requirement for the development of enforcement response plans would apply to POTWs that already have approved programs. It is the Agency's intent that all Control Authorities, including those with existing approved programs, develop and implement the requirement of this rule. Therefore, all POTWs with approved programs and those POTWs required to develop a program under 40 CFR 403.8(a) will be required to develop an enforcement response plan. This commenter also suggested that a compliance date be established for the development of these plans. Although the Agency does not agree that a uniform compliance date need be specified in the regulation, EPA points out that all enforcement response plans (as well as other program changes required by today's rule) must be included in the POTW's NPDES permit upon reissuance.

c. *Today's rule.* Today's rule provides that POTWs with approved programs must develop and implement an enforcement response plan. This plan shall contain detailed procedures indicating how a POTW will investigate and respond to instances of industrial user noncompliance and shall, at a minimum:

(1) Describe how the POTW will investigate instances of noncompliance;

(2) Describe the types of escalating enforcement responses the POTW will take in response to all anticipated types of industrial user violations and the time periods within which responses will take place;

(3) Identify by title the official(s) responsible for implementing each type of enforcement response; and

(4) Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards, as provided in 40 CFR 403.8(f) (1) and (2).

5. Definition of Significant Noncompliance (40 CFR 403.8(f)(2)(vii))

a. *Proposed change.* The existing regulations (40 CFR 403.8(f)(2)(vii)) require Control Authorities to publish, in the daily newspaper with the largest circulation in the service community, a list of industrial users which had significant violations of applicable pretreatment standards and requirements during the previous twelve months. This list must be published at least once per year. "Significant violation" is defined as a violation which remains uncorrected 45 days after notification of noncompliance; which is part of a pattern of noncompliance over a twelve month period; which involves a failure to accurately report noncompliance; or which resulted in the POTW exercising its emergency authority under 40 CFR 403.8(f)(1)(vi)(B).

This definition includes criteria similar to those previously used by Quarterly Noncompliance Reports (QNCRs) for direct dischargers. The Agency uses QNCRs to track the progress and measure the effectiveness of NPDES compliance and authorized state enforcement against direct dischargers. However, in 1985 EPA revised the criteria for the types of violations to be reported in QNCRs (see 40 CFR Part 123.45). The revisions established more precise criteria, known as technical review criteria (TRC), to be used for reporting certain permit violations. The TRC are based on the magnitude and/or duration of the violations and provide a means to quantify severity of violations for reporting of direct discharger noncompliance.

In the 1986 *Pretreatment Compliance Monitoring and Enforcement Guidance*, the Agency included a detailed recommended definition of significant noncompliance by industrial users which incorporated the essence of the new criteria used in determining the violations required to be reported in the QNCR. In the Guidance, EPA recommended the national use of this definition to identify the most serious violations by industrial users and to set priorities for enforcement actions.

Experience with the current regulatory definition of significant violation has shown that POTWs vary considerably in their application of this definition when selecting which names of violators to publish in the local newspaper. This is particularly true in deciding what constitutes a "pattern of noncompliance" under 40 CFR 403.8(f)(2)(vii). To eliminate these inconsistencies and to establish more parity in tracking violations committed by direct and indirect dischargers, the Agency proposed on November 23, 1988 to revise 40 CFR 403.8(f)(2)(vii) to replace the definition of significant violation with a new definition which essentially incorporates the criteria used in determining direct discharge violations to be reported on the QNCR. Under the proposal, an industrial user would be in significant violation if its violations met one or more of the following criteria:

- Chronic violations of wastewater discharge limits, defined as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;
- Technical review criteria (TRC) violations, defined as those in which thirty-three percent or more of all of the measurements taken during a six-month period equal or exceed the product of the daily average maximum limit or the average limit times the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);
- Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Control Authority believes has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);
- Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment and has resulted in the POTW's exercise of its emergency authority under paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge;
- Violation, by ninety days or more after the schedule date, of a compliance schedule milestone contained in a local control mechanism or enforcement order, for starting construction, completing construction, or attaining final compliance;
- Failure to provide required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules within thirty days of the due date;
- Failure to accurately report noncompliance; or
- Any other violation or group of violations which the Control Authority considers to be significant.

The Agency believes that this new definition will provide POTWs with more precise instructions regarding which industrial users in violation of pretreatment standards should have their names published in local newspapers.

EPA solicited comments on the appropriateness of the definition criteria, but emphasized that industrial users would continue to be liable for

any violation of applicable pretreatment requirements.

b. *Response to comments.* EPA received many comments on the proposed rule from States, POTWs, environmental groups, and private industry. The commenters were generally evenly divided with regard to favoring or opposing the proposed rule.

By far the greatest number of comments addressed the fact that under the proposed definition of significant violation, an industrial user could be considered a significant violator based on a single sampling event. This means that if the industrial user performs the minimally acceptable level of monitoring (generally twice per year) and detects a violation, then that industrial user, by definition, would be considered a significant violator. There was a recommendation from several commenters to lengthen the evaluation period for the criteria for chronic violations of wastewater discharge limits and technical review criteria violations from six months to twelve months to allow for the accumulation of more data. Alternatively, one commenter suggested that EPA should specify a minimum number of samples for the determination of what is a significant violation.

In response, EPA points out that the general pretreatment regulations specify only the minimum monitoring and reporting requirements for implementing the pretreatment program. Although it is true that an industrial user can be classified as a significant violator based on data from a single sampling event, an industrial user may increase its sampling frequency to lessen the chance that, for chronic or TRC violations, significant noncompliance will be based on only one sampling event. In addition, it should be noted that 40 CFR 403.12(g)(2) provides that if sampling performed by a categorical industrial user indicates a violation, the user shall repeat the sampling and analysis and submit the results of the repeat analysis to the Control Authority within 30 days after becoming aware of the violation.

Three commenters were of the opinion that the technical review criteria (TRC) were too low and that a more realistic and appropriate level for the TRC would be 2.0 for conventional pollutants and 1.5 for all other pollutants. One commenter suggested eliminating this component of the definition altogether. Another commenter suggested that the TRC be separately calculated for each pollutant by incorporating the removal efficiencies at the treatment works. A POTW commented that the TRC criteria should have language which specifies that the TRC applies for "each pollutant parameter."

One of the reasons for the development of the significant violator criteria was to promote parity between the tracking of violations for direct and indirect dischargers. 40 CFR 123.45(a)(2) establishes criteria for determining significant violations for direct dischargers. In the 1986 Guidance, the Agency recommended adopting these same criteria for evaluating significant noncompliance for indirect dischargers. The reportability criteria for the Quarterly Noncompliance Report (QNCR) uses TRC values of 1.2 and 1.4. Therefore, EPA proposed to adopt these same criteria in the regulatory definition of significant violation in the pretreatment program. The Agency does not believe that basing TRC values on the removal efficiencies at the POTW is a viable means to define significant violations, since it would involve calculations by each POTW on its removal efficiencies for many pollutants. EPA does agree, however, that the language in the TRC would be clearer if it specified for "each pollutant parameter," and has accordingly included such language in today's final rule.

Three commenters believed that criterion "C" of the proposed definition would promote arbitrary and inconsistent implementation of the definition and should be eliminated. A separate commenter stated that this criterion was inappropriate because the determination of a significant violation should be based on actual fact and not a "belief" that a discharge has caused interference or pass-through. This commenter recommended that we change the wording of this criterion to "has reason to believe." There was a related concern from private industry that the definition, as proposed, would allow for arbitrary or indiscriminate enforcement without providing for adequate or meaningful legal recourse on the part of the industrial user deemed to be in significant violation of pretreatment requirements. It was stated that certain of the criteria were sufficiently vague as to penalize dischargers without adequate warning and without any opportunity for appeal.

EPA recognizes the need to base allegations of violation on information and not on simple belief. Today's final definition therefore incorporates the phrase "which the Control Authority *determines* has caused, alone or in combination with other discharges, interference or pass through * * *" instead of the language in the proposed definition. For the same reason, the Agency has also incorporated the phrase "which the Control Authority *determines will adversely affect the operation or implementation of the local pretreatment program*" in the last criterion for significant violation, instead of "which the Control Authority considers to be significant", as was proposed. The Control Authority's determination may include a technical analysis documenting interference or pass through or other appropriate evidence which it deems sufficient. EPA believes that the above changes decrease the chance of arbitrary judgments by Control Authorities.

One commenter stated that an affirmative defense should be explicitly included in the definition of significant noncompliance. However, EPA does not believe that POTWs should be burdened with ascertaining which industrial users may be eligible for an affirmative defense under 40 CFR 403.5(a)(2) before satisfying the publication requirement in 40 CFR 403.8(f)(2)(vii). Incorporating the commenter's suggestion into the rule could lead to protracted and counterproductive efforts by POTWs if they had to investigate the eligibility of an industrial user for an affirmative defense prior to publication. In addition, where the eligibility for an affirmative defense is unclear, this requirement would leave POTWs uncertain about their obligations under 40 CFR 403.8(f)(2)(vii). Since the listing of an industrial user in the newspaper does not involve an administrative penalty or judicial action, eligibility for an affirmative defense is unaffected by such a listing, and such eligibility will be determined during administrative penalty or judicial enforcement proceedings. Accordingly, today's rule does not provide for the consideration of eligibility for an affirmative defense in determining whether an industrial user is in significant noncompliance.

In response to the comment that the industrial user is not provided with adequate or meaningful legal recourse, EPA believes that Control Authorities will not arbitrarily list industrial users as being in significant violation of pretreatment requirements. The Control Authority is most likely to base this decision on a reasoned professional judgment in cases where there is discretion provided to the POTW.

Three commenters stated that the POTW should develop its own criteria for what is considered significant because it was believed that the POTW is in the best position to determine what violations cause the greatest damage to the treatment works. These commenters suggested that EPA provide support by

maintaining its current criteria in guidance. One commenter was concerned that the Agency be very careful not to foster activities which might inhibit relations between the POTW and its industrial users. If the POTW then fails to follow its criteria, it would be liable to enforce action by the Approval Authority. In response, EPA points out that both the proposal and today's rule allow POTWs discretion to list any violations they consider significant. Today's rule establishes only minimum requirements, and should not affect relations between POTWs and their industrial users.

One commenter requested clarification regarding whether proposed criterion G, "failure to accurately report noncompliance", included only willful failures or any failures to report.

The general pretreatment regulations specify the signatory requirements for reports submitted by industrial users to the Control Authority. This requirement is designed to provide accountability on the part of the industrial user for the contents of any report, including required reports of noncompliance. In signing the report, the person so signing has confirmed that the report is complete and accurate in all respects. Any failure to report accurately is sufficient justification to list the industrial user as a significant violator.

As noted above, the Agency's 1986 guidance on this subject referred to "significant noncompliance" rather than "significant violation" (the term used in the November 23, 1988 proposal). Since that time EPA has directed Control Authorities and Approval Authorities to use the "significant noncompliance" criteria in determining appropriate responses to industrial user pretreatment violations. This term has been employed in EPA workshops and seminars and is also used as a basis for tracking industrial user noncompliance in the Pretreatment Permits Enforcement Tracking Systems (PPETs), a computer system which assists the Agency in overseeing pretreatment program implementation. For the sake of program consistency, today's regulation therefore refers to "significant noncompliance".

c. *Today's rule.* Today's rule provides that an industrial user is in significant noncompliance if its violations meet one or more of the following criteria:

- Chronic violations of wastewater discharge limits, defined as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;
- Technical review criteria (TRC) violations, defined as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily average maximum limit or the average limit times the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);
- Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);
- Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge;
- Failure to meet, within 90 days after the scheduled date, a compliance schedule milestone contained in a local control mechanism or enforcement order, for starting construction, completing construction, or attaining final compliance;
- Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- Failure to accurately report noncompliance; or
- Any other violation or group of violations which the Control Authority determines will adversely affect the operation or implementation of the local pretreatment program.

6. Reporting Requirements for Significant Industrial Users (40 CFR 403.12(h))

a. *Proposed rule.* 40 CFR 403.12 describes the reports that industrial users must submit to their Control Authorities. To demonstrate continued compliance with pretreatment standards, industrial users subject to categorical standards must submit semi-annual reports that include effluent monitoring data taken during the reporting period, as provided in 40 CFR 403.12(e). The existing regulations provide that Control Authorities must require appropriate reporting from those industrial users with discharges not subject to categorical standards. However, the regulations do not specify a minimum frequency for reporting by noncategorical industrial users to the Control Authority regarding their compliance with applicable pretreatment requirements.

To provide for more effective implementation of the existing requirements and to ensure that this reporting is carried out regularly, EPA proposed on November 23, 1988 to revise 40 CFR 403.12(h) to require that all significant industrial users (as defined under proposed 40 CFR 403.3(u)) submit to their Control Authorities, at least twice a year, a description of the nature, concentration, and flow of pollutants selected for such reporting by the Control Authority. In addition, the proposal would require all significant industrial users to base their reports on data obtained through appropriate sampling and analysis performed during the period covered by the report. Control Authorities may require more frequent monitoring as appropriate.

The Agency solicited comments on the proposed twice-yearly reporting frequency, on limiting the reporting requirements to significant industrial users, and on whether to require significant industrial users to sample for certain compounds, such as the RCRA appendix VIII hazardous constituents.

b. *Response to comments.* The Agency received many comments on the proposed rule from States, POTWs, environmental groups, and industry. A majority of the commenters favored the proposal to require significant industrial users to report with the same frequency as categorical industrial users.

A few of the commenters expressed concern that the rule would require duplicative reporting for categorical industrial users. The assumption was that this provision would require categorical industrial users to report more often than is currently required. This was not EPA's intent in the proposal, as indicated by the title of proposed 40 CFR 403.12(h)—"Reporting Requirements for Industrial Users Not Subject to Categorical Standards". Today's rule clarifies this intent by referring in 40 CFR 403.12(h) to "significant noncategorical industrial users."

A few other commenters stated that the current reporting requirements under 40 CFR 403.12(h) were sufficient and allowed for necessary flexibility in establishing reporting requirements for non-categorical industrial users. There was a concern that the current proposal would restrict that flexibility. These commenters believed that the current regulation is more suitable in dealing with the highly variable group of noncategorical discharges.

The Agency believes that the reporting requirements for all significant industrial users, including categorical and non-categorical users, should generally be the same. Since noncategorical significant industrial users are also likely contributors of toxic and hazardous pollutants to POTWs, EPA sees no reason for less frequent reporting for this group of dischargers. With respect to POTW flexibility, the Agency emphasizes that today's rule establishes only what it believes to be the minimum acceptable frequency for sampling and reporting. POTWs are free to require additional sampling and reporting as frequently as is necessary for a particular discharger. EPA believes that these requirements will give POTWs much more accurate knowledge of non-categorical wastes entering their treatment and collection systems. This knowledge is particularly important because many toxic and hazardous pollutants are not covered by categorical standards. EPA also believes that establishing minimum monitoring frequencies is the only way to ensure that the samples submitted to the POTW are representative and up to date. In order to help ensure that sampling is conducted once every six months instead of twice in one month (as the proposed rule would technically have allowed), the Agency is today requiring sampling reports to be submitted "at least once every six months on dates specified by the Control Authority", instead of "at least twice a year" as was proposed.

Two commenters stated a belief that POTW monitoring should be specified as an acceptable alternative in lieu of industrial user monitoring, as is currently stated in 40 CFR 403.12(g). Since the intent of the regulation is to provide parity between categorical and significant non-categorical dischargers, EPA has amended 40 CFR 403.12(h) to specify that POTW monitoring is acceptable in lieu of industrial user self-monitoring.

With respect to requiring significant industrial users to sample for certain compounds or classes of compounds (such as RCRA appendix VIII hazardous constituents), there was almost universal opposition to this suggestion from the commenters. EPA does not believe that monitoring for these constituents is necessary on a routine basis to prevent pass through or interference. POTWs may require an industrial user to monitor for any or all of these constituents if appropriate on an individual basis. Therefore, this requirement is not part of today's rule. However, EPA has added a requirement to 40 CFR 403.8(f)(1)(iii) that any pollutants required to be monitored must be identified in the individual control mechanism issued to the significant industrial user.

c. *Today's rule.* Today's rule requires noncategorical significant industrial users to submit to the Control Authority at least once every six months (on dates specified by the Control Authority) a description of the nature, concentration, and flow of the pollutants required to be reported by the Control Authority. The reports shall be based on sampling and analysis performed in the period covered by the report, and, where possible, performed in accordance with the techniques described in 40 CFR part 136. The sampling and analysis may be performed by the Control Authority in lieu of the significant noncategorical industrial user.

H. Miscellaneous Amendments

In addition to the substantive regulatory changes proposed on November 23, 1988, EPA also proposed to clarify certain of the general pretreatment regulations. These proposed non-substantive revisions are discussed below.

1. Local Limits Development and Enforcement

a. *Proposed change.* 40 CFR 403.5(c) provides that POTWs "developing" pretreatment programs must develop and enforce specific limits to implement the general and specific discharge prohibitions. In order to clarify that POTWs with already approved pretreatment programs must also develop and enforce local limits, EPA proposed to revise 40 CFR 403.5(c) to provide that POTWs shall continue to develop and enforce appropriate local limits after developing an approved pretreatment program.

b. *Response to comments.* No significant comments were received on this proposed revision.

c. *Today's rule.* Today's rule revises 40 CFR 403.5(c)(1) to provide that POTWs with approved pretreatment programs shall continue after pretreatment program submission and approval to develop local limits as necessary and effectively enforce such limits.

2. EPA Enforcement Action

a. *Proposed change.* 40 CFR 403.5(e) summarizes procedures that EPA follows to bring certain enforcement actions against an industrial user that has caused interference or pass through at a POTW, i.e., give the POTW 30 days notice to initiate its own enforcement action. However, 40 CFR 403.5(e) may be misleading in not stating that this notice requirement only applies to federal enforcement under section 309(f) of the Act and not to State or other federal enforcement actions. In order to avoid misunderstanding, the Agency proposed to revise the title of 40 CFR 403.5(e) to indicate that these notice procedures only apply to actions brought under section 309(f) of the Act.

b. *Response to comments.* No significant comments were received on this proposed revision. EPA notes that in addition to the above-mentioned title, the text of 40 CFR 403.5(e) is also misleading in that it refers to NPDES States in the context of enforcement actions. Since this provision is intended to apply only to actions brought under section 309(f) of the Act, EPA has deleted all references to NPDES States from 40 CFR 403.5(e).

c. *Today's rule.* The title of 40 CFR 403.5(e) has been changed to read "EPA enforcement actions under section 309(f) of the Clean Water Act", and the text of 40 CFR 403.5(e) has been revised to delete all references to NPDES States.

3. National Pretreatment Standards: Categorical Standards

a. *Proposed change.* 40 CFR 403.6 provides that categorical pretreatment standards, unless specifically noted otherwise, shall be in addition to the general prohibitions established in 40 CFR 403.5. There was an unintentional omission from this provision of a reference to the specific discharge prohibitions. In order to rectify this omission, the Agency proposed to revise 40 CFR 403.6 to add that national pretreatment standards, unless specifically noted otherwise, shall be in addition to all prohibitions and limits established under 40 CFR 403.5(c).

b. *Response to comments.* No significant comments were received on this proposed revision. The Agency has noted, however, that the proposed modification could be interpreted as being in conflict with requirements in part 403, other than the general and specific prohibitions, that apply to categorical dischargers. Since this was not the Agency's intent, EPA is today clarifying in 40 CFR 403.6 that categorical industrial users must comply with all applicable pretreatment standards and requirements set forth in part 403, as well as national categorical pretreatment standards.

c. *Today's rule.* Today's rule revises 40 CFR 403.6 to provide that categorical industrial users must comply with all applicable general pretreatment standards and requirements set forth in 40 CFR part 403.

4. POTW Pretreatment Program Requirements: Implementation

a. *Proposed change.* 40 CFR 403.8(f) establishes the requirements that a POTW pretreatment program must satisfy. Section 403.8(f)(1) provides that a POTW must have the legal authority which enables it to deny, condition and control pollutant contributions, require compliance by industrial users, conduct inspections of industrial users, and perform other essential attributes of a pretreatment program. The rule does not specifically state that POTWs must implement these procedures, although this has been EPA's consistent interpretation of the rule. To avoid any possible misunderstanding, the Agency proposed to revise the introductory sentence of 40 CFR 403.8(f) to state that "a POTW Pretreatment Program shall be developed *and implemented* to meet the following requirements". EPA also proposed to amend the title of 40 CFR 403.6 to read "POTW Pretreatment Programs: Development *and Implementation* by POTW" (emphasis added).

b. *Response to comments.* Several commenters specifically endorsed the proposed changes to 40 CFR 403.8(f) regarding implementation of approved pretreatment programs, stating that the proposed language clarified an important requirement. To further clarify this requirement, the introductory language to 40 CFR 403.8(f) has been changed from the proposal to read: "a POTW pretreatment program must be based on the following legal authority and include the following procedures. These authorities and procedures shall at all times be fully and effectively exercised and implemented".

c. *Today's rule.* Today's rule amends the title of 40 CFR 403.8 to read: "POTW Pretreatment Program Requirements: Development and Implementation by POTW". The introductory paragraph to 40 CFR 403.8(f) now provides that POTW pretreatment programs must be based on legal authorities and procedures which shall at all times be fully and effectively exercised and implemented.

5. Development and Submission of NPDES State Pretreatment Programs

a. *Proposed change.* 40 CFR 403.10(c) states that "the EPA shall * * * apply and enforce Pretreatment Standards and Requirements until the necessary implementing action is taken by the State." This sentence might give the wrong impression that the Agency will cease to enforce pretreatment requirements when a State has received program approval. Since this is not the case, EPA proposed to delete this sentence from 40 CFR 403.10.

b. *Response to comments.* No significant comments were received on this proposed revision.

c. *Today's rule.* Today's rule deletes the first sentence of 40 CFR 403.10(c).

6. Administrative Penalties Against Industrial Users

a. *Proposed rule.* The second to last sentence in 40 CFR 403.8(f)(1)(vi)(B) states that "the Approval Authority shall have authority to seek *judicial* relief for noncompliance by Industrial Users when the POTW has acted to seek such relief but has sought a penalty which the Approval Authority finds to be insufficient [emphasis added]". This provision could arguably be read to preclude the Agency from seeking administrative penalties in such instances. In order to clarify that EPA or a State Approval Authority may use any of their enforcement authorities in instances where a POTW has sought relief for industrial user noncompliance that the Approval Authority finds to be insufficient, the Agency proposed to revise 40 CFR 403.8(f)(1)(vi)(B) to provide that the Approval Authority shall have the authority to seek judicial relief and may also seek administrative relief when the POIW has acted to seek such relief but has sought a monetary penalty which the Approval Authority finds to be insufficient.

b. *Response to comments.* Some commenters did not support this proposed revision. These commenters believed that the Control Authority was the only proper entity to establish monetary penalties for discharges under its jurisdiction. One commenter pointed out that state and local ordinances limit most POTWs in the fines that they can levy. This commenter also stated that the proposed change would encourage industrial users to attempt to deal directly with the Approval Authority in cases of violation, bypassing the POTW.

The commenters appear to have been confused about the extent of the Approval Authority's existing authority to levy fines against industrial users when the POTW has sought an insufficient monetary penalty. Under the authority of sections 309(b) and 309(d) of the Clean Water Act, EPA has always been able to seek a judicial penalty against noncomplying industrial users when the POTW has sought an insufficient monetary penalty, including instances where the insufficiency was due to State or local limitations on fines that could be levied. The proposed amendments merely clarified that EPA may now seek administrative penalties as well, under the authority of section 309(g) of the Water Quality Act of 1987. It is clear that Congress intended to give the Administrator the authority to seek judicial or administrative penalties directly against noncomplying industrial users.

c. *Today's rule.* Today's rule revises 40 CFR 403.8(f)(1)(vi)(B) to provide that the Approval Authority shall have the authority to seek judicial relief but also may use administrative penalty authority when the POTW has sought a monetary penalty which the Approval Authority finds to be insufficient.

7. Provisions Governing Fraud and False Statements

a. *Proposed change.* 40 CFR 403.12(n) regarding fraud and false statements incorrectly states that certain reporting requirements are subject to the provisions of section 309(c)(2) of the Clean Water Act. The reference should have been to sections 309(c) (4) and (6) of the Act, as amended. EPA therefore proposed to revise 40 CFR 403.12(n) accordingly.

b. *Response to comments.* No significant comments were received on this proposed revision. To further clarify the existing requirements, the language of 40 CFR 403.12(n) has been changed from the proposal to read:

> * * * the reports and other documents required to be submitted or maintained under this section shall be subject to: 1) the provisions of 18 U.S.C. section 1001 relating to fraud and false statements; 2) the provisions of section 309(c)(4) of the Act, as amended, governing false statements, representation or certification; and 3) the provisions of section 309(c)(6) regarding responsible corporate officers.

c. *Today's rule.* Today's rule revises 40 CFR 403(n) to clarify that reports and other documents submitted under 40 CFR 403.12 are subject to sections 309(c)(4) and 309(c)(6) of the Clean Water Act.

III. Executive Order 12291

Under Executive Order 12291, EPA must judge whether a regulation is "Major" and therefore subject to the requirement of Regulatory Impact Analysis. Major rules are those which impose a cost on the economy of $100 million or more annually or have certain other economic impacts. The Agency completed a general estimate of the annual costs to industrial users and POTWs of the revisions proposed on November 23, 1988, which is included in the administrative record for this rulemaking, and which showed compliance costs at well below $100 million. Today's rule contains certain changes from the proposal which

increase costs to POTWs and industrial users. For example, the cost for the notification requirements has risen from approximately $250,000 in the proposed rule to approximately $800,000 in the final rule. Similarly, the cost for POTW inspections and sampling of significant industrial users has increased from approximately $1,160,000 in the proposed rule to $10,000,000 in the final rule. However, other changes from the proposal decrease such costs to POTWs and industrial users. For example, the cost of toxicity testing by POTWs has decreased from approximately $7,500,000 in the proposed rule to approximately $1,200,000 in the final rule, and the cost of technology-based limits for CWTs has decreased from approximately $21,000,000 in the proposed rule to no cost in the final rule. These changes are detailed in the Information Collection Request (ICR) for this rule submitted to the Office of Management and Budget (OMB) pursuant to the Paperwork Reduction Act. Since the net effect of these changes does not cause the annual economic impact of today's rule to approach $100 million, this rule does not meet the criteria of a major rule as set forth in section 1(b) of the Executive Order. This regulation has been approved by OMB pursuant to Executive Order 12291.

IV. Regulatory Flexibility Analysis

The Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, requires EPA and other agencies to prepare an initial regulatory flexibility analysis for all proposed regulations that have a significant impact on a substantial number of small entities. No regulatory flexibility analysis is required, however, where the head of the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Most of the amendments promulgated today will affect larger POTWs (those with approved pretreatment programs and design influent flow of more than one million gallons per day) and significant industrial users, who are less likely than the average industrial user to be a small business. Those requirements which affect small industrial users do not impose significant costs. I hereby certify, pursuant to 5 U.S.C. 605(b) that this regulation will not have a significant impact on a substantial number of small entities.

V. Paperwork Reduction Act

The information collection requirements contained in this rule were approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

Public reporting burden for this collection of information is estimated to average 49 hours per response for POTWs and 6 hours per response for industrial users, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Desk Officer for EPA".

List of Subjects

40 CFR Part 122

Administrative practice and procedure, Reporting and recordkeeping requirements, Water pollution control, Confidential business information.

40 CFR Part 403

Confidential business information, Reporting and recordkeeping requirements, Waste treatment and disposal, Water pollution Control.

Dated: July 3, 1990.

William K. Reilly,

Administrator.

40 CFR chapter I is amended as follows:

PART 122—EPA ADMINISTERED PERMIT PROGRAMS: THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

1. The authority citation for part 122 continues to read as follows:

Authority: Clean Water Act, 33 U.S.C. 1251 *et seq.*

2. Section 122.21 is amended by adding paragraphs (j)(1), (j)(2), (j)(3), and (j)(4) to read as follows:

§ 122.21 Application for a permit, (application to State programs, see § 123.25).

* * * * *

(j) * * *

(1) The following POTWs shall provide the results of valid whole effluent biological toxicity testing to the Director:

(i) All POTWs with design influent flows equal to or greater than one million gallons per day;

(ii) All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program;

(2) In addition to the POTWs listed in paragraph (j)(1) of this section, the Director may require other POTWs to submit the results of toxicity tests with their permit applications, based on consideration of the following factors:

(i) The variability of the pollutants or pollutant parameters in the POTW effluent (based on chemical-specific information, the type of treatment facility, and types of industrial contributors);

(ii) The dilution of the effluent in the receiving water (ratio of effluent flow to receiving stream flow);

(iii) Existing controls on point or nonpoint sources, including total maximum daily load calculations for the waterbody segment and the relative contribution of the POTW;

(iv) Receiving stream characteristics, including possible or known water quality impairment, and whether the POTW discharges to a coastal water, one of the Great Lakes, or a water designated as an outstanding natural resource; or

(v) Other considerations (including but not limited to the history of toxic impact and compliance problems at the POTW), which the Director determines could cause or contribute to adverse water quality impacts.

(3) For POTWs required under paragraph (j)(1) or (j)(2) of this section to conduct toxicity testing, POTWs shall use EPA's methods or other established protocols which are scientifically defensible and sufficiently sensitive to detect aquatic toxicity. Such testing must have been conducted since the last NPDES permit reissuance or permit modification under 40 CFR 122.62(a), whichever occurred later.

(4) All POTWs with approved pretreatment programs shall provide the following information to the Director: a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1).

PART 403—GENERAL PRETREATMENT REGULATIONS FOR EXISTING AND NEW SOURCES

1. The authority citation for part 403 continues to read as follows:

Authority: Sec. 54(c)(2) of the Clean Water Act of 1977 (Pub. L. 95-217), secs. 204(b)(1)(C), 208(b)(2)(C)(iii), 301(b)(1)(A)(ii), 301(b)(2)(A)(ii), 301(b)(2)(C), 301(h)(5), 301(i)(2), 304 (e) and (g), 307, 308, 309, 402(b), 405 and 501(a) of the Federal Water Pollution Control Act (Pub. L. 92-500), as amended by the Clean Water Act of 1977 and the Water

Quality Act of 1987; secs. 2002 and 3018(d) of the Solid Waste Disposal Act as amended.

2. Section 403.3 is amended by redesignating existing paragraph (t) as paragraph (u) and adding new paragraph (t) to read as follows:

§ 403.3 Definitions.

* * * * *

(t) *Significant Industrial User.* (1) Except as provided in paragraph (t)(2) of this section, the term Significant Industrial User means:

(i) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and

(ii) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

(2) Upon a finding that an industrial user meeting the criteria in paragraph (t)(1)(ii) of this section has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority (as defined in 40 CFR 403.12(a)) may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

* * * * *

3. Section 403.5 is amended by revising paragraphs (a)(2) introductory text, (b)(1), and (e), adding text to the end of (c)(1), and adding new paragraphs (b)(6), (b)(7), and (b)(8) to read as follows:

§ 403.5 National Pretreatment Standards: Prohibited Discharges.

(a) * * *

(2) Affirmative Defenses. A User shall have an affirmative defense in any action brought against it alleging a violation of the general prohibitions established in paragraph (a)(1) of this section and the specific prohibitions in paragraphs (b)(3), (b)(4), (b)(5), (b)(6), and (b)(7) of this section where the User can demonstrate that:

* * * * *

(b) * * *

(1) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Farenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21.

* * * * *

(6) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

(7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

(8) Any trucked or hauled pollutants, except at discharge points designated by the POTW.

(c) * * *

(1) * * * Each POTW with an approved pretreatment program shall continue to develop these limits as necessary and effectively enforce such limits.

* * * * *

(e) EPA enforcement actions under section 309(f) of the Clean Water Act.

If, within 30 days after notice of an Interference or Pass Through violation has been sent by EPA to the POTW, and to persons or groups who have requested such notice, the POTW fails to commence appropriate enforcement action to correct the violation, EPA may take appropriate enforcement action under the authority provided in section 309(f) of the Clean Water Act.

4. Section 403.6 is amended by revising the introductory text to read as follows:

§ 403.6 National Pretreatment Standards: Categorical Standards.

National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories will be established as separate regulations under the appropriate subpart of 40 CFR chapter I, subchapter N. These standards, unless specifically noted otherwise, shall be in addition to all applicable pretreatment standards and requirements set forth in this part.

* * * * *

5. Section 403.8 is amended by revising the section heading, the introductory text to paragraph (f), paragraphs (f)(1)(iii), (f)(1)(vi)(B), (f)(2)(v), and (f)(2)(vii), adding text to the end of (f)(2)(iii), and adding new paragraphs (f)(5) and (f)(6) to read as follows:

§ 403.8 Pretreatment Program Requirements: Development and Implementation by POTW.

* * * * *

(f) *POTW pretreatment requirements.* A POTW pretreatment program must be based on the following legal authority and include the following procedures. These authorities and procedures shall at all times be fully and effectively exercised and implemented.

(1) * * *

(iii) Control through permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements. In the case of Industrial Users identified as significant under 40 CFR 403.3(t), this control shall be achieved through permits or equivalent individual control mechanisms issued to each such user. Such control mechanisms must be enforceable and contain, at a minimum, the following conditions:

(A) Statement of duration (in no case more than five years);

(B) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;

(C) Effluent limits based on applicable general pretreatment standards in part 403 of this chapter, categorical pretreatment standards, local limits, and State and local law;

(D) Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in part 403 of this chapter, categorical pretreatment standards, local limits, and State and local law;

(E) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond applicable federal deadlines.

* * * * *

(vi) * * *

(B) Pretreatment requirements which will be enforced through the remedies set forth in paragraph (f)(1)(vi)(A) of this section, will include but not be limited to, the duty to allow or carry out inspections, entry, or monitoring activities; any rules, regulations, or

orders issued by the POTW; any requirements set forth in individual control mechanisms issued by the POTW; or any reporting requirements imposed by the POTW or these regulations. The POTW shall have authority and procedures (after informal notice to the discharger) immediately and effectively to halt or prevent any discharge of pollutants to the POTW which reasonably appears to present an imminent endangerment to the health or welfare of persons. The POTW shall also have authority and procedures (which shall include notice to the affected industrial users and an opportunity to respond) to halt or prevent any discharge to the POTW which presents or may present an endangerment to the environment or which threatens to interfere with the operation of the POTW. The Approval Authority shall have authority to seek judicial relief and may also use administrative penalty authority when the POTW has sought a monetary penalty which the Approval Authority believes to be insufficient.

* * * * *

(2) * * *

(iii) * * * Within 30 days of approval pursuant to 40 CFR 403.8(f)(6), of a list of significant industrial users, notify each significant industrial user of its status as such and of all requirements applicable to it as a result of such status.

* * * * *

(v) Randomly sample and analyze the effluent from industrial users and conduct surveillance activities in order to identify, independent of information supplied by industrial users, occasional and continuing noncompliance with pretreatment standards. Inspect and sample the effluent from each Significant Industrial User at least once a year. Evaluate, at least once every two years, whether each such Significant Industrial User needs a plan to control slug discharges. For purposes of this subsection, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge. The results of such activities shall be available to the Approval Authority upon request. If the POTW decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:

(A) Description of discharge practices, including non-routine batch discharges;

(B) Description of stored chemicals;

(C) Procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days;

(D) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response;

* * * * *

(vii) Comply with the public participation requirements of 40 CFR part 25 in the enforcement of national pretreatment standards. These procedures shall include provision for at least annual public notification, in the largest daily newspaper published in the municipality in which the POTW is located, of industrial users which, at any time during the previous twelve months, were in significant noncompliance with applicable pretreatment requirements. For the purposes of this provision, an industrial user is in significant noncompliance if its violation meets one or more of the following criteria:

(A) Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;

(B) Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH.

(C) Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);

(D) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge;

(E) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;

(F) Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

(G) Failure to accurately report noncompliance;

(H) Any other violation or group of violations which the Control Authority determines will adversely affect the operation or implementation of the local pretreatment program.

* * * * *

(5) The POTW shall develop and implement an enforcement response plan. This plan shall contain detailed procedures indicating how a POTW will investigate and respond to instances of industrial user noncompliance. The plan shall, at a minimum:

(i) Describe how the POTW will investigate instances of noncompliance;

(ii) Describe the types of escalating enforcement responses the POTW will take in response to all anticipated types of industrial user violations and the time periods within which responses will take place;

(iii) Identify (by title) the official(s) responsible for each type of response;

(iv) Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards, as detailed in 40 CFR 403.8 (f)(1) and (f)(2).

(6) The POTW shall prepare a list of its industrial users meeting the criteria in 40 CFR 403.3(t)(1). The list shall identify the criteria in 40 CFR 403.3(t)(1) applicable to each industrial user and, for industrial users meeting the criteria in 40 CFR 403.3(t)(1)(ii), shall also indicate whether the POTW has made a determination pursuant to 40 CFR 403.3(t)(2) that such industrial user should not be considered a significant industrial user. This list, and any subsequent modifications thereto, shall be submitted to the Approval Authority as a nonsubstantial program modification pursuant to 40 CFR 403.18(b)(2). Discretionary designations or de-designations by the Control Authority shall be deemed to be approved by the Approval Authority 90 days after submission of the list or modifications thereto, unless the Approval Authority determines that a modification is in fact a substantial modification.

§ 403.10 [Amended]

6. Section 403.10 is amended by removing the first sentence in paragraph (c).

7. Section 403.12 is amended by adding text to the end of paragraph (h), by revising paragraphs (j) and (n), and adding new paragraph (p) to read as follows:

§ 403.12 Reporting requirements for POTW's and Industrial Users.

* * * * *

(h) * * * Significant Noncategorical Industrial Users shall submit to the Control Authority at least once every six months (on dates specified by the Control Authority) a description of the nature, concentration, and flow of the pollutants required to be reported by the Control Authority. These reports shall be based on sampling and analysis performed in the period covered by the report, and performed in accordance with the techniques described in 40 CFR part 136 and amendments thereto. Where 40 CFR part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the Administrator determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other persons, approved by the Administrator. This sampling and analysis may be performed by the Control Authority in lieu of the significant noncategorical industrial user. Where the POTW itself collects all the information required for the report, the noncategorical significant industrial user will not be required to submit the report.

* * * * *

(j) Notification of changed discharge. All Industrial Users shall promptly notify the POTW in advance of any substantial change in the volume or character of pollutants in their discharge, including the listed or characteristic hazardous wastes for which the Industrial User has submitted initial notification under 40 CFR 403.12(p).

* * * * *

(n) Provisions Governing Fraud and False Statements: The reports and other documents required to be submitted or maintained under this section shall be subject to:

(1) The provisions of 18 U.S.C. section 1001 relating to fraud and false statements;

(2) The provisions of sections 309(c)(4) of the Act, as amended, governing false statements, representation or certification; and

(3) The provisions of section 309(c)(6) regarding responsible corporate officers.

(p)(1) The Industrial User shall notify the POTW, the EPA Regional Waste Management Division Director, and State hazardous waste authorities in writing of any discharge into the POTW of a substance, which, if otherwise disposed of, would be a hazardous waste under 40 CFR part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the Industrial User discharges more than 100 kilograms of such waste per calendar month to the POTW, the notification shall also contain the following information to the extent such information is known and readily available to the Industrial User: An identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following twelve months. All notifications must take place within 180 days of the effective date of this rule. Industrial users who commence discharging after the effective date of this rule shall provide the notification no later than 180 days after the discharge of the listed or characteristic hazardous waste. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notifications of changed discharges must be submitted under 40 CFR 403.12 (j). The notification requirement in this section does not apply to pollutants already reported under the self-monitoring requirements of 40 CFR 403.12 (b), (d), and (e).

(2) Dischargers are exempt from the requirements of paragraph (p)(1) of this section during a calendar month in which they discharge no more than fifteen kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen kilograms of non-acute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification.

Subsequent months during which the Industrial User discharges more than such quantities of any hazardous waste do not require additional notification.

(3) In the case of any new regulations under section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the Industrial User must notify the POTW, the EPA Regional Waste Management Waste Division Director, and State hazardous waste authorities of the discharge of such substance within 90 days of the effective date of such regulations.

(4) In the case of any notification made under paragraph (p) of this section, the Industrial User shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

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

Appendix—Hazardous Waste Authorities: Notifications under 40 CFR 403.12(p)

Environmental Protection Agency

Region I

Director, Waste Management Division, Environmental Protection Agency, John F. Kennedy Building, Boston, Massachusetts 02203

Region II

Director, Air & Waste Management Division, Environmental Protection Agency, 26 Federal Plaza, New York, New York 10278

Region III

Director, Hazardous Waste Management Division, Environmental Protection Agency, 841 Chestnut Street, Philadelphia, Pennsylvania 19107

Region IV

Director, Waste Management Division, Environmental Protection Agency, 345 Courtland St. N.E., Atlanta, Georgia 30365

Region V

Director, Waste Management Division, Environmental Protection Agency, 230 South Dearborn Street, Chicago, Illinois 60604

Region VI

Director, Hazardous Waste Management Division, Environmental Protection Agency, 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202

Region VII

Director, Waste Management Division, Environmental Protection Agency, 726 Minnesota Avenue, Kansas City, Kansas 66101

Region VIII

Director, Hazardous Waste Management Division, Environmental Protection Agency, One Denver Place, 999 18th St., Suite 500, Denver, Colorado 80202-2405

Region IX

Director, Hazardous Waste Management Division, Environmental Protection Agency, 1235 Mission Street, San Francisco, California 94103

Region X

Director, Hazardous Waste Division, Environmental Protection Agency, 1200 6th Avenue, Seattle, Washington 98101

States

Alabama

Chief, Land Division, Alabama Department of Environmental Management, 1751 Federal Drive, Montgomery, Alabama 36130

Alaska

Chief, Solid and Hazardous Waste Management Program, Division of Environmental Quality, Department of Environmental Conservation, 3200 Hospital Drive, P.O. Box O, Juneau, Alaska 99811–1800

Arizona

Assistant Director, Office of Waste and Water Quality Management, Arizona Department of Environmental Quality, 2005 N. Central Avenue, Room 304, Phoenix, Arizona 85004

Arkansas

Chief, Hazardous Waste Division, Arkansas Department of Pollution Control and Technology, 8001 National Drive, P.O. Box 9583, Little Rock, Arkansas 72209

California

Chief, Deputy Executive Officer, California Waste Management Board, 1020 9th Street/Suite 300, Sacramento, California 95814

Colorado

Director, Waste Management Division, Colorado Department of Health, 4210 E. 11th Avenue, Denver, Colorado 80220

Connecticut

Chief, Bureau of Waste Management, Connecticut Department of Environmental Protection, Hazardous Materials Management Unit, 165 Capital Avenue, Hartford, Connecticut 06106

Delaware

Director, Division of Air & Waste Management, Department of Natural Resources and Environmental Control, P.O. Box 1401, 89 King's Highway, Dover, Delaware 19903

District of Columbia

Chief, Pesticides and Hazardous Materials Division/Superfund, Department of Consumer and Regulatory Affairs, 614 H Street NW., Room 505, Washington, DC 20001

Florida

Director, Division of Waste Management, Underground Storage Tanks, Department of Environmental Regulations, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301

Georgia

Chief, Land Protection Branch, Industrial and Hazardous Waste Management Program, Floyd Towers East/Room 1154, 205 Butler Street, SE., Atlanta, Georgia 30334

Hawaii

Manager, Solid and Hazardous Waste Branch, Hawaii Department of Health, Hazardous Waste Program, P.O. Box 3378, Honolulu, Hawaii 96801

Idaho, Chief, Hazardous Materials Bureau, Department of Health and Welfare, Idaho State House, 450 W. State Street, Boise, Idaho 83720

Illinois

Manager, Illinois Environmental Protection Agency, 2200 Churchill Road, P.O. Box 19276, Springfield, Illinois 62794–9276

Indiana

Assistant Director, Indiana Department of Environmental Management, 105 S. Meridian Street, P.O. Box 6015, Indianapolis, Indiana 46225

Iowa

Chief, Air Quality and Solid Waste Protection, Department of Water, Air, and Waste Management, 900 East Grand Avenue, Henry A. Wallace Building, Des Moines, Iowa 50319–0034

Kansas

Director, Bureau of Waste Management, Department of Health and Environment, Forbes Field, Building 321, Topeka, Kansas 66620

Kentucky

Director, Division of Waste Management, Department of Environmental Protection, Cabinet for Natural Resources and Environmental Protection, 18 Reilly Road, Frankfort, Kentucky 40601

Louisiana

Assistant Secretary, Hazardous Waste Division, Office of Solid Waste and Hazardous Waste, Louisiana Department of Environmental Quality, P.O. Box 44307, N. Fourth Street, Baton Rouge, Louisiana 70804

Maine

Director, Bureau of Solid Waste Management, Department of Environmental Protection, State House #17, Augusta, Maine 04333

Maryland

Director, Hazardous and Solid Waste Management Administration, Maryland Department of the Environment, 201 W. Preston Street, room 212, Baltimore, Maryland 21201

Massachusetts

Director, Division of Solid and Hazardous Waste, Massachusetts Department of Environmental Quality Engineering, One Winter Street, 5th Floor, Boston, Massachusetts 02108

Michigan

Chief, Technical Services Section, Waste Management Division, Department of Natural Resources, Box 30038, Lansing, Michigan 48909

Minnesota

Director, Solid and Hazardous Waste Division, Minnesota Pollution Control Agency, 520 Lafayette Road, North, St. Paul, Minnesota 55155

Mississippi

Director, Division of Solid Waste Management, Bureau of Pollution Control, Department of Natural Resources, P.O. Box 10385, Jackson, Mississippi 39209

Missouri

Director, Waste Management Program, Department of Natural Resources, Jefferson Building, 205 Jefferson Street (13th–14th floors), P.O. Box 176, Jefferson City, Missouri 65102

Montana

Chief, Solid and Hazardous Waste Bureau, Department of Health and Environmental Sciences, Cogswell Building, Room B–201, Helena, Montana 59620

Nebraska

Chief, Hazardous Waste Management Section, Department of Environmental Control, State House Station, P.O. Box 98477, Lincoln, Nebraska 68509

Nevada

Director, Waste Management Program, Division of Environmental Protection, Department of Conservation and Natural Resources, Capitol Complex, 201 South Fall Street, Carson City, Nevada 89710

New Hampshire

Chief, Division of Public Health Services, Office of Waste Management, Department of Health and Welfare, Health and Welfare Building, 6 Hazen Drive, Concord, New Hampshire 03301

New Jersey

Assistant Commissioner, Division of HQ Waste Management, Department of Environmental Protection, 401 East State Street, Trenton, New Jersey 08625

New Mexico

Chief, Groundwater and Hazardous Waste Bureau, Environmental Improvement Division, New Mexico Health and Environment Department, P.O. Box 968, Santa Fe, New Mexico 87504–0968

New York

Director, Division of Hazardous Substance Regulation, Department of Environmental Conservation, 50 Wolfe Road, Room 209, Albany, New York 12233

North Carolina

Head, Solid and Hazardous Waste Management Branch, Division of Health Services, Department of Human Resources, P.O. Box 2091, Raleigh, North Carolina 27602

North Dakota

Director, Division of Hazardous Waste Management, Department of Health, 1200

Missouri Avenue, Room 302, Bismarck, North Dakota 58502–5520

Ohio

Chief, Division of Solid and Hazardous Waste Management, Ohio Environmental Protection Agency, 1800 Watermark Drive, P.O. Box 1049, Columbus, Ohio 43266–0149

Oklahoma

Chief, Waste Management Service, Oklahoma State Department of Health, P.O. Box 53551, 1000 Northeast 10th Street, Oklahoma, Oklahoma 73152

Oregon

Director, Hazardous and Solid Waste Division, Department of Environmental Quality, 811 Southwest 6th Avenue, Portland, Oregon 97204

Pennsylvania

Director, Bureau of Waste Management, Pennsylvania Department of Environmental Resources, P.O. Box 2063 / Fulton Building, Harrisburg, Pennsylvania 17120

Rhode Island

Director, Solid Waste Management Program, Department of Environmental Management, 204 Canon Building, 75 Davis Street, Providence, Rhode Island 02908

South Carolina

Chief, Bureau of Solid Waste Management, Hazardous Waste Management, Department of Health and Environmental Control, 2600 Bull Street, Columbia, South Carolina 29201

South Dakota

Director, Office of Air Quality and Solid Waste, Department of Water and Natural Resources, 523 E. Capitol, Foss Building, Room 416, Pierre, South Dakota 57501

Tennessee

Director, Division of Solid Waste Management, Tennessee Department of Public Health, 701 Broadway, Customs House, 4th Floor, Nashville, Tennessee

Texas

Director, Hazardous and Solid Waste Division, Texas Water Commission, P.O. Box 13087, Capitol Station, Austin, Texas 78711–3087

Vermont

Chief, Waste Management Division, Agency of Environmental Conservation, 103 South Main Street, Waterbury, Vermont 05676

Virginia

Executive Director, Division of Technical Services, Virginia Department of Waste Management, Monroe Building, 11th Floor, 101 North 14th Street, Richmond, Virginia 23219

Washington

Manager, Solid and Hazardous Waste Management Division Department of Ecology, Mail Stop PV–11 Olympia, Washington 98504

West Virginia

Chief, Waste Management Division, Department of Natural Resources, 1260 Greenbrier Street, Charleston, West Virginia 25311

Wisconsin

Director, Bureau of Solid Waste, Department of Natural Resources, P.O. Box 7921, Madison, Wisconsin 53707

Wyoming

Supervisor, Solid Waste Management Program, Department of Environmental Quality, 122 West 25th Street, Herschler Building, Cheyenne, Wyoming 82002

American Samoa

Director, Solid Waste Division, Environmental Quality Commission, Government of American Samoa, Pago Pago, American Samoa 96799

Guam

Director, Hazardous Waste Management Program, Guam Environmental Protection Agency, P.O. Box 2999, Agana, Guam 96910

Commonwealth of Northern Mariana Islands

Chief, Division of Environmental Quality, Department of Public Health and Environmental Services, Commonwealth of the Northern Mariana Islands, Office of the Governor, Saipan, Mariana Islands 96950

Puerto Rico

President, Environmental Quality Board, Santurce, Puerto Rico 00910–1488

Virgin Islands

Director, Department of Conservation and Cultural Affairs, P.O. Box 4399, Charlotte, St. Thomas, Virgin Islands 00801

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