

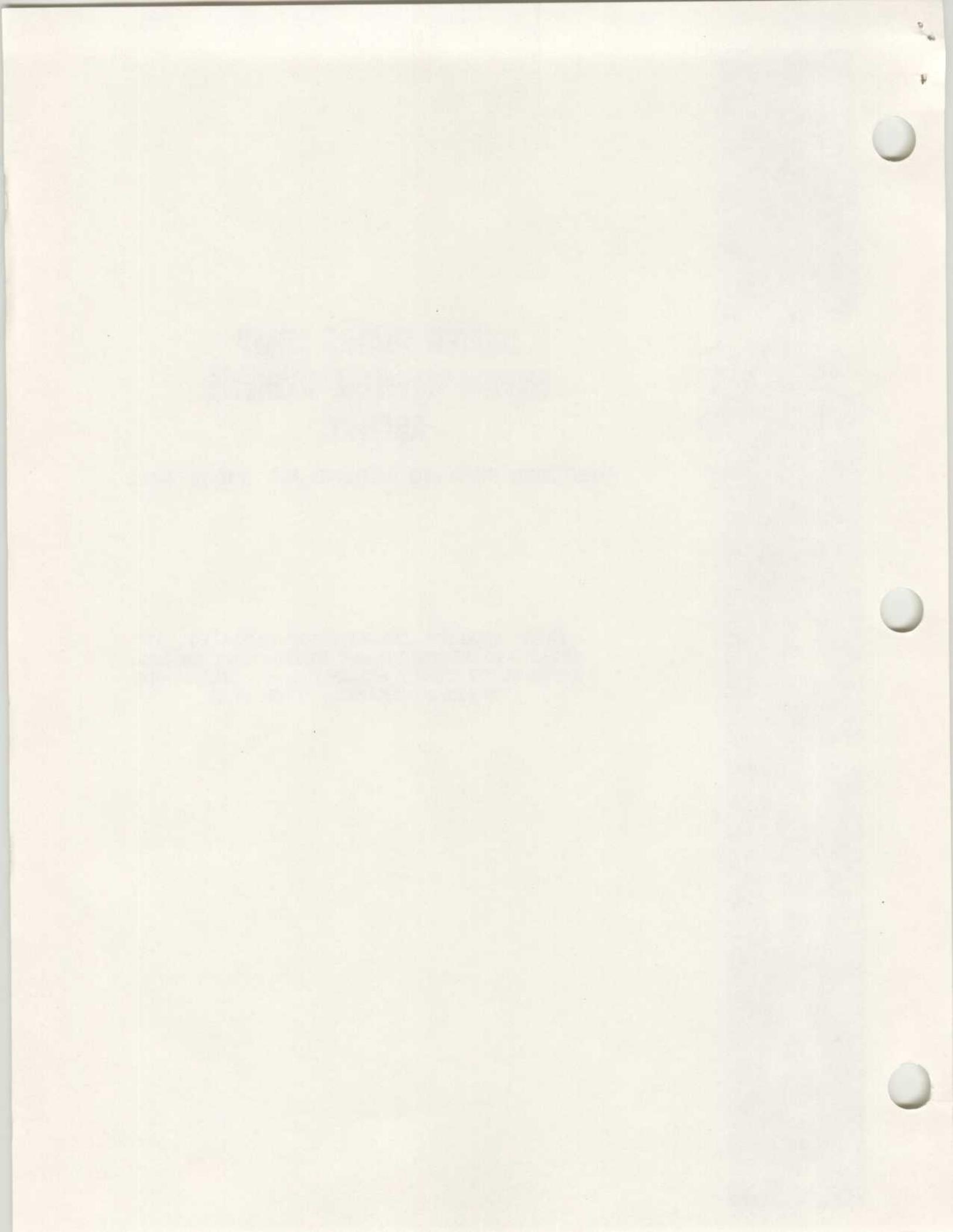


**UNITED STATES ARMY
ENVIRONMENTAL HYGIENE
AGENCY**

ABERDEEN PROVING GROUND, MD 21010-5422

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**WATER QUALITY INFORMATION PAPER NO. 47
NPDES AND PRETREATMENT REGULATION UPDATE:
CONTROL OF TOXIC POLLUTANT AND HAZARDOUS
WASTE DISCHARGES TO POTW'S**





DEPARTMENT OF THE ARMY
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY
ABERDEEN PROVING GROUND, MARYLAND 21010-5422

REPLY TO
ATTENTION OF

HSHB-ME-WM (40)

16 JAN 1991

SUBJECT: WATER QUALITY INFORMATION PAPER NO. 47

NPDES AND PRETREATMENT REGULATION UPDATE:
CONTROL OF TOXIC POLLUTANT AND HAZARDOUS
WASTE DISCHARGES TO POTW'S

1. REFERENCES. See Appendix A for a list of references.
2. ABBREVIATIONS. See Appendix B for a list of abbreviations.
3. PURPOSE. The purpose of this paper is to summarize the final regulations on the discharge of hazardous wastes to publicly-owned treatment works (POTW's). These regulations are based on an EPA report dealing with hazardous waste discharges through sewer systems to POTW's. A majority of these wastes was previously exempt from regulations due to the Domestic Sewage Exclusion under RCRA. As a result of the study of Section 3018(b) of RCRA and Sections 307(b) and 402(b)(8) of the CWA, the EPA is implementing revisions for General Pretreatment and NPDES regulations. The objectives of these new rulings include the following: to improve control of the discharge of hazardous and toxic pollutants to all POTW's; to prevent discharge of pollutants into the POTW that will impede the POTW's operation, pass through the POTW, or interfere with the disposal of the sludge; and to employ recycling and reuse techniques in order to reclaim municipal and industrial wastewaters and sludges.
4. BACKGROUND.
 - a. The final regulations on the discharge of hazardous wastes to POTW's have been promulgated in order to protect human health and the environment, and to enhance control of the hazardous wastes that were previously exempt from regulations due to the Domestic Sewage Exclusion. At the time of this writing, the EPA has revised (references 2 and 4) and promulgated (reference 7) the final regulations. The regulations became effective on August 23, 1990.
 - b. The Federal Water Pollution Control Act of 1972, as amended by the CWA of 1977, previously provided the authority for regulations governing the discharge of toxic pollutants in wastewaters. The EPA has promulgated final effluent limitations and standards (on the discharge of hazardous wastes to POTW's) for major industries. These standards were established by

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utilizing a list of 126 priority pollutants, which are considered to be potentially detrimental to human health and the environment.

5. SPECIFIC DISCHARGE PROHIBITIONS.

a. Ignitability and Explosivity.

(1) The old ruling prohibits the discharge of flammable or explosive pollutants to the POTW in order to prevent fire, explosion hazards, corrosive structural damage, obstruction of flow, and the occurrence of heat in the POTW influent.

(2) Today's rule specifies a more stringent numerical flash point limit, prohibiting the discharge of wastewater with a closed cup flash point of less than 140 °F, thus being more effective in preventing interference within the POTW.

(3) A waste is ignitable if it is:

(a) A liquid solution which contains less than 24 percent alcohol by volume and has a flash point less than 140 °F.

(b) Not a liquid solution but under standard temperature and pressure can cause a fire through friction.

(c) An ignitable compressed gas.

(d) An oxidizer such as peroxide.

b. Reactivity and Fume Toxicity.

(1) The old ruling prohibits the discharge of pollutants that create fire or explosion hazards within the POTW. A waste is reactive if it is:

(a) Normally unstable and readily undergoes violent change without detonating;

(b) Reacts violently with water;

(c) Forms explosive mixtures with water or forms toxic gases or fumes when mixed with water;

(d) Cyanide or sulfide waste that can generate potentially harmful toxic fumes, gases, or vapors;

(e) Capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or

(f) If it contains forbidden explosives as defined by 49 CFR 173.

(2) Similarly, today's rule states that any toxic fumes, vapors, or gases resulting from pollutant discharge to the POTW, with the potential to cause safety problems or harm to workers, are prohibited due to their harmful effect on human health and their potential to impede POTW performance. In addition, there is a new requirement which states that an industrial user will be exonerated from charges of alleged violation of 40 CFR 403.5(b)(7) if the user can verify the following to be true:

(a) The user did not know that the discharge (alone or added to other discharges) would cause pass through or interference.

(b) Local limits designed to prevent pass through and interference, for each pollutant in the industry, were followed by the user directly prior to and during the pass through or interference.

c. RCRA Toxicity.

(1) Today's rule contains no specific discharge prohibition based on RCRA toxicity because the current controls on discharges from industry (such as the interference and pass through prohibition, categorical standards, local limits, and permit limits) do not warrant an additional ruling.

(2) Leachability characteristics can be measured by the Toxicity Characteristic Leaching Procedure (TCLP); however, the EPA believes that this test is currently inappropriate due to lack of information and insufficient data on the contamination of ground water caused from leaky sewers.

(3) The EPA did not change the current specific discharge prohibitions to add a prohibition based on RCRA toxicity characteristics, nor is the Agency finalizing such a prohibition in today's rule.

d. Corrosivity.

(1) The current ruling from Section 403.5(b)(2) bans the discharge of pollutants that have the potential to be structurally corrosive to the POTW. In addition, there is also a numerical

pH limit prohibiting the discharge of wastewaters below a pH of 5.0, unless the POTW is specifically designed to handle this type of wastewater.

(2) No numerical limit has been established for caustic wastewaters since most violations that occur involve acidic wastes that are corrosive; basic pH's are generally not a problem for POTW operations.

(3) An RCRA waste is corrosive if it displays the following characteristics (however, the following definition is not applicable to the new ruling since it is less stringent than the existing ruling):

(a) Aqueous and has a pH less than or equal to 2, or greater than or equal to pH 12.5; or

(b) If it is a liquid that corrodes steel at a specified rate.

e. Oil and Grease.

(1) Previously, there was no ban on the discharge of oil and grease to the POTW. However, there is concern that high amounts of oil and grease may interfere with operation of the POTW, causing pass through and interference. One reason given for high amounts of oil discharged is that there are few incentives to recycle used oil. Today, the EPA is trying to increase the recycle and reuse of used oil in order to better manage the problem.

(2) The new regulation prohibits the discharge of specific oils that will interfere with the POTW's performance and cause pass through. The following oils apply: petroleum oil, nonbiodegradable cutting oil, and products of mineral oil origin. There is no prohibition on the discharge of oils of animal or vegetable origin since these oils can easily be broken down and metabolized in wastewater treatment plants. In addition, today's rule states that an industrial user will have an affirmative defense against charges of alleged violation of 40 CFR 403.5(b)(6) if the user can verify the following to be true [pursuant to 40 CFR 403.5(a)(2)(i) and (ii)]:

(a) The user did not know (or have reason to know) that the discharge (alone or in addition to other discharges) would cause pass through or interference.

(b) Local limits, designed for each pollutant, to prevent pass through and interference were adhered to by the user directly prior to and during the pass through or interference.

f. Solvent Wastes.

(1) A ban on the discharge of solvents from nonspecific sources was proposed in order to protect public health and prevent fires or explosions in the event of a solvent reaction in the POTW. However, since other current rules on discharge adequately prevent the discharge of solvents and other potential fire hazards to the POTW, no amendment has been made prohibiting the discharge of RCRA listed solvent hazardous wastes to POTW's. Furthermore, certain solvents are adequately handled by the treatment system and may even be beneficial to the system.

(2) Currently, users must be evaluated by POTW's for their need to develop control plans for toxic organics, in accordance with the Total Toxic Organic and solvent management plan requirements.

6. SPILLS AND BATCH DISCHARGES (SLUGS). Slugs, a common type of hazardous waste discharge, can cause ill health effects, explosions, biological upsets or inhibitions, toxic fumes, corrosion, or contamination of sludge and receiving waters. Slug loadings can violate the prohibitions of 40 CFR 403.5(b). For this reason, POTW's shall evaluate each industrial user to decide who needs a slug prevention plan. Each plan must contain the following minimum requirements:

a. Description of discharge practices, including nonroutine batch discharges.

b. Description of stored chemicals.

c. Plan for immediately notifying the POTW of slug discharges and discharges that would violate prohibitions under 40 CFR 403.5(b), including procedures for subsequent written notification within 5 days.

d. Necessary practices to prevent accidental spills. This would include proper inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, and worker training.

e. Proper procedures for building containment structures or equipment.

f. Necessary measures to control toxic organics pollutants and solvents.

g. Proper procedures and equipment for emergency response.

h. Any subsequent plans necessary to limit damage suffered by the treatment plant or the environment.

7. TRUCKED AND HAULED WASTE. The new provision bans the discharge of trucked and hauled liquid and hazardous waste into the POTW, except at locations specified by the POTW. This provision will provide better control over types of waste that may be otherwise difficult to identify. This provision, however, does not include trucked wastes that are discharged into industrial collection systems since these wastes characterize the facilities' typical wastestream.

8. NOTIFICATION REQUIREMENTS.

a. All industrial users discharging 15 or more kilograms of nonacute hazardous wastes to the POTW are required to provide a written notification to the POTW, EPA Regional Waste Management Division Directors, and State Hazardous Waste authorities of any hazardous waste discharge into a POTW as defined under Section 3001 of RCRA.

b. Notification must include the name of the hazardous waste, mass and concentration of this material, EPA hazardous waste number, type of discharge (continuous, batch, etc.).

c. Users generating and discharging more than 100 kilograms per month of hazardous wastes must also provide the following information with the notification:

(1) Identification of the ingredients of the hazardous waste.

(2) Estimation of the mass and concentration of the ingredients discharged that month.

(3) Estimation of the mass and concentration of the ingredients expected to be discharged during the next 12 months.

d. All notifications must take place within 180 days after the hazardous waste discharge, or by February 19, 1991, and is only required once for each hazardous waste discharged.

e. Additional notification is required only when an industrial user discharges greater than 100 kilograms of hazardous waste when it previously discharged less than 100 kilograms of hazardous waste.

f. Each industrial user submitting a notification must also have an economically feasible plan to reduce amounts of hazardous waste generated and/or the toxicity of these wastes.

9. INDIVIDUAL CONTROL MECHANISMS FOR INDUSTRIAL USERS.

a. Today's rule requires POTW's to enforce their pretreatment programs by issuing permits to each industrial user or by other control mechanisms, such as administrative orders. This type of individual control ensures that the pretreatment programs are followed, thus preventing violations. Also, users need better notice of pretreatment requirements and should receive a list of requirements before a preventable NOV can occur.

b. Enforceable control mechanisms used are based on general pretreatment standards as defined in 40 CFR 403, and must include a minimum of the following:

(1) Statement of duration (in no case more than 5 years).

(2) Statement of nontransferability without prior POTW approval and a copy of the current control mechanism to the owner or operator.

(3) Effluent limits based on categorical pretreatment standards, local limits, and State and local law.

(4) Sampling, reporting, notification, and recordkeeping requirements.

(5) Sampling requirements should include the identification of the pollutants to be monitored, specific random sampling location, self-monitoring requirements, sampling frequency, and sample type, based on general pretreatment standards so that the POTW has information on its users.

(6) Statement of applicable civil and criminal penalties for violations of pretreatment standards and requirements, as well as necessary compliance schedules. These schedules may not extend the compliance date beyond Federal deadlines.

10. IMPLEMENTING THE GENERAL PROHIBITIONS AGAINST PASS THROUGH AND INTERFERENCE.

a. Toxicity-Based Permit Limits.

(1) All POTW's (or POTW's with established pretreatment programs) with design influent flows greater than or equal to 1 MGD are required to perform whole effluent biological toxicity testing at the POTW.

(2) Whole effluent biological toxicity testing will reveal whether or not a discharger is complying with the water quality standards, and indicates whether water quality permit limits need to be established. It will also reveal whether the POTW causes or contributes to violations of water quality standards, and determines the impact of the effluent on the water quality. The purpose of this is to prevent toxic discharges from passing through the system and harming aquatic life or interfering with the plant.

(3) The POTW's are required, on request, to provide results of these toxicity tests to 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). Similarly, other POTW's are required on request to provide (along with the permit application) the results of the toxicity tests based on the following:

- (a) Variability of pollutants in the effluent.
- (b) Dilution of the effluent in the receiving water.
- (c) Existing controls on point and nonpoint sources.
- (d) Receiving stream characteristics.

b. Sludge Control.

(1) In order to control and reduce the amount of hazardous pollutants that contaminate sludge, some technical standards were proposed in 1989 (54 FR 5746) for the following five sludge use and disposal methods. They are:

- (a) Agricultural and non-agricultural land application.
- (b) Distribution and marketing.
- (c) Incineration.

(d) Sludge-only landfills.

(e) Surface disposal sites.

(2) All NPDES permits issued to POTW's must currently include Federal standards (numerical limits) for the control of toxic pollutants in sewage sludge. This is a result of the new provisions of the CWA.

(3) Technical standards were proposed by the EPA in 1989. Final rules are to be promulgated by December 1991. These will be codified under 40 CFR 503 (reference 6).

(4) This improved regulation of sewage 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 POTW's.

c. Control of Indirect Dischargers: Commercial Centralized Waste Treaters (CWT's).

(1) Commercial CWT's are facilities that receive wastes from offsite generators. Under the current rule, POTW's are required to enforce the categorical pretreatment standards for wastewaters discharged to the POTW by CWT's, as well as other industrial users.

(2) Prior to treatment, CWT's ordinarily mix process effluent with wastewaters not generated by the industrial process; therefore, the discharge limits used should be calculated using the combined wastestream formula (CWF) in 40 CFR 403.6(e). To ensure that the categorical pretreatment standards are met, self monitoring by the CWT is required as defined in 40 CFR 403.6(e).

(3) There are no new provisions in the latest regulations regarding CWT's. The EPA is postponing any new regulations.

d. Categorical Standards for Other Industries. The EPA is required to develop schedules to annually review and revise effluent guidelines, and to promulgate new Best Available Technology (BAT) guidelines and source performance standards for generators of toxic and nonconventional pollutants, in order to implement Section 304(m) of the CWA. These schedules were

established on January 2, 1990, and significant contributors of toxic pollutants were targeted as candidates for new or revised pretreatment standards, but the EPA has not yet revised any effluent guidelines at this time.

11. ENFORCEMENT ISSUES.

a. Revision to Local Limits. The status of the POTW varies greatly through changes in NPDES permits, changes in sludge disposal standards or methods, modifications to the treatment plant, loss or gain of certain industries, and changes in the industrial users' treatment operations cause. As a result of the constantly changing status of the POTW, each POTW is required to submit a written technical evaluation for the need to update local limits. This is considered a part of the NPDES permit application.

b. Inspections and Sampling.

(1) The POTW's with approved pretreatment programs are required to annually inspect and randomly sample from each significant industrial user, in order to identify any users not complying with pretreatment regulations.

(2) The POTW should sample for all regulated pollutants discharged but does not need to monitor for all RCRA Appendix VIII hazardous constituents unless there is a need to do so.

c. Definition of Significant Industrial User. By today's rule, the following is a definition of a significant industrial user:

(1) Any discharger required to follow categorical pretreatment standards.

(2) Any discharger of an average of greater than or equal to 25,000 GPD of wastewater to the POTW, (this wastewater does not include sanitary, noncontact cooling, or boiler blowdown wastewaters) or an industrial user that discharges a wastestream that comprises greater than or equal to 5 percent of the average dry weather hydraulic or organic capacity of the POTW.

(3) The POTW may designate a user as significant if the industry has the potential to violate pretreatment requirements by causing pass through, interference, or sludge contamination upon discharging pollutants.

d. Enforcement Response Plans for POTW's.

(1) All POTW's must develop and utilize an enforcement response plan. The plan must include specific instructions on how the POTW investigates and handles a situation where an industrial user is in noncompliance with pretreatment regulations.

(2) The response plan must include a minimum of the following:

(a) Specific instructions on how the POTW investigates user violations.

(b) Description on how the POTW will respond to the violation and enforce its requirements, and the amount of time it will take to respond.

(c) Identification by titles of the officials responsible for carrying out the enforcement response plan.

(d) Shows the importance of the POTW's responsibility to enforce all pretreatment requirements and standards as defined in 40 CFR 403.8(f)(1) and (2).

e. Definition of Significant Noncompliance. Significant violation is one that is not corrected within 45 days after notification of noncompliance and if it is part of some long term incidences of noncompliance. The new rule states that if the industrial user's violations meet one or more of the following criteria, it is in major noncompliance:

(1) Chronic violations of wastewater discharge limits, where 66 percent or more of all the measurements taken (within a 6-month period) exceed the daily maximum limit or average limit for the same pollutant parameter.

(2) Technical review criteria (TRC) violations where 33 percent or more of all measurements for each pollutant parameter taken (within a 6-month period) equals or exceeds the product of the daily average maximum limit or the average limit multiplied by the applicable TRC.

(a) TRC = 1.4 for all BOD, TSS, fats, oil, grease

(b) TRC = 1.2 for other pollutants (not pH)

(3) Other violations of pretreatment effluent limits (daily maximum or longer term average) that, according to the Control Authority, have caused pass through or interference, thus causing harm to the health of POTW employees or the public.

(4) Discharge of a pollutant that has caused impending danger to human health, welfare, or the environment, or that has caused a POTW to prevent or stop the discharge.

(5) Any violation (exceeding the schedule date by 90 days or more) of a compliance schedule step found in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.

(6) 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 30 days after the due date.

(7) Failure to accurately report noncompliance.

(8) Any other violations that the Control Authority considers to be detrimental to the operation or implementation of the local pretreatment program.

f. Reporting Requirements for Significant Industrial Users.

The new rule states that all noncategorical significant industrial users must provide a list and description of the nature, concentration, and flow of pollutants used and discharged to the Control Authority. The list must be submitted at least once every 6 months. The description will be based on sampling and analysis by the techniques described in 40 CFR 136, and sampling may be performed by the Control Authority rather than the individual user, if desired. Under existing rules, all categorical significant industrial users already must provide semiannual reports.

12. MISCELLANEOUS AMENDMENTS. The following administrative provisions, as described in 40 CFR 403, may offer clarification of general pretreatment regulations:

- a. Local Limits Development and Enforcement.
- b. EPA Enforcement Action.
- c. National Pretreatment Standards: Categorical Standards.
- d. POTW Pretreatment Program Requirements: Implementation.

e. Development and Submission of NPDES State Pretreatment Programs.

f. Administrative Penalties Against Industrial Users.

g. Provisions Governing Fraud and False Statements.

13. IMPACT OF THE PRETREATMENT REGULATIONS ON THE ARMY.

a. All Army installations or activities discharging to POTW's are subject to pretreatment standards as outlined in 40 CFR 403, and as such, must comply with those sections of this promulgation which expand or revise the basic regulations. Specifically, these entail compliance with the specific discharge prohibitions (paragraph 5), the notification requirements (paragraph 8), and the reporting requirements for noncategorical significant industrial users.

b. Army sewage treatment plants (STP's) which discharge directly to receiving waters are not normally considered to be POTW's, although some states have regulated them as POTW's. As such, the new rules would not legally apply to Army-owned STP's or to the industrial discharges to these STP's. However, the updated Army Regulation 200-1 states the following: "discharges to Army-owned treatment facilities will comply with all pretreatment regulations applicable for discharges to POTW's." Thus, all Army installations should try to meet the substantive requirements of these updated pretreatment regulations in order to improve control of hazardous substance/waste discharges to sanitary sewerage systems. Specific sections that Army installations should adhere to include the specific discharge prohibitions (paragraph 5) and the whole effluent biological toxicity testing [paragraph 10a(1)]. The administrative requirements of this promulgation would not be applicable or appropriate to these same wastewater discharges.

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6. Development and Subdivision of NPDES State Treatment Programs.

7. Administrative Penalties Against Industrial Users.

8. Provisions Governing Fraud and False Statements.

9. IMPACT OF THE TREATMENT REGULATIONS ON THE ARMY.

a. All Army installations or activities discharging to POTW are subject to treatment standards as outlined in 40 CFR 401, and as such, must comply with those sections of this regulation which expand or revise the basic regulations. Specifically, these entail compliance with the specific discharge prohibitions (paragraph 5), the verification requirements (paragraph 6), and the reporting requirements for nonconformity (paragraph 7), and the reporting requirements for nonconformity (paragraph 8).

b. Army sewage treatment plants (STP's) which discharge directly to receiving waters are not normally considered to be POTW's, although some states have regulated them as POTW's. As such, the new rules would not directly apply to Army-owned STP's or to the industrial discharges to these STP's. However, the updated Army Regulation 160-4 states the following: "discharges to Army-owned treatment facilities will comply with all treatment requirements applicable for discharges to POTW's." Thus, all Army installations should try to meet the applicable requirements of these updated treatment regulations in order to improve control of hazardous substances discharging to sanitary sewage systems. Specific sections that Army installations should address to include the specific discharge prohibitions (paragraph 5) and the verification (paragraph 6) and reporting (paragraph 7) provisions. The administrative penalties (paragraph 8) would not be applicable or appropriate to these Army wastewater discharges.

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APPENDIX A

REFERENCES

1. Army Regulation 200-1, 23 April 1990, Environmental Protection and Enhancement.
2. Title 40, Code of Federal Regulations (CFR), 1988 rev, Part 122, EPA Administered Permit Programs: National Pollutant Discharge Elimination System.
3. Title 40, CFR, 1988 rev, Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants.
4. Title 40, CFR, 1988 rev, Part 403, General Pretreatment Regulations for Existing and New Sources of Pollution.
5. Title 49, CFR, 1988 rev, Part 173, Shippers - General Requirements for Shipments and Packagings.
6. Proposed Rule, Standards for the Disposal of Sewage Sludge, 54 Federal Register (FR) 5746, 6 February 1989.
7. Final Rule, 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, 55 FR 30082, 24 July 1990.

APPENDIX A

REFERENCES

1. Army Regulation 200-1, 23 April 1990, Environmental Protection and Management.
2. Title 40, Code of Federal Regulations (CFR), 1988 rev, Part 135, EPA Administered Permit Programs: National Pollutant Discharge Elimination System.
3. Title 40, CFR, 1988 rev, Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants.
4. Title 40, CFR, 1988 rev, Part 403, General Pretreatment Regulations for Existing and New Sources of Pollution.
5. Title 40, CFR, 1988 rev, Part 173, Shipwrecks - General Requirements for Shipments and Packagings.
6. Proposed Rule, Standards for the Disposal of Sewage Sludge, 54 Federal Register (FR) 5745, 6 February 1989.
7. Final Rule, EPA Administered Permit Programs: The National Pollutant Discharge Elimination System; General Pretreatment Regulations for Existing and New Sources; Regulations to Enhance Control of Toxic Pollutants and Hazardous Waste Discharges to Publicly Owned Treatment Works, 55 FR 30082, 24 July 1990.

APPENDIX B
ABBREVIATIONS

BAT	Best Available Technology
BOD	Biochemical Oxygen Demand
CWA	Clean Water Act
CWF	Combined Wastestream Formula
CWT	Commercial Centralized Waste Treaters
EPA	U.S. Environmental Protection Agency
MGD	million gallons per day
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
POTW	Publicly-Owned Treatment Works
RCRA	Resource Conservation and Recovery Act
STP	Sewage Treatment Plant
TCLP	Toxicity Characteristic Leaching Procedure
TRC	Technical Review Criteria
TSS	Total Suspended Solids
USAEHA	U.S. Army Environmental Hygiene Agency

APPENDIX B

ABBREVIATIONS

BAE	Best Available Technology
BOD	Biochemical Oxygen Demand
CWA	Clean Water Act
CWP	Combined Wastewater Formula
CWP	Commercial Controlled Waste Processors
EPA	U.S. Environmental Protection Agency
MGD	million gallons per day
NOT	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
POTW	Publicly-Owned Treatment Works
RERA	Resource Conservation and Recovery Act
STP	Sewage Treatment Plant
TCEP	Toxicity Characteristic Leaching Procedure
TSC	Technical Review Criteria
TSS	Total Suspended Solids
USEPA	U.S. Army Environmental Hygiene Agency