



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 17 1990

OFFICE OF
WATER

MEMORANDUM

SUBJECT: New Regulations Governing the Discharge of Toxic and Hazardous Pollutants to Publicly Owned Treatment Works

FROM: James R. Elder, Director
Office of Water Enforcement
and Permits

TO: Water Management Division Directors
Regions I - X

On July 3, 1990, the Administrator signed regulations amending 40 CFR Parts 122 and 403. The amendments were published in the Federal Register on July 24, 1990 (55 FR 30082), and became effective on August 23, 1990. They address the findings and recommendations of the Domestic Sewage Study (DSS) regarding improved control of hazardous wastes discharged to publicly owned treatment works (POTWs). The purpose of this memorandum is to describe the significance of these amendments to EPA's pretreatment and NPDES programs. The memorandum discusses both permitting and compliance monitoring and enforcement implementation activities.

EPA Regions should develop their own strategies for implementing the DSS regulations and should encourage States with approved NPDES or pretreatment programs to do the same. Some general suggestions to ensure effective implementation of DSS requirements are:

- o Pretreatment POTWs whose NPDES permits have expired or will expire soon should be identified so that conditions requiring implementation of DSS regulations can be included in the reissued permits.
- o POTWs whose NPDES permits are coming up for renewal should be advised of the new application requirements regarding toxicity testing and local limits evaluation (discussed below).

o Regions and States with approved pretreatment programs should use existing tools to ensure compliance with DSS requirements as revised NPDES permits become effective. Some of these tools are pretreatment compliance inspections (PCIs), audits (with checklists revised to incorporate the new provisions), and POTW annual reports.

o POTWs that are developing a pretreatment program for the first time or are now in the process of revising or modifying their approved programs must develop or revise their programs consistent with the new regulations.

o Regions and States with approved pretreatment programs should consider advising POTWs to coordinate existing and anticipated pretreatment program modifications to minimize resources devoted to this activity (for example, one program modification package could include both DSS and PIRT changes). EPA encourages POTWs to submit any necessary pretreatment program modifications pursuant to 40 CFR 403.18 as soon as possible.

Some of these changes will likely be substantial program modifications (e.g., a change from an ordinance system to individual control mechanisms). These changes will be subject to public notice and Approval Authority approval or disapproval pursuant to 40 CFR 403.18(b)-(f). Other changes (e.g., minor changes to industrial user slug control plans) may be considered nonsubstantial program modifications under 40 CFR 403.18(b). In those cases the changes shall be deemed approved by the Approval Authority within 90 days after submission of the changes, unless the Approval Authority specifies otherwise within that time period. Both substantial and nonsubstantial pretreatment program modifications must be incorporated in the POTW's NPDES permit as a minor permit modification under 40 CFR 122.63(g).

One important requirement that should be expedited is for POTWs to identify all of their significant industrial users pursuant to the new definition in 40 CFR 403.3(t) as soon as possible. The POTW should submit this list to its Approval Authority as a nonsubstantial program modification pursuant to new 40 CFR 403.8(f)(6). The POTW must then notify all of its significant industrial users of their status pursuant to new 40 CFR 403.8(f)(2)(iii).

Any regulatory changes that need to be made to State NPDES programs pursuant to the amendments to 40 CFR Part 122 (discussed below) should be made within one year of the date of promulgation of these regulations (two years if a statutory enactment or revision is necessary). EPA encourages States with approved pretreatment programs to make regulatory changes to conform to the amendments to 40 CFR Part 403 within the same time frame.

Following is a description of the revised requirements of 40 CFR Part 122, since these are the changes that most directly affect Regions and States as NPDES permitting authorities. Also included are some suggestions for appropriate action items. The changes to Part 403, which principally affect POTWs, are described in an attachment, along with some action items which EPA Headquarters is considering.

CHANGES TO 40 CFR PART 122

1. Section 122.21(j)(1)-(3): Whole Effluent Toxicity Testing

This new paragraph provides that designated POTWs shall provide the results of valid whole effluent biological toxicity testing to the Director (EPA Regional Administrator or NPDES State permitting authority) in their NPDES permit applications. The designated POTWs are: 1) all POTWs with design influent flows equal to or greater than one million gallons per day; 2) all POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program; 3) POTWs required to perform such testing at the Director's discretion. Such testing must have been conducted since the last permit reissuance or permit modification, whichever occurred later.

POTWs whose NPDES permits will expire soon should be notified of this requirement if they are in either of the two "non-discretionary" categories above, and permitting authorities should consider which additional POTWs should conduct toxicity testing pursuant to the Director's discretionary authority.

The NPDES permitting authority must determine acceptable protocols for the testing, as is currently the case. Permitting authorities should provide instructions about testing protocols to POTWs who have never before performed such testing.

The testing must be performed using EPA methods or other established protocols which are scientifically defensible and sufficiently sensitive to detect aquatic toxicity. Testing protocols will be addressed in the revised Technical Support Document for Water Quality-Based Toxics Control, to be issued in early 1991. Other guidance documents include EPA's Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA 600/4-89/001, Second Edition, February 1989; Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, EPA 600/4-85/013, Third Edition, March 1985; Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, EPA 600/4-87/028, May 1988.

Testing results should be used to determine whether toxicity-based or other appropriate limits should be included in

the POTW's NPDES permit, consistent with 40 CFR 122.44(d). It should be noted that when the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above a water quality criterion, (whether the criterion is narrative or numeric), the permit must include one or more water quality-based effluent limits (see 40 CFR 122.44(d)(1)(iii)-(vi)).

2. Section 122.21(j)(4): Revisions to Local Limits

This paragraph requires all POTWs with approved pretreatment programs to submit, with their NPDES permit applications, a formal evaluation of the need to revise local limits.

Pretreatment POTWs whose NPDES permits will expire soon need to be notified of this requirement. Permitting authorities may wish to consider which POTWs have had pass through or interference problems, so as to give those applications particular attention.

I believe that these amendments will be very valuable in achieving better control of toxic and hazardous wastes discharged to POTWs. I hope this memorandum will help you to develop your own individual plans for implementation of the regulations. We have also conducted several activities involving direct outreach to pretreatment POTWs, such as a distribution of the regulations with the September 1990 Pretreatment Bulletin and a checklist for POTWs for implementation evaluation purposes. If you have questions or need more information about these requirements, please contact Cynthia Dougherty at FTS 475-9545 or have your staff contact Marilyn Goode at FTS 475-9526.

Attachment

cc: Regional Pretreatment Coordinators

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Prepared by the Office of Water Enforcement and Permits,
Environmental Protection Agency

SUMMARY OF CHANGES TO 40 CFR PART 403
JULY 24, 1990: 55 FR 30082

1. Sections 403.3, 403.8(f)(6), and 403.8(f)(2)(iii):
Definition of "Significant Industrial User"

These provisions codify a definition of significant industrial user (SIU) to conform to guidance that has been in place for several years, and specify how a POTW's designation of an SIU becomes effective. An SIU is:

- o Any IU subject to categorical standards;
- o Any noncategorical IU that discharges 25,000 gallons per day or more of process wastewater, or any IU that contributes a process wastestream which makes up five percent or more of the dry weather hydraulic or organic capacity of the POTW treatment plant; or any IU that has a reasonable potential, in the opinion of the Control Authority, for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

POTWs with approved pretreatment programs are required to prepare a list of significant industrial users pursuant to 40 CFR 403.8(f)(6). The list, and any subsequent modifications thereto, must be submitted to the Approval Authority as a minor program modification under section 403.18(b)(2). Approval Authorities may wish to consider establishing special procedures for POTWs with very frequent modifications to their list of SIUs. Approval Authorities should be prepared to review POTWs' lists of SIUs to ensure that the regulatory criteria are being applied. Pursuant to 403.8(f)(2)(iii), within 30 days of approval of the list, POTWs must notify all their SIUs of their status and the requirements stemming from that status.

2. Section 403.5(b): Specific Discharge Prohibitions

This paragraph makes certain changes to prohibited industrial user discharges as follows:

- o Ignitability: All industrial users are prohibited from discharging pollutants with a closed cup flashpoint of less than 140 degrees Fahrenheit (the RCRA ignitability standard for liquid characteristic waste).

The sampling for these discharges is relatively straightforward and will be covered in forthcoming guidance on worker health and safety. We also expect to address this issue in future local limits workshops.

- o Reactivity: All industrial users are prohibited from discharging pollutants to the POTW that result in toxic gases, vapors, and fumes in a quantity that may cause worker health and safety problems.

Guidance for POTWs on the subject of worker health and safety (including implementation of this prohibition) is being prepared and will be distributed in 1991. The subject of worker health and safety was also addressed in the local limits guidance distributed in 1987.

- o Oil and Grease: All industrial users are prohibited from discharging petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that could cause pass through or interference.

We are considering addressing this issue in workshops (e.g., impacts of various amounts and types of oil, test procedures, etc.).

- o Trucked and Hauled Waste: All industrial users are prohibited from discharging trucked or hauled pollutants to POTWs except at discharge points designated by the POTW.

Pretreatment workshops and seminars will continue to stress the importance of adequate control of trucked and hauled wastes, including the designation of appropriate discharge points.

3. Section 403.8(f)(1)(iii): Individual Control Mechanisms for SIUs

This paragraph provides that POTWs shall control the contributions of SIUs through permits or equivalent individual control mechanisms issued to each such user. The paragraph also lists the minimal conditions which such permits or individual control mechanisms must contain. EPA issued guidance on this subject in September 1989 (the Industrial User Permitting Guidance Manual).

We also plan to continue training of POTWs through workshops; distribution of the industrial user permitting guidance; tracking of individual control mechanisms through OWAS, STARS; and oversight through pretreatment audits and pretreatment compliance inspections (PCIs).

4. Section 403.8(f)(5): Enforcement Response Plans

This paragraph provides that POTWs with approved pretreatment programs must develop and implement an enforcement response plan containing procedures indicating how a POTW will respond to instances of industrial user noncompliance.

EPA issued guidance on this subject in September 1989 (Guidance for Developing Control Authority Response Plans) which was distributed to Regions and POTWs. Workshops for POTWs on the development of POTW enforcement response plans were held in 1990 and will be available again in 1991. Existence of plans will be verified through audits and PCIs.

5. Section 403.8(f)(2)(v): Inspection and Sampling of SIUs

This paragraph requires pretreatment POTWs to inspect and sample the effluent from SIUs at least once a year. With respect to this requirement, no specific action items are planned, since many POTWs are conducting these activities already. Sampling and inspections will be verified through audits and PCIs.

6. Section 403.8(f)(2)(v): Slug Control Plans

This paragraph requires pretreatment POTWs to evaluate, at least once every two years, whether each SIU needs a plan to control slug discharges. If the POTW decides that a slug control plan is needed, the regulations specify certain minimal elements which the plans must contain.

A guidance manual addressing this subject (Guidance Manual for Control of Slug Loadings to POTWs) was developed and initial copies were distributed to the Regions in 1989. We expect to renew efforts to print and distribute this guidance. We also expect this requirement to be verified through audits and PCIs.

7. Section 403.8(f)(2)(vii): "Significant Noncompliance"

This paragraph provides criteria for what constitutes significant noncompliance for industrial users (for purposes of newspaper publication). The criteria are similar to those used for requiring noncompliance reports from direct dischargers.

No new action items are planned, since the criteria are essentially the same as those which have been contained in the 1986 Pretreatment Compliance Monitoring and Enforcement Guidance.

8. Section 403.12(h): SIU Sampling and Reporting

This paragraph requires all noncategorical SIUs to sample their effluent a minimum of twice a year and report results to the POTW.

No action items are planned because most POTWs are familiar with the similar sampling requirements for categorical users. Audits and PCIs will verify compliance.

9. Section 403.12(p): Notification by IUs of Hazardous Waste Discharges

This paragraph requires industrial users to notify POTWs, EPA Waste Management Division Directors, and State counterparts of any discharge of a listed or characteristic hazardous waste. The contents of the notification vary somewhat according to the amount of waste discharged. The industrial user must also 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. This is a one-time notification requirement, which takes effect six months after promulgation of the rule.

We plan to coordinate with OSWER on options for tracking and compiling this information. We are also investigating the need for guidance or training on industrial user waste minimization requirements.