

APR 3 1987

MEMORANDUM

SUBJECT: Sewage Sludge Permitting Programs: Implementation
of Amendments to Section 405

FROM: Martha G. Prothro, Director
Permits Division (EN-336)

TO: Water Management Division Directors,
Regions I - X

The purpose of this memorandum is to alert you to some of the activities that EPA Regions and States will need to undertake over the next several months to implement the new provisions of the Water Quality Act of 1987 pertaining to sewage sludge. As you know, Congress has recently passed amendments to the Clean Water Act that include changes to Section 405 dealing with sewage sludge regulation. The amendments to Section 405 are a significant departure from the old law. For example, Section 405(d)(4) now provides that prior to the development of the Part 503 technical regulations,

"... the Administrator shall impose conditions in permits issued to [POTWs] ... or take such other measures as the Administrator deems appropriate to protect public health and the environment from any adverse effects which may occur from toxic pollutants in sewage sludge."

The amendments to Section 405 set forth for the first time a comprehensive program for meeting the goals of reducing the environmental risks and maximizing the beneficial uses of sludge.

The proper management of sewage sludge is becoming increasingly important as efforts to remove pollutants from effluent have become more effective. In addition, greater focus on surface water toxics control, as well as RCRA provisions such as the land ban and the Domestic Sewage Exemption may result in increased volumes of toxic and hazardous pollutants ending up in sewage sludge. The

interrelationship among these efforts to minimize environmental risk necessitates a comprehensive approach, which includes the effective management of sewage sludge.

Under the structure of the amendments, sludge management is to be accomplished through two initiatives. First, sludge technical regulations are to be promulgated identifying toxic pollutants in sewage sludge and specifying acceptable management practices for sludge (the 405(d) criteria; 40 CFR Part 503). Second, these criteria are to be implemented through permits. The Office of Water Regulations and Standards (OWRS) is developing the 405(d) sludge criteria. The first set of these regulations is scheduled to be proposed by the end of FY 87. The second part of Section 405 requirements, implementing the criteria through permits, is the responsibility of the Office of Water Enforcement and Permits (OWEP). This second element is the subject of this memorandum, which explains the changes in the law and the framework it establishes for the program, and discusses our preliminary plans for implementation.

There are some areas of amended Section 405 that are very general and allow a lot of flexibility in establishing a program; in other areas the law is very specific. The first part of this memorandum describes the major changes in the law and identifies where we do and do not have flexibility in developing a program. The second section discusses overall goals and preliminary plans for implementation. The third section identifies current activities that are or shortly will be underway to get us moving toward implementation.

I. SECTION 406: OVERVIEW OF PROGRAM REQUIREMENTS

A. Permitting Program

Section 406 of the Water Quality Act of 1987, which amends Section 405 of the Clean Water Act, is a significant departure from the old Section 405. It clearly establishes that sludge regulation will be administered as a permitting program. There are three key elements to the amendment: 1) the promulgation of technical criteria identifying and regulating toxic pollutants of concern in sewage sludge; 2) the implementation of the criteria through permits issued by EPA or the States; and 3) the regulation of sludge through permits or other appropriate means prior to the development of criteria (interim implementation). The clear mandate of the statute is to establish by regulation both numerical limits and management practices, implement those requirements through permits, and, in the interim, develop permit limits for sludge on a case-by-case basis or take other measures to protect public health and the environment from the adverse

effects of toxic pollutants in sludge.

B. Long-Term Implementation

The amendment states that any 402 permit issued to a POTW or any other treatment works treating domestic sewage shall include the sludge technical requirements, unless such requirements have been included in a permit issued under subtitle C of RCRA, part C of the Safe Drinking Water Act, MPPSA, or the Clean Air Act, or

"under State permit programs approved by the Administrator, where the Administrator determines that such programs assure compliance with any applicable requirements of this Section. Not later than December 15, 1986, the Administrator shall promulgate procedures for approval of State programs pursuant to this paragraph."

Compliance with the sludge technical requirements is required within one year from their final promulgation unless construction is required, in which case the permittee has two years to achieve compliance.

Thus the Act mandates that 402 permits, whether issued by EPA or by an NPDES State, contain the sludge criteria unless such criteria have been included in one of the listed Federal permit programs or an approved State program. This means that NPDES or other permits will be the primary basis for implementing the criteria. Thus, once the sludge criteria are promulgated, the issuance of an NPDES permit to a POTW or other treatment works treating domestic sewage must include sludge requirements unless they are addressed in another appropriate permit. Failure to include the criteria would be contrary to law and may subject the permit issuance authority to challenge.

A State desiring to regulate sludge in lieu of EPA may submit its own permit program to EPA for approval, and the Administrator may approve the program if it assures compliance with Section 405. Pursuant to the Act's requirements, EPA will be proposing regulations to establish the minimum requirements for approvable State sludge programs, to assure that such programs comply with Section 405. This is discussed in more detail below.

C. Interim Implementation

The new language in the Act makes it clear that Congress intended sludge regulation to proceed even before promulgation of the sludge criteria. Section 405(d)(4) states that prior to the promulgation of the criteria,

"... the Administrator shall impose conditions in permits issued to publicly owned treatment works

under section 402 of this Act or take such other measures as the Administrator deems appropriate to protect public health and the environment from any adverse effects which may occur from toxic pollutants in sewage sludge."

This means that, where permits are issued prior to the promulgation of the technical criteria by OWBS, sludge limits in such permits will have to be developed on a case-by-case basis.

On its face, the "or other measures deemed appropriate" language in amended section 405(d)(4) would appear to grant broad authority in establishing a program for interim implementation. Although we intend to take advantage of this flexibility, we need to begin now to take action to identify and address problems that may result from pollutants in sludge. Thus, the interim period should be viewed as a time for EPA and the States to: 1) identify and regulate through permits those sources that present or have the potential to present greatest risk to the public health and the environment, and 2) get the legal and programmatic mechanisms in place to incorporate the sludge criteria into permits and meet the other requirements of the Act. To achieve these objectives, the interim program will focus on: a) establishing permitting priorities; b) setting case-by-case limits to be incorporated into priority permits; c) putting monitoring requirements into lower-priority permits to provide information on sludge quality and identify potential problems, and d) assessing existing State sludge programs to determine what changes will need to be made, if any, to legal authorities, resources and administration to assure that the programs are able to carry out the requirements of Section 405.

II. PLAN FOR IMPLEMENTATION

A. Program Objectives

The plan for implementing the goals of Section 405 -- to protect public health and the environment from adverse effects of pollutants in sewage sludge -- will be driven by two basic program objectives. First, meet the requirements of Section 405 in establishing a process to regulate sludge through permits as envisioned by Congress. Second, build as much as possible on existing State sludge programs rather than hinder existing programs that are effective, but provide guidance and assistance where State programs are not effective or are nonexistent.

In keeping with the objective of meeting Clean Water Act requirements, one of the principles of EPA's Section 405 implementation both in the interim and in the long-term is to provide the programmatic framework to help States

One of the first efforts toward this objective is to establish case-by-case sludge limits in permits prior to the promulgation of the technical requirements. We should conduct case-by-case permitting in a way that will head facilities in the direction of compliance with the technical requirements and reduce the need to reopen permits to get facilities into compliance when the final criteria are promulgated. Our priorities for selecting facilities for case-by-case permitting should direct resources toward those POTWs with sludge practices that present the highest potential risk to the public health and the environment while a more comprehensive regulatory program is being developed. Putting monitoring requirements in lower priority permits and establishing other basic requirements will ensure permit coverage at a later date if problems are identified by the monitoring results.

The second major objective concerns State program development, strengthening, support, and oversight. Most States have some type of sludge management program in place; some of these programs employ effective permitting that will require little or no change to meet the requirements of Section 405. Some States implement sludge requirements under State authorities but through the vehicle of the NPDES permit, others use State solid waste permits, still others use a hybrid or something else. Our preliminary review indicates that existing programs vary widely in terms of approach and coverage. Thus, State program requirements need to be structured with sufficient flexibility to allow various approaches where the State is running an effective program that meets EPA's basic requirements. It would serve no purpose to define an approvable program so inflexibly that an existing program that is effectively regulating sludge through permits would have to be overhauled in order to comply. For example, States that have NPDES authority have already undergone a review of their basic program. In the instances where an NPDES State has been regulating sludge through NPDES permits and wants to continue to do so, we are hopeful that at least in the interim an informal process can be established for EPA to defer to State sludge permitting activities. The process would be structured to assure that these programs carry out the requirements of the Act with a minimum of disruption and delay. Another possible mechanism might be to reference the State sludge permit in the NPDES permit.

At the same time, there are a number of States whose current programs are inadequate to carry out the 405(d) requirements. One of the objectives is to provide assistance in strengthening these programs, and to encourage the States to take the lead as much as possible. EPA will exercise its authority to fulfill statutory requirements where a State proves unable or unwilling.

The 1986 Office of Water Accountability System (OWAS) measures call for each State to submit a description of its existing State sludge management program by the beginning of FY 88. This information is very important for the development of State program requirements and will help structure the national program to maximize the use of existing resources and expertise.

B. Priority Implementation Activities

There are several activities that are or shortly will be underway to implement the requirements of the section.

1. Work Group. OWEP is putting together a sludge permitting work group of about fifteen members with representatives from the Regions, States and Headquarters. This group will hold periodic meetings to discuss program implementation, provide input on existing programs, and assist in the development of State program requirements and interim case-by-case permit requirements. We have been in touch with several of the Regions and States and have a list of those who have expressed interest in such a work group and have tentatively agreed to participate. Anyone interested who has not already been contacted should contact Greg McBrien at (202)475-9527. All documents will be widely distributed for review. Each Region and State that has not done so should designate a contact person to monitor EPA's sludge permit program activities and receive information.

2. Guidance on Establishing Interim Case-by-Case Permit Limits. Permits Division is preparing guidance on how to write interim sludge limits into permits on a case-by-case basis. EPA is reviewing existing State sludge contaminant limits and required management practices, and reviewing other available information including existing EPA guidance and results of analyses being conducted by OWRS as they develop the sludge criteria. Based on this review, EPA will recommend contamination limits and management practices that are consistent with the general direction OWRS is taking to develop the sludge criteria. This guidance is scheduled to be available in draft form by the end of FY 87.

3. State Program Requirements. Another major task for the next several months will be to develop minimum requirements for approvable State sludge programs. In accordance with Section 405, the most important element of these programs is that they must use permits to regulate pollutants in sludge. Otherwise, the 1987 Amendments grant EPA considerable discretion in determining the content and approval process for State programs, requiring only that the Administrator determine that the State program "assure[s] compliance with the applicable requirements of Section 405."

The Office of Municipal Pollution Control (OMPC) proposed State sludge management regulations that appeared in the Federal Register on February 4, 1986. These regulations set forth minimum program requirements and procedures for States to obtain approval of their sludge management programs. Because these regulations were proposed prior to the Water Quality Act, they did not require permit programs. We do not yet know whether we will be able to finalize the proposed 501 state program regulations or will have to propose new State sludge program requirements. However, apart from adding a requirement to issue permits, we currently expect that the required elements of an approvable State sludge permitting program will be very similar to those proposed by OMPC. As such, States may use these proposed regulations as a guide for assessing the approvability of their existing program. The program regulations will contain such elements as public participation in permitting and enforcement, and the authority to conduct inspections, require monitoring, recordkeeping and reporting and take enforcement actions. Because an NPDES State must have these general program elements in order to obtain NPDES approval, approved NPDES States desiring to regulate sludge through their NPDES programs may not need significant modification to their existing programs to address the specific requirements of Section 405. Non-NPDES State sludge permitting programs may meet these requirements with little modification as well.

EPA plans to propose State sludge permit program requirements by the end of FY 87. Prior to the promulgation of State program regulations, we will be able to approve State sludge programs. It will be necessary to establish minimum criteria in guidance prior to any such approvals.

4. Other Policy Memoranda. OWEP is in the process of developing several memoranda to serve as guidance in implementing the requirements of section 405. The first of these will address interim sludge requirements in POTW permits. The memorandum will define two classes of POTWs for interim sludge permitting: high-priority POTWs, whose permits should reflect the case-by-case guidance that will be available at the end of September 1987; and all other POTWs. Guidance on monitoring or other requirements, including reopener clauses, that should be placed into lower priority POTW permits as they expire will be provided. Suggested permit language for the recommended minimum requirements will also be given.

5. State Inventories. OWAS contains a requirement that States develop inventories of their sludge management facilities, including the quantity and quality of sludge being handled and an identification of the use/disposal practices. Many States have been collecting this information for some time. EPA currently has a contract underway to develop PC software to enable the States to input this

information into a data base, and to allow this information to be easily accessed and updated.

III. CONCLUSION

The amendments to Section 405 direct a Federal program for sludge management. However, in many respects some States are far ahead of EPA in this area. EPA and the States need to work together to set up a program that best carries out the requirements of the Act and builds on existing expertise and experience. The States should continue their efforts to pull together inventories of their sludge handling facilities and identify the quantity and quality of sludge and where it is ultimately disposed. Existing State programs need to be assessed in light of the new requirements, and program changes made where needed.

We will continue to send you guidance and program updates, and solicit your input and suggestions as the program takes shape. I believe the existing tools and expertise in the Regions and States can be utilized to fulfill the requirements of the new Act, without major structural changes. I welcome your comments, suggestions and ideas. Please contact me if you have any questions, or have your staff contact Martha Kirkpatrick at (FTS) 475-9517. Questions regarding the development of interim permit limits should go to Tom Wall at (FTS) 475-9515. Questions on the sludge technical criteria should go to Alan Rubin in OWRS, at (FTS) 475-7311. Questions on sludge management technologies should go to Ed Gross in OMPC, at (FTS) 475-9412.

cc: Ned Notzon, OWRS
Susan Lepow, OGC
Bob Blanco, OMPC
Bill Jordan, OWEP

bcc: James Elder, OWEP
Alan Rubin, OWRS
Margie Pitts, OWRS
Ed Gross, OMPC
Bob Bastian, OMPC
Dov Weitman, OGC
Rich Kinch, OWEP

MFIRKPATRICK/EN-336/475-9517/dsk 11/doc 3/3-16-87/3-23-87/
3-25-87/3-30-87/4-2-87/4-3-87