



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

Jill

May 3, 1996

Dear Colleague:

As you may know, the United States Environmental Protection Agency (EPA) recently proposed changes to the federal Ocean Dumping Regulations that confirm the Agency's long standing interpretation of the regulations consistent with our current practices for testing dredged sediment. This action has created some misconceptions about our intent in proposing the changes and raised questions about our commitment to protect human health and the environment.

I am writing to assure you that the proposed change does not alter our commitment to public health and the marine environment. EPA continues to work aggressively to protect coastal and ocean waters. The proposed clarification does not change current methods of testing dredged sediments or the level of protection these tests provide. It does, however, preserve EPA's discretion to require only those tests that have been proven to be technically valid and scientifically defensible.

I have enclosed a packet of information including, the proposed rule from the February 29, 1996 Federal Register, a fact sheet that answers questions about dredging in the New York/New Jersey Harbor and the proposed clarifications and, an Op-Ed piece published by the Asbury Park Press on May 3rd. If you are interested in learning more about the proposed regulations or about dredging in the New York/New Jersey Harbor, please let me know or have your staff contact Patricia Pechko, Water Management Division, at (212) 637-3796 or Lillian Johnson, External Programs Division, at (212) 637-3660.

Sincerely,

Jeanne M. Fox
Jeanne M. Fox
Regional Administrator

Attachments

DREDGING IN THE NEW YORK/NEW JERSEY HARBOR



REGION 2

U.S. Environmental Protection Agency - Region 2
290 Broadway, New York, New York 10007
Jeanne M. Fox, Regional Administrator

May 3, 1996

DREDGING IN THE NEW YORK/NEW JERSEY HARBOR

The United States Environmental Protection Agency (EPA)

- **works aggressively to protect public health and the marine environment;**
- **assures that dredged material is carefully evaluated to determine if it can be safely disposed of in the ocean;**
- **does not permit any dredged sediments to go into its ocean disposal site that could threaten coastal or ocean waters, marine life or human health;**
- **has proposed changes to the federal Ocean Dumping Regulations that confirm the Agency's long-standing interpretation of the regulations consistent with current testing practices;**
- **has led a consensus-building process through the Dredged Material Management Forum since 1993 with the U.S. Army Corps of Engineers (ACE), the states of New York and New Jersey, the Port Authority of NY/NJ, local governments, elected officials and the environmental and business communities that has developed a plan to safely manage dredged sediments in the short-term; and**
- **believes we can protect the ocean environment and people's health without jeopardizing the region's economy.**

Overview

The New York/New Jersey Harbor is one of the region's most important environmental and economic resources. This vital port, with its extraordinary beauty and abundant resources, supports transportation and shipping and provides fishing, boating and tourism opportunities for more than 20 million people. Each year, over 4,500 ships carry almost \$60 billion worth of cargo in and out of the Harbor.

The New York/New Jersey Harbor is not naturally deep and has been mechanically deepened to allow passage by oil tankers, passenger liners and cargo ships. Every year, millions of tons of sediment -- the silt that naturally washes down from rivers and tributaries into the Harbor -- must be dredged and removed to maintain Harbor depth.

EPA and ACE share responsibility for regulating the disposal of dredged materials in ocean waters. EPA's main role in the dredging permit process is to protect coastal and ocean waters, the species that live in those waters and the health of people who consume seafood.

EPA: Designates specific locations where ocean disposal of dredged sediments may occur.

Establishes guidelines that define the acceptable quality of dredged sediments to be disposed of in the ocean.

Reviews ACE dredging permits.

ACE: Evaluates permits for ocean disposal of dredged material.

EPA/ACE: Manage and monitor dredged material ocean disposal sites.

The dredged sediment contains varying levels of contaminants, including heavy metals, petroleum hydrocarbons, dioxin and PCBs that enter the water through urban runoff, air pollution and direct industrial and municipal discharges. Sometimes, the levels of these contaminants are not a danger to the marine environment. At other times, the levels found are considered a threat.

Historically, since the late 1800s, most material dredged from the Harbor was disposed of in the ocean in a broad 30-square-mile area east of Sandy Hook, New Jersey. Since 1973, sediments have been disposed of in a limited 2.2-square-mile area called the "Mud Dump Site," located about 6 miles east of Sandy Hook and 11 miles south of Rockaway, New York.

Before dredged sediment is considered for ocean disposal, the ACE must first determine that no practical alternatives to ocean disposal exist. Under EPA regulations and guidelines, rigorous chemical and biological tests are conducted on dredged sediment to ensure that, if the sediment is deposited at the Mud Dump Site, it will not degrade the ocean environment or threaten the species that live there and the health of people who consume fish from these waters. The technical and scientific requirements for conducting these tests are specified in the "Green Book," a joint EPA/ACE manual issued in 1977 and revised in 1991. These tests measure toxicity (immediate danger) and bioaccumulation (build-up in living organisms as big fish eat little fish that eat worms) of the contaminants in dredged sediment. Test results are used to determine into which of three categories the dredged sediments fall. The categories determine the most environmentally sound disposal method for each type of sediment.

Category I materials have no long-term impacts and no significant short-term impacts, and are considered acceptable for unrestricted disposal in the ocean (at the Mud Dump Site).

Category II materials have no discernable toxic effects. They do contain low levels of substances that -- while they are not seen as threats and do not violate ocean disposal criteria -- in Region 2 are prudently disposed of in the ocean with a cap of clean (Category I) dredged material.

Category III sediments do not meet ocean dumping criteria because of either toxic effects on marine life or unacceptable bioaccumulation in marine species. They cannot be disposed of in the ocean.

Although Category III materials are not suitable for ocean disposal, they are not considered hazardous materials. Their unacceptability for ocean disposal is based on either their toxicity to certain forms of marine life or the potential health risk associated with eating seafood in which contaminants may bioaccumulate. Direct contact with these sediments poses, in all but the most extreme cases, little or no health risk.

Alternatives to the ocean disposal of dredged material include beneficial uses such as habitat creation and daily landfill cover, as well as disposal in upland landfills. Category III materials can also be placed in underwater "borrow" pits or containment islands located within the Harbor (roughly inside a line drawn between Rockaway Point and Sandy Hook), as long as proper methods are used to isolate the material from the marine environment. Currently, there is no large scale alternative to ocean disposal available for Category III material dredged from the NJ/NY Harbor.

Proposed Clarification of the Ocean Dumping Regulations

In 1993, a local environmental group filed a lawsuit against EPA and ACE in an attempt to halt the ocean disposal of 500,000 cubic yards of dredged sediment that contained trace amounts of dioxin. Although the federal government won the case, the group appealed. The U.S. Appeals Court for the Third Circuit did not overturn the original decision, but did question aspects of the testing required by EPA and ACE. The court's decision differed from EPA's interpretation of certain sediment testing provisions of the Rules and Regulations that EPA had adopted to govern the testing, and created inconsistencies with the testing practices set out in the 1991 Green Book, the national EPA/Corps of Engineers testing manual for managing dredged materials. The court decision has created tremendous uncertainty for dredge applicants.

EPA recently proposed a clarification of these ocean dumping regulations to eliminate this confusion. The proposed clarification confirms EPA's long-standing interpretation of the national regulations and makes them consistent with the practices and procedures detailed in the 1991 Green Book. It does not alter the Agency's ability or commitment to protect human health and the environment. It does not change the current method of testing, the level of protection these tests provide, or EPA's original intent in adopting the rules.

EPA will continue to require that all applicants follow the testing protocols and procedures contained in the 1991 Green Book. The proposed clarification does not make any changes to the Green Book. It incorporates provisions that have been in place and followed throughout the United States by EPA and ACE since 1991 when, after a period of public comment, the Green Book was finalized.

Proposed Expansion of the Mud Dump Site

EPA and ACE are proposing to expand the boundary of the present Mud Dump Site. A Supplemental Environmental Impact Statement on the proposal is being prepared and should be complete by the fall of 1996. At that time, a public hearing will be scheduled and public comment solicited.

Beginning in the late 1800s, dredged material has been disposed of in a broad area covering some 30 square miles of the ocean east of Sandy Hook, New Jersey. This area includes, but is much larger than, the present Mud Dump Site, the 2.2-square-mile area that has been receiving sediments approved for ocean disposal since 1973. Sediments that were disposed of in the larger historic area prior to the enactment of the Marine Protection, Research and Sanctuaries Act in 1972 were not tested for contamination. We can assume that sediments containing some level of contamination were deposited throughout the larger disposal area. That presumption has been confirmed in recent years by extensive sediment sampling that has identified various areas where contaminated material is found.

The proposed expansion of the present Mud Dump Site is necessary for two reasons:

- There is a short-term need to locate an additional disposal area for Category II material until acceptable alternatives for the disposal of Category II sediments have been found. Category II sediments would only be disposed of in areas where contamination from pre-1970s dumping has been identified, and where there is sufficient ocean depth to permit covering or capping with clean material.
- There is a long-term need to cover or cap the sediments that were placed in the ocean before EPA/ACE testing requirements were established in 1977, in order to reduce the potential marine exposure to contaminated sediments. This would be accomplished by placing a layer of clean sediments on top of the contaminated historic dredged material, as well as over material that contains acceptable levels of trace contaminants (Category II) that may be placed there. Even clean cap material, used strictly for the purpose of remediation, cannot be placed without the expansion of the Mud Dump Site.

Questions & Answers

What contaminants do you look for when testing sediments; why don't you test for other contaminants?

EPA requires testing for a long list of contaminants, based on knowledge about pollutants in the NY/NJ Harbor from previous Harbor studies. Screening has become more stringent and the list has grown from four contaminants in 1977 to 39 contaminants today. These include polychlorinated biphenyls (PCBs), polyaromatic hydrocarbons (PAHs), pesticides including DDT and metals such as cadmium and mercury. There is no reason to believe that other contaminants of concern are present in Harbor sediments. If new contaminants are introduced into the environment or they show up in sediment chemistry testing, they would be added to the list.

How is sediment tested for toxicity?

Marine organisms (small crustaceans known as amphipods) chosen from among sensitive local aquatic species that can be handled in laboratory conditions are exposed to two samples of sediments. One group is exposed to a sample of the material to be dredged; the other group is exposed to sediments taken from an ocean floor site outside the historic disposal area. The mortality rates of the two samples are compared to determine the toxicity of the sediments to be dredged. Sediment that fails the toxicity test cannot be disposed of in the ocean.

Why is sediment tested for bioaccumulation?

Marine creatures (e.g., clams and worms), to varying degrees, can retain toxic material in their bodies without dying. As these creatures are consumed by larger creatures, moving up the food chain, the contaminants may accumulate to the point at which they affect the health of the population. By extension, since humans are at the top of the food chain and eat seafood, bioaccumulation can put human health at risk. Bioaccumulation testing is intended to protect all species, including humans, from long-term risk.

How is sediment tested for bioaccumulation?

Sensitive marine organisms are exposed to the material to be dredged. Following exposure, tissue from the organisms is analyzed to see if contaminants have accumulated. If the level of accumulation is a threat to the marine environment or the human food chain, the sediment cannot be disposed of in the ocean.

What biological tests are required by EPA?

The 1991 Green Book, the national EPA/ACE testing manual for managing dredged material, requires sediment testing on at least two sensitive marine species that must collectively exhibit three characteristics (burrowing, filter feeding and deposit feeding) that make them susceptible to exposure to contaminants in the sediment. Some species may exhibit more than one characteristic. Worms, for example, burrow and also eat decayed organic material. Clams burrow and also filter feed. The species currently required by the Green Book are considered to be sensitive indicators of the potential effects of ocean disposal of dredged material on the marine environment.

Why did EPA propose a change to its Ocean Dumping Regulations?

EPA is clarifying the regulatory language of the Ocean Dumping Regulations in response to an opinion of the United States Court of Appeals for the Third Circuit about the intent of the sediment testing provisions of the regulations. EPA has always interpreted the Ocean Dumping Regulations as giving the Agency the discretion to require testing that is consistent with the procedures detailed in the 1991 Green Book. The court opinion has resulted in confusion for dredge applicants about what procedures to follow, which the proposed changes to the regulations are intended to eliminate.

While EPA has proposed this clarification, no substantive change has been proposed in the manner in which we protect the marine environment, the species that live in this environment or the health of people who consume these species.

How does the court opinion view the regulations?

The Third Circuit opinion could be construed to indicate that three different test species exhibiting the characteristics specified in the regulation (filter feeding, deposit feeding and burrowing) should be subjected to testing. In addition, the court opinion could be understood to suggest that tests be conducted regardless of whether there are EPA-approved procedures for them.

Is it more environmentally protective to test three species instead of two?

It is EPA's opinion that tests conducted on two sensitive marine organisms that exhibit three characteristics (filter feeding, deposit feeding and burrowing) provide full environmental protection. The added cost of performing the tests on three species, estimated at \$10,000 and to \$100,000 per project, is not justified given that the current method of testing two species is equally protective.



Are additional tests required at this time?

It is not reasonable to require applicants to perform tests that at this point are not available or viable, and for which no criteria exist to evaluate the results. All of the tests contained in the Green Book reflect sound approaches that represent the current state of the science. The proposed clarification preserves EPA's discretion to require only those tests that have been proven to be technically valid and scientifically defensible.

Should the testing procedures be detailed in the regulations instead of the Green Book?

The regulations should address policy issues and establish a framework for decision making. The highly specific details of testing should be left to technical guidance manuals in which detailed testing procedures can be better addressed. Guidance manuals allow EPA the flexibility to update testing procedures to ensure that they reflect good, current science and are protective of the ocean. It should be noted that ACE and EPA provided an opportunity for public comment on the Green Book revisions of 1991 and on the regional testing manual. At that time, Region 2 and ACE were urged by the public and environmental groups to adopt the revised manual as soon as possible.

EPA and ACE changes to the Green Book have made testing procedures more environmentally protective. For example, the 1991 Green Book included the testing of more sensitive organisms than were previously used, longer exposure times for bioaccumulation tests and an expanded list of contaminants that must be considered. It has been estimated that for the New York/New Jersey Harbor, as a result of the 1991 Green Book update, the amount of dredged material categorized as unacceptable for ocean disposal has risen from 5% of the annual volume dredged to greater than 50%.

Are toxicity and bioaccumulation tests still required under the proposed clarification?

The 1991 Green Book is not being changed. EPA and ACE will continue to require the tests detailed in the Green Book, which prescribes the tests a dredge permit applicant must perform. The recent proposed clarification does not change the substantive environmental criteria for issuing ocean disposal permits. None of the tests that have been used in determining the acceptability or unacceptability of recently reviewed dredging applications will be modified or eliminated.

Is EPA substituting the use of models and other procedures for species testing?

EPA will continue to require that species testing be conducted in accordance with the 1991 Green Book, and that applicants provide the appropriate test results needed for ACE and EPA to make informed disposal permit decisions. Consistent with past practices, the Agency has the discretion to allow certain EPA-approved methods to be used along with species testing. Models, which are intentionally more conservative and predict test results in a quicker

and less costly manner, and other procedures are permitted when they provide information that is equivalent to or better than species tests. These models and other procedures have, in most applications, been found to be more environmentally protective than tests on species. They often make a greater data base available as decisions are being made.

When the regulation change is finalized, will dredging projects now considered unacceptable for ocean disposal be considered acceptable?

No. Projects involving Category III sediments that are currently unacceptable for ocean disposal would remain unacceptable after the regulation change.

Will dioxin-contaminated sediments still be tested?

Yes. EPA Region 2 and the New York Corps of Engineers have a dioxin testing and evaluation procedure that dredge applicants must follow. There is no proposed change in the testing requirements for proposed projects that involve dioxin contaminated sediments. Bioaccumulation testing will continue to be required if EPA finds or expects to find dioxin contamination in sediments. There is also no change proposed to the criteria that determine if dioxin-containing material is acceptable or unacceptable for ocean disposal.

What is the Guidance on Management of Dioxin Contaminated Dredged Material and how will it be used?

EPA is developing guidelines to allow the Agency to make scientifically sound, risk-based decisions on sediment testing. The document, which will be reviewed by a panel of independent scientists and be made available for public comment, will provide a state-of-the-practice, risk-based approach to making decisions on dioxin-contaminated dredged material. It will provide a consistent nationwide approach to decision-making on this issue.

Are there dredging permit applications for projects that would be affected if the proposed clarification is not finalized in the next several months?

There are 18 pending permit applications for private projects, as well as some federal projects, that are currently on "active" status in various stages of the permit process. Additionally, there are many potential applicants for dredging permits awaiting the resolution of the recent regulatory uncertainties.

What are the alternatives for disposal of dredged material that cannot go in the ocean?

The ACE, along with various other agencies including EPA, is evaluating alternatives to ocean disposal of dredged material, and is preparing a Dredged Material Management Plan (DMMP) for the NJ/NY Harbor. The DMMP interim report, which will recommend both short and long-term alternatives, is expected to be issued during the summer of 1996.

The DMMP is considering such non-ocean alternatives as disposal in shallow-water borrow pits or containment islands located in harbor waters (waters inside the line between the tip of Sandy Hook and the western end of the Rockaway peninsula), and upland disposal, including beneficial use such as landfill cover and wetlands restoration. Additionally, the DMMP will also consider management alternatives such as reducing the volume of material to be dredged.

Sediments can also be decontaminated. EPA Region 2, in conjunction with ACE, has been evaluating decontamination technologies by conducting bench-scale tests (i.e., laboratory testing) on Harbor sediments. Some pilot-scale tests (tests on larger volumes) were started in April. Others will begin this summer and are expected to continue through the summer.

Where do the contaminants typically found in dredged material come from?

The rivers that flow into the New York Bight drain watersheds that have long been heavily urbanized and industrialized. They carry contaminants ranging from auto emissions to by-products of agricultural, manufacturing and industrial processes. These substances make their way into waterways through erosion, runoff and outfall discharges and eventually settle into the sediment.

Do the sediments disposed of at the Mud Dump Site reach our beaches?

The Mud Dump Site is located in a stable environment. When dumped from barges, the vast majority of material falls within a confined area on the bottom of the ocean. Tests done at the time of barge disposal have found that contaminants dissipate rapidly in the water column and quickly become undetectable.

There have been several studies conducted over the years at the Mud Dump Site to determine whether sediments have been moved off-site by storms or wave action. These studies have all shown that the material disposed of at the site, for the most part, remains within the site boundaries.

It should be noted that the beach washups, which seriously affected area beaches in the 1980s and which occur sporadically today, all stem from floatable debris. This debris comes largely from combined sewer overflows throughout the metropolitan area; it has nothing to do with the disposal of dredged sediments in the ocean.

Has the disposal of dredged material contaminated the seafood we eat?

Recent studies of both finfish and lobsters caught in the New York Bight indicate that edible tissue, other than lobster tomalley (the green material), meets all fish consumption guidelines. The tomalley is the lobster's filtration organ (liver), and is the subject of consumption advisories in almost all northeastern waters. [Note: Individuals are cautioned to observe all specific applicable state/local fish advisories.]

Are there techniques/technologies that reduce material dispersal during disposal?

The Mud Dump Site was selected because it is in a low energy area, an area where ocean currents are generally too weak to significantly move bottom sediments around. In addition, disposal depths are managed to make sure that dredged material is placed below the reach of potential storm-wave erosion or scouring.

EPA and ACE have required operators to reduce the speed of the scows or hoppers at the site to reduce the plume associated with disposal. The Port Authority, using Category I materials, is working with the EPA and ACE to develop techniques for using geotextile bags to contain dredged sediments at the Mud Dump Site.

Why haven't the sources of Harbor contaminants been eliminated?

Source reduction programs such as those found under the Clean Water Act, Clean Air Act and related environmental laws are significantly reducing the amount of contamination that enters regional waters. The cleanup of Superfund sites has already eliminated the sources of some of the worst contamination. Control of some sources of pollution may be more difficult to eradicate. The New York/New Jersey Harbor Estuary Program (HEP) has developed comprehensive short and long-term strategies for searching out and controlling these sources in the Hudson and Raritan Estuaries.

What is the Harbor Estuary Program (HEP)?

The New York/New Jersey Harbor Estuary Program (HEP), established in 1988, is a geographically based environmental protection program involving federal and state agencies and area stakeholders. This consensus-building program is attempting to establish and maintain a healthy and productive ecosystem in the Harbor and Bight. HEP has created a Comprehensive Conservation and Management Plan (CCMP) that provides a framework of toxics reduction and pollution prevention. It includes reduction of combined (storm and wastewater) sewer overflows and other rainfall-induced discharges.

What is the Dredged Material Management Forum?

EPA, ACE and the states of New Jersey and New York sponsored the Dredged Material Management Forum in 1993 to resolve conflicts surrounding the environmentally and economically sound disposal of dredged material. The Forum brought government together with environmentalists, academics and business interests ranging from shipping to fishing. Its goal was to identify a broad range of critical issues needing resolution and to seek consensus on solutions. The Forum, which soon concluded that the most efficient and effective way to continue its work would be under the auspices of HEP, was integrated into the estuary program in 1994. Within the HEP framework, the Forum is looking at alternatives to ocean disposal, decontamination technologies, improved dredging and disposal techniques, and has put special emphasis on addressing chemicals that contaminate dredged material. The HEP management plan, the CCMP, has targeted the reduction of metals (mercury, copper, nickel), PCBs, dioxin, PAHs and pesticides.

By JEANNE M. FOX

Dredging up false fears

Only material that poses no threat will be dumped in ocean

Recent claims by opponents of the ocean disposal of dredged material would have you believe that the Environmental Protection Agency is turning the ocean into a dumping ground for toxic material. These reports are irresponsible and, frankly, flat-out wrong. The EPA has long been committed to protecting our coastal and ocean waters; we are not about to relax that commitment now. Ironically, in seeking to prevent the temporary expansion of the area where sediments can be placed, opponents would actually harm their own cause.

The New Jersey/New York Harbor is not naturally deep. Sediment must be removed through dredging to permit passage of the more than 4,500 ships that carry over \$60 billion worth of cargo in and out of our region each year. Before ocean disposal of this dredged sediment is even considered, the law requires evidence that there are no practical alternatives. For example, dredged sediment can sometimes be put to such beneficial use as beach replenishment. For the rest of the material, if it meets ocean disposal criteria, disposal at the Mud Dump Site, located six miles east of Sandy Hook is currently the most practical alternative.

The EPA designates the location and boundaries of the mud dump. The U.S. Army Corps of Engineers issues the actual permits for disposal at the site based on national criteria established by the EPA. Before dredged

sediment can be placed in the mud dump the EPA requires that it undergo rigorous testing. These tests are designed to ensure that sediment disposal will neither harm the marine life that live in ocean waters nor threaten the health of people who consume seafood from those waters.

Recently, as a result of a Third Circuit Court of Appeals opinion, the EPA proposed a clarification to our ocean dumping regulations. The court's decision differed from the EPA's long standing interpretation of certain provisions of the rules and regulations the agency had adopted to govern the testing of sediment. This has created confusion about how dredge permit applicants should test the materials they propose for disposal in the ocean. The EPA proposed modifications that will clarify the intent of the existing regulation throughout the country while remaining consistent with existing protective practices. At no time has there been any attempt to change the intent or effect of EPA ocean disposal test requirements, or to lessen in any way their protection of the environment.

Opponents of ocean disposal claim that the

EPA has weakened or even eliminated tests that were once required by the agency for ocean disposal. This is absolutely not the case. The rule change is intended to clear up current confusion about the EPA's long-standing requirements for testing of dredge sediments — it in no way changes them from current practice. There have been charges by environmental activists, repeated by some elected officials and now the subject of editorials, that the EPA no longer plans to require testing for dioxin. Nothing could be further from the truth. Reach A of Port Newark-Elizabeth sits undredged today because its sediments are too contaminated with dioxin to be disposed of in the ocean. The EPA's proposed rule clarification would do nothing to change that. Material that is currently rejected for ocean disposal will continue to be rejected under the proposed clarification. The national testing requirements laid out in EPA/Army Corps of Engineer protocols have not been changed in any way.

In fact, over the years since 1979, when the original ocean dumping regulation was written, the EPA has consistently strengthened requirements by updating testing pro-

cedures to reflect advances in both scientific knowledge and technique. This trend is most evident in changes made in 1991, which have resulted in an estimated ten-fold increase in the amount of material that is unacceptable for ocean disposal. It has been estimated that over 50 percent of the sediments dredged from the harbor are not considered acceptable for disposal at the mud dump.

Ocean disposal opponents are also attacking plans to expand the borders of the present mud dump to include areas that had been used historically for disposal of dredged sediments. These areas were used before there were rules and regulations, before there was testing for contamination, before the EPA even existed. This knee-jerk opposition is unfortunate and unwarranted. Many of our critics know that the EPA's intent is to use clean materials, including dredged sediment that meets today's strict standards, to cover or cap contaminated materials that are already sitting on the ocean floor. These contaminated materials were placed over a large area surrounding the present mud dump in the decades before the EPA's protective constraints were in place. Far from introducing

new contaminants to vast areas of our coastal waters, the EPA is attempting to reduce the potential marine exposure to contaminated sediments that already exist in the ocean due to past disposal.

For material that does not meet our ocean disposal criteria — and cannot go into the mud dump — there is currently no simple disposal method. Since June 1993, when EPA Region 2 convened the Dredge Material Management Forum made up federal, state and local governments, the Port Authority, environmental and business groups and other interested parties, we have been exploring alternatives to ocean disposal. This consensus-building process has resulted in the development of a comprehensive plan to safely manage dredged sediments.

The EPA is actively supporting the Army Corps of Engineers, the states and the port interests that are seeking alternative disposal sites and methods such as borrow pits, containment islands, and land disposal sites for dredged material.

The EPA has taken the lead in exploring technologies for decontamination. I can assure you that the EPA is continuing to work to protect the marine environment in the most responsible manner. Our objective is to avert a dredging crisis in our port, while protecting the long-term health of the public and our environment.

□ Jeanne M. Fox is regional administrator of the U.S. Environmental Protection Agency's Region 2.

[Federal Register: March 28, 1996 (Volume 61, Number 61)]

[Proposed Rules]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 220 and 227

[FRL-5449-4]

RIN 2040-AC81

Extension of Time for Receipt of Comments on Proposed Rule on Testing Requirements for Ocean Dumping

AGENCY: Environmental Protection Agency (EPA).

ACTION: Extension of time for receipt of comments on proposed rule on testing requirements for ocean dumping.

SUMMARY: On February 29, 1996, EPA published a proposed rule at 61 FR 7765, clarifying certain provisions of the Agency's ocean dumping regulations relating to testing provisions of the regulations. The proposal stated that written comments on the proposed rule would be accepted until April 1, 1996. EPA has received several requests for an extension of time to comment on the proposed rule, on the grounds that several issues that the rule addresses require additional time for analysis. The Agency has determined that an extension of time is in the public interest, and that an additional 30 days to comment on the proposed rule is reasonable. Consequently, the period for receipt of comments on the proposed rule is extended until May 1, 1996.

DATES: The comment period is extended until May 1, 1996. It should be noted that this extension of time for comment neither represents any modification of the proposed rule, nor indicates a change in the Agency's interpretation of the existing requirements under the ocean dumping regulations. The extension of time for receipt of comments simply provides those interested parties an additional 30 days to provide comments to the Agency on the proposed rule. All other requirements stipulated in the initial proposal for receipt of comments still apply.

FOR FURTHER INFORMATION CONTACT: John Lishman, Chief, Marine Pollution Control Branch, Oceans and Coastal Protection Division (4504F), Environmental Protection Agency, 401 M Street, SW, Washington, DC, 20460, telephone 202/260-8448.

Dated: March 22, 1996.

Robert Perciasepe, Assistant Administrator.

[FR Doc. 96-7606 Filed 3-27-96; 8:45 am]

BILLING CODE 6560-50-P

[Federal Register: February 29, 1996 (Volume 61, Number 41)]

[Proposed Rules]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 220 and 227

[FRL-5432-2]

RIN 2040-AC81

Testing Requirements for Ocean Dumping

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA today is issuing a proposed rule that would clarify certain provisions of the Agency's ocean dumping regulations relating to requirements for bioassay testing. The purpose of today's proposal is to clarify regulatory language that was interpreted by the U.S. Court of Appeals for the Third Circuit in a different manner than EPA intended. Today's proposal would confirm the validity of existing testing practices, and would not change them.

DATES: Written comments on this proposed rule will be accepted until April 1, 1996. All comments must be postmarked or delivered by hand to the address below by this date.

ADDRESSES: Send written comments on this proposed rule to the Ocean Dumping Proposed Rule Comment Clerk, Water Docket, MC-4101, Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. Commenters should submit any references cited in their comments. Commenters are requested to submit an original and three copies of their written comments and any enclosures. Commenters who want receipt of their comments acknowledged should include a self-addressed, stamped envelope. No facsimile or electronic mail transmissions (faxes or e-mail) will be accepted.

A copy of the supporting documents for this proposed rule are available for review at EPA's Water Docket, Room L-102, 401 M Street, SW, Washington, DC 20460. For access to the docket materials, call 202/260-3027 between 9:00 a.m. and 3:30 p.m., for an appointment.

FOR FURTHER INFORMATION, CONTACT: John Lishman, Chief, Marine Pollution Control Branch, Oceans and Coastal Protection Division (4504F), Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, telephone 202/260-8448.

SUPPLEMENTARY INFORMATION:

A. Statutory and Regulatory Background, and Summary of Previous Litigation

The Ocean Dumping Regulations, which govern the evaluation and permitting of material to be ocean dumped, were promulgated by EPA on January 11, 1977, under Title I of the Marine

certain of the ocean dumping regulatory testing requirements. Today's proposed rulemaking would clarify those regulatory requirements in a manner that is consistent with existing testing practices.

In particular, the Third Circuit examined the language of 40 CFR 227.6(c). That section currently provides that the potential for significant undesirable effects due to the presence of constituents listed at 40 CFR 227.6(a) "shall be determined by application of results of bioassays on liquid, suspended particulate, and solid phases of wastes according to procedures acceptable to EPA, and for dredged material, acceptable to EPA and the Corps of Engineers." EPA and the Corps had argued, and the District Court had found, that Sec. 227.6(c) reserves discretion in the agencies not to require bioaccumulation bioassay tests in the suspended phase if acceptable procedures for such tests are not available and approved for use. The Third Circuit, however, concluded that Sec. 227.6(c) requires suspended phase bioaccumulation bioassays even where neither EPA nor the Corps of Engineers has identified acceptable procedures. The Court read that section as reserving discretion in the agencies to determine how, but not whether, to conduct the tests. 57 F.3d at 332.

As described more fully in Part B of today's preamble, today's proposal would amend Secs. 220.2, 227.6, and 227.27 to more clearly reserve discretion regarding when bioassays are to be conducted. This would be done by clarifying that bioassays are not required if there are no Agency-approved procedures, as will be explained in more detail below. (EPA has previously amended Secs. 227.6(c)(2) and 227.27(b) of the ocean dumping regulations to clarify specifically that bioaccumulation tests are not required in the suspended phase. See 59 FR 26566 (May 20, 1994) (Interim Final Rule); 59 FR 52650 (October 18, 1994) (Final Rule)).

The Third Circuit opinion also addressed Sec. 227.27(d). That section provides that "appropriate sensitive benthic organisms," which are to be used in solid phase testing under Sec. 227.6(c)(2), means "at least one species each representing filter-feeding, deposit-feeding, and burrowing species chosen from among the most sensitive species accepted by EPA as being reliable test organisms to determine the anticipated impact on the site * * *". There are some marine species that exhibit more than one of the filter-feeding, deposit-feeding, and burrowing characteristics. Current Agency guidance specifies that when bioaccumulation and toxicity testing is performed on the solid phase, two species may be used for each of these two sets of tests, so long as the two species together exhibit all of the three species characteristics. The Third Circuit opinion, however, could be construed to indicate that three different test species should be required for solid phase bioassay tests. See 57 F.3d at 332, 333 n.2. (In the case before the Third Circuit, only one benthic organism was tested for bioaccumulation of dioxin in the solid phase before the District Court required additional testing. 861 F. Supp. at 1210.)

EPA is proposing to amend the definition of the "appropriate sensitive benthic organisms" used in benthic bioassay tests to mean at least two species that together exhibit filter-feeding, deposit-feeding, and burrowing characteristics. Consistent with current Agency guidance, the proposed language would clarify that the use of two such species is sufficient. In addition, today's proposal would amend the definition of "appropriate sensitive marine organisms," which

opinion has cast some doubt on this issue. To better clarify that the Agency has reserved its discretion in establishing procedures for when and how to perform bioassays, today's proposal would add a new definition of "bioassay" in proposed Sec. 220.2(j) to make clear that references in the regulations to "bioassays" means only those that have been approved for use by EPA, or in the case of dredged material, approved by EPA and the Corps. The intent is to make clear that in the absence of approved procedures, bioassays are not required by the regulations. As a conforming matter, today's proposal would also delete language in existing Secs. 227.6(c), (c)(2), c(3), and 227.27(a)(2) and (b) referring to bioassay procedures approved by the Agency. The language that is proposed to be deleted becomes redundant or unnecessary in light of the proposed definition of "bioassay."

The proposed definition of bioassay further makes clear that the Agency has reserved its discretion on the evaluative procedures to be used by employing the term "effects-based evaluations." This would be done to avoid any implication that the regulations intend to mandate only the exposure of organisms to materials or contaminants in laboratory tests. While such tests provide one way to evaluate the toxicity and bioaccumulation potential of contaminants from a material proposed for ocean disposal, they are not the only way to make such assessments. Improvements in the sciences of toxicology and risk assessment allow conclusions to be made about the potential environmental impacts of ocean disposal of a material without actually running such laboratory tests in all cases. As a result, an adequate evaluation of material proposed for ocean dumping does not always require the performance of specific laboratory biological tests for each material or contaminant evaluated. In general, as will be explained below, the following biological effects-based approaches can be used or combined to evaluate material proposed for ocean disposal: (1) Laboratory tests of organisms exposed to the material or results of such tests run on similar material; (2) toxicological and/or risk assessment models; or (3) screening evaluations that use highly protective estimates of exposure and effects assumptions.

As stated above, exposure of organisms to materials or contaminants in laboratory experiments provide one way to measure the potential effects of dumping the material. Results of such tests on similar material may also be adequate for determining the potential effects depending on a number of factors, including, but not limited to, the following: (1) Whether the methods used are consistent with currently approved test procedures; (2) whether organisms tested include those identified in 40 CFR 227.27 (c) and (d), as appropriate; and (3) whether the characteristics of the material tested are sufficiently similar to the material to be dumped so that one can reasonably predict the potential for environmental effects from dumping of the latter material by extrapolating from the results of testing on the former material.

The bioavailability of many contaminants in the environment also can be predicted through the use of toxicological and/or risk assessment models. For example, the equilibrium partitioning model is one approach that can be used to predict the bioavailable fraction of a contaminant in an aquatic sediment (Reference 2). A variation of this model, called the Theoretical Bioaccumulation Potential (TBP) model, has been used to screen dredged material for further bioaccumulation testing (Reference 6). A review of the use of the TBP model in dredged material evaluations indicates that it is highly protective because of the use of

means an effects-based evaluation which is to be conducted only if approved procedures exist for such evaluations; (2) by revising language to be clear that the Agency has reserved discretion to identify what, when, and how evaluation processes will be used; and (3) by clarifying that laboratory tests are not required in all cases. These changes make clear that the Agency has reserved its discretion in this complex technical area.

Approved Agency evaluation procedures can be found in the Blue Book, the Green Book, and Regional implementation manuals, or parties seeking to use other procedures may seek their approval from EPA, or in the case of dredged material, from EPA and the Corps. EPA does not intend to require evaluations that have not been approved, or that are not useful in a regulatory context. The determination as to the types of evaluations necessary to assess potential biological effects of material proposed for ocean dumping involves highly complex technical issues, and is impacted by evolving changes in the science and methods underlying such assessments. Today's action by the Agency is intended to preserve EPA's discretion in this complex technical area to ensure that the appropriate and up-to-date evaluations as approved by the Agency are conducted.

(2) Number and types of organisms to be tested

The current ocean dumping regulations define "appropriate sensitive marine organisms" and "appropriate sensitive benthic marine organisms" for use in laboratory tests. The type of organisms used can impact on the sensitivity of the tests in determining toxicity, and the existing regulations provide that the organisms to be used represent three categories of organisms. For the liquid and suspended phases the organisms to be used are defined in Sec. 227.27(c) "as at least one species each representative of phytoplankton or zooplankton, crustacean or mollusk, and fish species chosen from among the most sensitive species documented in the scientific literature or accepted by EPA as being reliable test organisms" • • • For the solid phase, these are defined in Sec. 227.27(d) as "at least one species each representing filter-feeding, deposit-feeding, and burrowing species chosen from among the most sensitive species accepted by EPA as being reliable test organisms" • • •

As discussed above, EPA has described a range of characteristics that the test species need to represent. The Agency believes this approach is protective of the marine environment because different marine organisms are known to exhibit different sensitivities to environmental contaminants (Reference 8). The Agency's approved testing allows the use of two different species that together cover the three species characteristics in 40 CFR 227.27(c) and (d). For example, the marine worm, *Nephtys incisa*, is both a deposit-feeder and burrower (Reference 9), and the amphipod crustacean, *Ampelisca abdita*, is both a filter-feeder and deposit-feeder (Reference 10).

The Third Circuit opinion, however, could be construed to indicate that 40 CFR 227.27(d) requires the use of three different test species for the solid phase. See, 57 F. 3d 328, 333 n. 2. EPA is proposing today to remove any ambiguity about the number and type of organisms specified by Secs. 227.27(c) and (d). This would be done by removing the words "one species each," and clarifying that what is meant is at least two species that together are representative of

Regulatory Flexibility Analysis for regulations having a significant impact on a substantial number of small entities. The RFA recognizes three kinds of small entities, and defines them as follows:

- (1) Small governmental jurisdictions: any government of a district with a population of less than 50,000.**
- (2) Small business: any business which is independently owned and operated and not dominant in its field, as defined by the Small Business Administration regulations under the Small Business Act.**
- (3) Small organization: any not for profit enterprise that is independently owned and operated and not dominant in its field.**

As discussed below in the discussion of Executive Order 12866, today's proposed rule does not impose economic burdens. Accordingly, EPA has determined that today's proposed rule would not have a significant impact on a substantial number of small entities, and that a Regulatory Flexibility Analysis therefore is unnecessary.

B. Paperwork Reduction Act

The Paperwork Reduction Act, 44 U.S.C. 3501 et seq., is intended to minimize the reporting and record keeping burden on the regulated community, as well as to minimize the cost of Federal information collection and dissemination. In general, the Act requires that information requests and record keeping requirements affecting ten or more non-Federal respondents be approved by the Office of Management and Budget. Since today's proposed rule would not establish or modify any information or record keeping requirements, it is not subject to the requirements of the Paperwork Reduction Act.

C. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant," and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to lead to a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more, or adversely and materially affecting a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;**
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;**
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations, of recipients thereof; or**
- (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.**

It has been determined that this proposed rule is not a "significant regulatory action" under the