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[Federal Register: May 20, 1994]

Part II

Environmental Protection Agency

40 CFR Part 227

Clarification of Suspended Particulate Phase Bioaccumulation Testing
Requirements for Material Dumped in Ocean Waters; Final Rule and
Proposed Rule
ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 227

[FRL-4886-5]

Clarification of Suspended Particulate Phase Bioaccumulation
Testing Requirements for Material Dumped in Ocean Waters

AGENCY: Environmental Protection Agency (EPA).
ACTION: Interim final rule.

SUMMARY: EPA today is issuing an interim final rule interpreting and clarifying the ocean dumping regulations. The rule clarifies provisions of the regulations related to bioaccumulation testing of the suspended particulate phase of materials proposed to be dumped at sea. This rule would make clear that for the suspended particulate phase of the dumped material, it is unnecessary to perform bioaccumulation testing. This clarification applies to the suspended particulate phase only and does not affect any other testing requirements contained in the regulations. EPA believes that bioaccumulation testing of the suspended particulate phase is unnecessary and inappropriate. The Agency has not previously interpreted or applied its regulations to require such testing. EPA is

issuing this rule to remove any possible ambiguity. This interim final rule is effective immediately. By separate notice of proposed rulemaking published elsewhere in today's Federal Register, EPA also is publishing and seeking comment on a proposed rule, identical to this interim final rule, that also clarifies that bioaccumulation testing for the suspended particulate phase of dumped material is not required.

DATES: This interim final rule becomes effective May 20, 1994. Written comments on this interim final rule will be accepted until 30 days after May 20, 1994. All comments must be postmarked or delivered by hand by June 20, 1994.

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

A copy of the comments and supporting documents cited in the reference section of this document 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 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), U. S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, telephone 202/260-8448.

SUPPLEMENTARY INFORMATION:

A. Statutory and Regulatory Background

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 Protection, Research, and Sanctuaries Act of 1972, as amended, 33 U.S.C. 1401 et seq. (hereinafter ``the Act'' or ``the MPRSA''). These regulations are contained in 40 CFR parts 220-229. They have not undergone substantive revision since 1977.

The MPRSA prohibits transporting materials from the United States for the purpose of ocean dumping without a permit, and prohibits U.S. instrumentalities and U.S. registered or flagged vessels from transporting materials from any location for the purpose of ocean dumping without a permit. The Act also prohibits the unpermitted dumping of material transported from a location outside the United States into the territorial sea or contiguous zone, if the dumping affects the territorial sea or U.S. territory.

Section 102(a) of the MPRSA requires the Administrator, in establishing criteria for ocean dumping, to apply the standards and criteria binding upon the United States under the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, (referred to in this rulemaking as ``the London Convention,'' ``the LC,'' or ``the Convention'', and formerly known as the London Dumping Convention), including its Annexes, to the extent EPA may do so without relaxing the requirements of MPRSA title I.

Annex I of the LC contains absolute prohibitions on the dumping of certain listed materials, except when they are present as ``trace contaminants'' or when they are ``rapidly rendered harmless'' by physical, chemical, or biological processes in the sea. Annex II of the LC contains a list of materials for which ``special care'' must be used in their disposal if they are present in ``significant amounts''. Annex

III of the LC contains a list of technical considerations to be considered in establishing criteria to implement the requirements of the Convention.

Under section 102(a) of the Act, 33 U.S.C. 1412(a), EPA has responsibility for issuing permits for ocean dumping of all materials other than dredged material. Under section 103(a) of the Act, 33 U.S.C. 1413(a), the Secretary of the Army has responsibility for issuing permits for ocean dumping of dredged material. This permitting authority has been delegated to the Army Corps of Engineers ('`the Corps``'). EPA's role in regard to Corps issuance of dredged material disposal permits is one of review and concurrence. (Although the Corps is the permitting authority for dredged material, section 103 of the Act establishes a substantial role for EPA with regard to evaluation of the impacts of dredged material ocean disposal.)

Under sections 102(a) and 103(a) of the Act, 33 U.S.C. 1412(a) and 1413(a), ocean dumping permits may be issued upon a determination that:

The dumping will not unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities.

The Act directs EPA to establish criteria for evaluating ocean dumping permit applications and requires that EPA consider the following factors in establishing these criteria:

- (A) The need for the proposed dumping.
- (B) The effect of such dumping on human health and welfare, including economic, aesthetic, and recreational values.
- (C) The effect of such dumping on fisheries resources, plankton, fish, shellfish, wildlife, shorelines and beaches.
- (D) The effect of such dumping on marine ecosystems particularly with respect to--
 - (i) The transfer, concentration, and dispersion of such material and its by-products through biological, physical, and chemical processes,
 - (ii) Potential changes in marine ecosystem diversity, productivity, and stability, and
 - (iii) Species and community population dynamics.
- (E) The persistence and permanence of the effects of the dumping.
- (F) The effect of dumping particular volumes and concentrations of such materials.
- (G) Appropriate locations and methods of disposal or recycling, including land-based alternatives and the probable impact of requiring use of such alternative locations or methods upon considerations affecting the public interest.
- (H) The effect on alternative uses of oceans, such as scientific study, fishing, and other living resource exploitation, and nonliving resource exploitation.
- (I) In designating recommended sites, the Administrator shall utilize, wherever feasible, locations beyond the edge of the Continental Shelf. (section 102(a), 33 U.S.C. 1412(a).)

Under section 103(b) of the Act, 33 U.S.C. 1413(b), when considering whether to issue a dredged material disposal permit, the Corps (as designee of the Secretary of the Army) must apply the EPA criteria relating to the effect of the dumping. If the Corps determines that the proposed dumping meets those environmental effects criteria, MPRSA Sec. 103(c), 33 U.S.C. 1413(c), provides that it must notify the EPA of its intention to issue the permit. EPA must then evaluate the environmental impacts of the proposed permit, and either concur or decline to concur in the Corps determination regarding compliance with the environmental effects criteria.

In the event that EPA nonconcur in a dredged material ocean dumping permit, section 103(d) of the Act, 33 U.S.C. 1413(d), allows the Secretary of the Army to seek a waiver of the criteria from the Administrator. To obtain a waiver, the Secretary must certify to the

Administrator that there are no economically feasible alternatives to the proposed dumping and must request a waiver of the specific criteria involved. The Act provides that the waiver shall be issued within 30 days, unless the Administrator finds that the dumping will result in unacceptably adverse impacts on municipal water supplies, shellfish beds, wildlife, fisheries, or recreational areas.

Under section 102(c) of the MPRSA, 33 U.S.C. 1412(c), EPA is further charged with designating recommended sites and times for dumping after consideration of the section 102(a) criteria described above. EPA must designate sites or times for dumping that mitigate adverse environmental impacts to the greatest extent practicable. EPA may also designate sites or times within which certain materials may not be dumped if, after consultation with the Corps, EPA finds that it is necessary to protect critical areas. In addition, section 103(b) of the Act, 33 U.S.C. 1413(b), provides that in considering appropriate locations for disposal of dredged material, the Corps shall utilize sites designated by EPA under section 102(c), to the maximum extent feasible.

Under section 103(b), in any case where the use of an EPA-designated dredged material disposal site is not feasible, the Corps may select an alternative site with EPA's concurrence. Selection of the site shall be based on the section 102(a) criteria previously described. Disposal at an alternative site shall be limited to five years, unless the site is subsequently designated by EPA pursuant to section 102(c). An alternative site may be used for an additional five years if:

- (1) No feasible site has been designated by EPA;
- (2) Continued use of the alternative site is necessary to maintain navigation and facilitate interstate commerce; and
- (3) EPA determines that the use of the site does not pose an unacceptable risk to human health, aquatic resources, or the environment.

Beginning on January 1, 1997, no ocean dumping permit, or authorization under section 103(e) of the Act, shall be issued for a site which does not have a site management plan, unless it is an alternative site selected under section 103(b).

B. Discussion

1. The Litigation

On June 1, 1993, Clean Ocean Action, an organization concerned with issues affecting oceanic water quality, and others ('`the plaintiffs''), filed a complaint and request for injunctive relief in the United States District Court against the U.S. Army Corps of Engineers, EPA, and the Port Authority of New York and New Jersey ('`the Port Authority''), challenging the issuance of a permit to the Port Authority (Clean Ocean Action v. York, Civil No. 93-2402, D. N.J.). The permit authorized the Port Authority to perform up to 500,000 cubic yards of maintenance dredging from two Port Authority facilities in Newark Bay, and to deposit the dredged material in the Atlantic Ocean at the New York Bight Dredged Material Disposal Site (also known as the Mud Dump Site). This area has been used to deposit dredged material since 1914.

The permit was issued on January 6, 1993, suspended on January 14, 1993, at the request of EPA, and reinstated on May 26, 1993, after further review by EPA and the Corps. The plaintiffs sought to have the permit invalidated on the basis that it was impermissibly granted. In a decision on June 7, 1993, the Court denied the plaintiffs' request to enjoin the dredging of the Port Authority facilities. However, the Court raised concerns in its decision that applicable regulations may not have been followed, and ordered the Port Authority to demonstrate that the permit had been lawfully issued. After submissions by the Port Authority and the plaintiffs, the Court issued a second opinion on July

6, 1993, which preliminarily determined that additional testing of the dredged material was required, because bioaccumulation testing on pelagic organisms in the suspended particulate phase had not been conducted prior to the granting of the permit to the Port Authority.

Under 40 CFR 227.6, materials proposed for dumping may not contain any of the following contaminants, unless these compounds are determined to be present only in trace amounts: (1) Organohalogen compounds; (2) mercury and mercury compounds; (3) cadmium and cadmium compounds; (4) oil of any kind, or in any form, transported for the purpose of dumping, to the extent that the discharge is not regulated under the Clean Water Act; and (5) known or suspected carcinogens, mutagens, or teratogens. Whether these contaminants are present in trace amounts in the material proposed for disposal is determined by conducting biological tests on living marine organisms. These tests, known as bioassays, must be conducted according to procedures approved by EPA and the Corps.

Bioassays are conducted using both marine organisms that live in the water column (known as pelagic organisms), and organisms that live on or in the ocean floor (known as benthic organisms). The results of these bioassays determine the potential for, and the extent of, impacts on the marine environment. These impacts include acute effects, such as lethality, as well as chronic effects, such as mutagenic growth and reproductive dysfunction. The potential for chronic effects are evaluated, in part, on the results of bioaccumulation bioassays, which indicate the degree to which contaminants have accumulated in the tissues of the organisms being tested. The Court determined that 40 CFR 227.6(c)(2) of the ocean dumping regulations required that suspended particulate phase bioaccumulation tests must be conducted on pelagic organisms, and that this requirement was not met prior to permit issuance.

As a result of this interim opinion, there is uncertainty as to whether permit applicants must perform bioaccumulation testing for the suspended particulate phase of dumped material. Today's rule, consistent with the Agency's interpretation of the existing regulations and its long-standing practice, is intended to clarify that suspended particulate phase bioaccumulation testing of dumped material is not required.

Suspended particulate phase bioaccumulation testing of dumped material is unnecessary and inappropriate for three principal reasons. First, exposure to the suspended particulate phase in the environment does not provide sufficient time for bioaccumulation; second, bioaccumulation testing of marine organisms in the solid phase already provides a worst case indication of the bioaccumulation potential, so that separate suspended phase testing would be unnecessary in any event; and third, no reliable tests are available for bioaccumulation in the suspended particulate phase of dumped materials. Further discussion of these points follows below.

1. Exposure to the Suspended Particulate Phase Does Not Provide Sufficient Time for Bioaccumulation

For appreciable bioaccumulation to occur in aquatic organisms, exposure to the potential bioaccumulant for up to one month is generally necessary. In contrast, suspended particulate material from dumping operations is a short-term and near-field (limited area) phenomenon in the marine environment (References 3, 4, 5). As a result, the potential for appreciable bioaccumulation in marine organisms from the suspended particulate phase is very low (Reference 6). This is due to the transient nature of the suspended particulate phase, as a result of dilution and dispersion by movement of the water column and settling of the material to the bottom, as well as the mobility of marine species that could be impacted by exposure to the suspended particles (References 1, 2, 7). Recent Agency state-of-the-art plume tracking studies (Reference 15), which examined the disposal of the New York/New Jersey Port Authority dredged material, have also confirmed the transient nature of the suspended phase, finding that suspended

particulate phase plumes could be acoustically and physically detected for only a few hours after dumping. Studies at the Mud Dump Site (where the water depth is approximately 90 feet) demonstrate the rapid dilution and dispersion of dumped material following ocean dumping. Dissolved metals and non-polar organic compounds such as dioxin were diluted at least 3,000 times within 15 minutes of dumping; suspended particulate matter was diluted at least 10,000 times in the same time period (References 15, 16). After two hours, the metals and non-polar organics were diluted up to 64,000 times; the suspended particulates were diluted by more than 500,000 times (Reference 18).

Given the physical characteristics of suspended particulate plumes, and the life history characteristics of the marine species potentially impacted by them, the potential exposure durations are of such short term (at most, only a few hours), that appreciable bioaccumulation is extremely unlikely (References 8, 9). Reflecting this, the 1977 edition of EPA's Dredged Material Testing Manual (known as the ``Green Book'') states ``* * * it is considered unlikely that bioaccumulation would occur at the disposal site from the suspended particulate phase, since animals would be exposed to it for such short periods [of time], due to dilution [of the dumped material in the water column] * * *'' (Reference 1). The manual concluded, ``(b)ioaccumulation from the suspended particulate phase is of secondary concern (compared to the solid phase), except in special cases, due to the short exposure time resulting from rapid dispersion of the suspended particulates by mixing'' (Reference 1). This view was based on studies performed by the Corps (Reference 13). The 1991 edition of the Dredged Material Testing Manual corroborates this view: ``Because concern about bioaccumulation focuses on the impact of gradual uptake over long exposure times, primary attention [must be] given to the dredged material deposited on the bottom. Bioaccumulation from the material in the water column is generally of minor concern, due to the short exposure time and the low exposure concentrations, resulting from rapid dispersion and dilution'' (Reference 2).

As noted above, for appreciable bioaccumulation to occur in a marine organism, a period of exposure for up to one month is generally necessary, by whatever exposure route is used, whether it is food ingestion, absorption through gill membranes from the water column, or a combination of these mechanisms (Reference 19). Designing and conducting a suspended particulate phase water column bioassay that maintains necessary conditions for a long enough time to induce bioaccumulation would not be representative of actual in vivo (real world) conditions that would occur as a result of dumping (Reference 18). Furthermore, as will be discussed below, the benthic bioaccumulation tests that are run in evaluating material proposed for dumping are carried out for a 28-day period, and expose test organisms to undiluted sediment. As a result, those test results provide a more conservative estimate of bioaccumulation potential, including any bioaccumulation that could possibly result from limited exposure to the suspended particulate phase.

2. Bioaccumulation Results From Solid Phase Testing Provide a Worst Case Representation of Bioaccumulation in the Suspended Particulate Phase

In evaluating material proposed for ocean disposal, including dumped material, bioaccumulation tests on the solid phase of dumped material are performed on appropriately sensitive benthic marine organisms, using procedures approved by EPA (and the Corps in the case of dredged material). See 40 CFR 227.6(c) (3) and 227.27(d). These solid phase tests are run using the whole material to be dumped, including the fine particles that make up the suspended particulate phase. The tests are set up to allow the fine particles of the suspended phase to settle out so that they are available for direct consumption as a food source for sensitive deposit-feeding test organisms (References 1, 2). This mimics real-world exposure scenarios and, as explained below, also represents a worst case estimate of suspended phase bioaccumulation

potential.

Research conducted by the Agency and the Corps (References 5, 17, 18) has shown that the greatest potential for bioaccumulation at the dumpsite is not in the water column, but in the benthic environment. This is because material deposited on the ocean bottom provides a habitat for benthic marine organisms for the extended periods of time necessary for bioaccumulation to occur.

Appropriate solid phase bioaccumulation test organisms have been identified by EPA and the Corps (Reference 2). No appropriate organisms have been identified for bioaccumulation testing for the suspended particulate phase. These appropriate organisms live in benthic sediments, and ingest them as part of their nutritive requirements. They readily accumulate organic compounds, thereby providing a reliable indication of the bioaccumulation potential of the material. They have long life cycles and are hardy enough to survive the stress of exposure to contaminants so that they can be exposed for periods long enough to result in bioaccumulation. These organisms also have high tissue lipid content which effectively bioaccumulate organic compounds (References 7, 8).

This extended benthic exposure, using sediment-ingesting organisms with high lipid content, presents a conservative estimate of the potential for bioaccumulation from the suspended phase. This is because the duration of exposure in the solid phase is far greater than it would be in the water column of a dumpsite. In addition, benthic test organisms live in the sediment, are in direct contact with it, and also consume it, therefore substantially increasing their exposure to contaminants in the sediment, as compared to water column organisms.

Thus, even though there is only limited potential for bioaccumulation in the suspended particulate phase, testing of the solid phase of dumped material provides the Agency with all the necessary information to determine whether there is significant undesirable bioaccumulation from either the suspended particulate phase or the solid phase; that is, whether a listed material is present in more than trace amounts, with regard to bioaccumulation.

3. No Reliable Tests Are Available For Bioaccumulation in the Suspended Particulate Phase

Bioaccumulation tests in the suspended particulate phase would require the use of accepted species, as well as procedures approved by EPA (and the Corps for dredged material), to provide reliable information on the potential for bioaccumulation of the contaminants at the dump site. See 40 CFR 227.6(c)(2) and 227.27(c). There are no such tests that are currently recommended, approved, or required, either in the 1977 or 1991 editions of the ocean dumping dredged material testing manual (the "Green Book") (References 1, 2), or the bioassay procedures for the ocean disposal permit program (Reference 14). In contrast, the Green Book specifies procedures for bioaccumulation testing of the solid phase. Bioaccumulation testing of the suspended particulate phase is not run in any nationwide ocean disposal program, since such testing for regulatory purposes is not a standard practice. One reason for this is that the interpretation of these suspended particulate phase bioassay tests for human or ecological impacts would be difficult, since there are no meaningful indices against which to measure these test results (Reference 1).

Approved benthic bioaccumulation tests generally require large volumes of tissue from the test organism to adequately measure effects. That volume of tissue is not available in the majority of standardized laboratory organisms for water column suspended particulate phase toxicity testing without using thousands of individual organisms. Exposure durations in laboratory tests would also require exposures far exceeding exposure times in the real-world environment of a dump site in order for bioaccumulation to occur. The results of using such large numbers of organisms in non-standardized bioaccumulation tests at unrealistic exposure durations and conditions would be very difficult to interpret, or to relate to ecological impact or human health effects

(Reference 1).

C. Today's Rule

Today's rule clarifies that bioaccumulation testing of the suspended particulate phase is not required. This is being done by adding a clarifying and interpretive statement to Sec. 227.6(c)(2), which was the particular section of the regulations interpreted by the July 1993 interim opinion in Clean Ocean Action as appearing to require such tests. Today's rule also adds a clarifying statement to Sec. 227.27(b) of the regulations. Although not directly at issue in the Court's interim ruling, this provision of the regulations also addresses testing requirements. In order to avoid any implication that this provision might also call for suspended particulate phase bioaccumulation testing, EPA believes a similar clarification is appropriate.

D. References

1. ``Ecological Evaluation of Proposed Discharge of Dredged Material into Ocean Waters'', U.S. Environmental Protection Agency and U.S. Army Corps of Engineers, Second Printing, April 1978.
2. ``Evaluation of Dredged Material Proposed for Ocean Disposal, Testing Manual'', U.S. Environmental Protection Agency and U.S. Army Corps of Engineers, April 1991.
3. ``Evaluation of Dredged Material Pollution Potential'', James M. Brannon, U.S. Army Waterways Experiment Station, Technical Report DS-78-6, August 1978.
4. ``Aquatic Dredged Material Disposal Impacts'', Thomas D. Wright, U.S. Army Waterways Experiment Station, Technical Report DS-78-1, August 1978.
5. ``Summary of U.S. Army Corps of Engineers and U.S. Environmental Protection Agency Field Verification Program'', report by Battelle Ocean Sciences, U.S. Army Waterways Experiment Station, Technical Report D-88-6, October 1988.
6. ``The transport and fate of particulate hydrocarbons in an urban fjord-like estuary'', P.P. Murphy, et al., in *Estuarine, Coastal, and Shelf Science*, 27(5):461-482, 1988.
7. ``Bioaccumulation of organic micropollutants from sediments and suspended particulates by aquatic animals'', J.M. Neff, in *Fresenius Zeitschrift fur Analytische Chemie*, 319(2):132-136, 1984.
8. ``Accumulation mechanisms and geographical distribution of PCBs in the North Sea'', K. Delbeke and C. Joiris, pp. 771-779, in ``Environmental Protection of the North Sea'', edited by P.J. Newman and A.R. Agg, Heinemann Publishers, Oxford, 1988.
9. ``Organochlorine dynamics between zooplankton and their environment: A reassessment'', G.C. Harding, in *Marine Ecology Progress Series*, 33:167-191, 1986.
10. ``Guidance for Performing Tests on Dredged Material To Be Disposed in Ocean Waters'', U.S. Army Corps of Engineers, New York District, and U.S. Environmental Protection Agency, Region 2, 21 December 1984.
11. ``2,3,7,8-TCDD, 2,3,7,8-TCDF, and PCBs in Marine Sediments and Biota: Laboratory and Field Studies'', R.J. Pruell, et al., report to U.S. Army Corps of Engineers, New York District, U.S. Environmental Protection Agency, Environmental Research Laboratory, Narragansett, RI, March 1990.
12. ``Accumulation of Polychlorinated Organic Contaminants From Sediment by Three Benthic Marine Species'', R.J. Pruell, et al., in *Archives of Environmental Contamination and Toxicology*, 24:290-297, 1994.
13. ``Field Study of the Mechanics of the Placement of Dredged Material at Open Water Disposal Sites'', Volume 1 and Appendices, H.J. Bokuniewicz, et al., U.S. Army Corps of Engineers Dredged

Material Research Program, Technical Report D-78-7, April 1978.

14. ``Bioassay Procedures for the Ocean Disposal Permit Program'', U.S. Environmental Protection Agency, Office of Research and Development, March 1978.

15. ``Plume Tracking of Dredged Material Containing Dioxin'', Draft Final Report, P. Dragos and C. Peven, Battelle Ocean Sciences Laboratory, Report to EPA Region 2 under Contract No. 68-C2-0134, 1994.

16. ``Plume Tracking Model Verification Project'', Draft Final Report, P. Dragos and D. Lewis, Battelle Ocean Sciences Laboratory, Report to EPA Region 2 under Contract No. 68-C2-0134, 1993.

17. ``Synthesis of Research Results: Applicability and Field Verification of Predictive Methodologies for Aquatic Dredged Material Disposal'', J.H. Gentile et al., U.S. Army Waterways Experiment Station, Technical Report D-88-5, 1988.

18. ``Use of Suspended Phase Bioaccumulation Tests as Part of the Evaluation of the Suitability of Material for Ocean Disposal'', Oceans and Coastal Protection Division, EPA, Washington, D.C., May 1994.

19. ``Guidance Manual: Bedded Sediment Bioaccumulation Tests'', H. Lee, et al., U.S. Environmental Protection Agency, Environmental Research Laboratory, Newport, OR, September 1989.

Compliance With Other Laws and Executive Orders

A. Administrative Procedure Act

The Administrative Procedure Act (APA), 5 U.S.C. 551 et seq., generally requires notice of proposed rulemaking to be published in the Federal Register with an opportunity for public comment prior to promulgation of a final rule. The APA also provides, however, that the normal notice and comment requirements do not apply to ``interpretative rules'' or to cases in which

``[T]he Agency for good cause finds (and incorporates the finding and a brief statement of reasons therefore in the rule issued) that notice and public procedures thereon are impracticable, unnecessary, or contrary to the public interest. 5 U.S.C. 553(b) (A) and (B).

EPA believes that the ``interpretative rule'' and ``good cause'' exceptions apply to this interim final rule. To ensure that the Agency has the full benefit of public comment on any issues surrounding the bioaccumulation testing of the suspended particulate phase, however, EPA is publishing a proposal elsewhere in today's Federal Register that seeks public comment on this interim final rule and other alternatives that would accomplish the same regulatory result. EPA will take final action on the proposal by reissuing the interim final rule as a final rule or amending it as appropriate in light of comments received. Today's interim final rule will remain in effect until EPA takes final action on the proposal.

Interpretative Rule Exception

Today's interim final rule interprets and clarifies the existing ocean dumping regulations, consistent with EPA's longstanding interpretation and practice, by eliminating any implication that bioaccumulation testing of the suspended particulate phase is required in order to obtain a permit to dump material in ocean waters. Today's rule is therefore an interpretative rule that is exempt from notice and comment requirements under section 553(b) (A).

As EPA has explained in its submissions to the Court in the Clean Ocean Action case, the Agency does not interpret the existing ocean dumping regulations to require bioaccumulation testing of the suspended

particulate phase. The existing regulations provide that with certain exceptions, the ocean dumping of materials containing certain listed constituents as other than trace contaminants will not be approved. 40 CFR 227.6(a). These listed constituents will be considered to be present as trace contaminants:

Only when they are present in materials otherwise acceptable for ocean dumping in such forms and amounts in liquid, suspended particulate, and solid phases that the dumping of the materials will not cause significant undesirable effects, including the possibility of danger associated with their bioaccumulation in marine organisms. 40 CFR 227.6(b)

40 CFR 227.6(c) provides that the potential for undesirable effects due to the presence of these constituents 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.'' (Emphasis added). 40 CFR 227.6(c) (2) and 227.27(b) together state that the bioassay tests on the suspended particulate phase should be conducted with appropriate sensitive marine organisms ``accepted by EPA as being reliable test organisms to determine the anticipated impact of the wastes on the ecosystem at the disposal site'' using procedures accepted by EPA and the Corps. (Emphasis added). The regulations thus vest substantial discretion in EPA and the Corps to determine the testing procedures and test organisms to be used in assessing the anticipated effects of dumping the material.

Accordingly, as the Agency explains more fully earlier in this notice, it is EPA's longstanding interpretation of the existing ocean dumping regulations that the existing regulations do not require bioaccumulation testing of the suspended particulate phase. It is the Agency's longstanding practice not to require these tests, because: (1) No reliable tests are available for bioaccumulation in the suspended particulate phase; (2) exposure to the suspended particulate phase in the environment does not provide sufficient time for bioaccumulation; (3) the bioaccumulation testing of marine organisms in the solid phase provides a worst case indication of the bioaccumulation potential, so that separate suspended phase testing would be unnecessary in any event. Bioaccumulation testing of the suspended particulate phase is not run in any nationwide ocean disposal program, including that administered by EPA and the Corps under the MPRSA because bioaccumulation testing of the suspended particulate phase is not a standard practice.

As the Agency also explains more fully earlier in this notice, no such tests were recommended, approved, or required in either the 1977 or the 1991 editions of the ocean dumping dredged material testing manual (the Green Book), or the bioassay procedures for the ocean permit disposal program. (The Green Book does, however, specify bioaccumulation tests of whole sediment on benthic species. See Green Book, Section 12.) EPA issued the 1991 Green Book after noticing its availability for comment in the Federal Register and considering the comments it received, adding further weight to the Agency's interpretation of the regulations as not requiring bioaccumulation testing of the suspended particulate phase. 55 FR 8191 (March 7, 1990) (notice of availability of draft Green Book); 56 FR 13826 (April 4, 1991) (notice of availability of final Green Book).

Accordingly, in light of the Agency's position regarding the proper interpretation of the existing regulations, and in the absence of any recommended, approved or required procedures for bioaccumulation of the suspended particulate phase, it is appropriate to issue today's rule as an interpretative rule that will be effective on the date of publication in the Federal Register, and will remain in effect until completion of the proposed notice and comment rulemaking that is referenced above.

Good Cause Exception

EPA also believes that the "good cause exception at 5 U.S.C. 553(b) (B) provides an independent basis for issuing today's interim final rule without notice and comment. EPA estimates that issuing this rule through normal notice and comment procedures would take four to six months. Delaying the issuance of this rule for that period of time would be contrary to the public interest as evidenced by the urgent safety and economic concerns that have arisen in the Port of New York and New Jersey.

The uncertainties surrounding the need for bioaccumulation testing of the suspended phase that have followed the Court's interim ruling in the Clean Ocean Action case, coupled with the lack of practicable and reliable suspended phase bioaccumulation tests, has complicated and ultimately delayed the issuance of ocean dumping permits that are essential for dredging projects in New York/New Jersey Harbor. Twenty-five applications are pending before the Corps of Engineers from non-federal entities to dispose of dredged material at sea from projects proposed for the Port of New York. There are also at least eight Federal projects that are being delayed by uncertainty over the testing requirements. Since EPA's interpretation of the regulations differs from the interpretation reflected in the Court's interim ruling in the Clean Ocean Action case, there is a real possibility of legal challenge whether or not the applicants are required to perform bioaccumulation testing of the suspended particulate phase. The Corps has informed EPA that it is withholding issuance of seven of these permits, and that analysis and review of the other 18 have been delayed as well, solely because of these legal uncertainties surrounding the testing requirements that are addressed by today's interim final rule.

If navigation channels and berthing areas are not routinely dredged to adequate depths to accommodate the vessels they service, there is an increased potential for grounding of vessels and barges that transport bulk goods, petroleum products, chemicals, and other materials. There is also an increased need to lighter (partially off-load) vessels while they are moored in deeper waters. Both groundings and lightering operations can result in serious environmental consequences such as spills, as well as increased safety risks to vessel operators and their crews. Finally, concerns about safety and the need to lighter affect the volume of shipping and the amount of cargo that can enter a port. All of these concerns have resulted in a situation in New York/New Jersey Harbor that EPA believes must be addressed by the issuance of this rule as an interim final rule with immediate effectiveness.

For example, on April 13, 1994, a cargo vessel collided with a petrobulk vessel that was engaged in lightering operations off Stapleton, Staten Island, New York. (USCG Case No. MC94007346). Although EPA is unable to confirm that the petrobulk vessel was lightering because navigation channels or berthing areas have not been dredged, this accident illustrates the hazard that lightering operations can pose. Dredging of the Port would lessen the need for lightering and consequently lower the risk of collision and the potential for injury and environmental harm.

Delays in dredging also are beginning to cause serious economic impacts to the Port of New York/New Jersey. As an example, on large cargo vessels, it is estimated that for every one foot of depth lost below a vessel's controlling draft, the vessel must carry 100 fewer cargo containers. These containers are either diverted or the vessels carrying them are lightered prior to entering the Port. Each container holds between fifteen and twenty tons of cargo. Approximately two to three thousand container vessels enter the Port each year. The Port Authority of New York and New Jersey estimates that two to three percent of the total tonnage of cargo previously entering the Port is diverted to other ports due to decreased depths in the navigation channels and berthing areas. The New York Shipping Association believes this estimate is conservative.

Similarly, a petroleum refining facility in Perth Amboy, New Jersey

submitted a dredging permit application to the Corps of Engineers on February 2, 1991. Tankers servicing this facility normally draw thirty-six feet of water; however, the current depth at the facility is thirty-two feet. The result has been loss of revenue at a rate of \$2 million per year, as estimated by the company, from space left empty on tankers to decrease draft and allow for safe berthing at the facility. It is not possible to offset this loss by increasing the number of ships servicing this facility because of the lack of berthing area. According to the New York Shipping Association, there is a facility in Yonkers, New York that has a charter that requires it to provide thirty feet of water. The water depth at this facility currently is twenty-four feet as a result of permitting delays. Captains are docking, but only ``under protest.'' This means that the facility is liable for damage that may occur to a ship as a result of inadequate water depths. It is not feasible for the facility to compensate for this loss by trucking.

Finally, the New York Shipping Association has reported that the International Longshoremen's Association has lost 300,000 man hours of wages during the year ending September 30, 1993 because of cargo diversions. This equates to somewhere in the neighborhood of \$6 million in lost wages. The Port Authority of New York and New Jersey has reported that 100,000 hours were lost during a three month period in the fall of 1993 because of cargo diversions. This equates to somewhere in the neighborhood of \$2 million for those three months.

In the case of four permit applicants, there is special need for dredging permit decisions to be issued expeditiously. The proposed permits for these projects included restrictions limiting dredging to certain times of the calendar year in order to protect juvenile striped bass, winter flounder, anadromous fish including various herrings and alewives, and the endangered shortnose sturgeon. If dredging is not completed for these projects this fall, it would be further delayed between three and a half and eleven months as a result of these restrictions. For these applicants to complete the dredging this fall, they must receive a permit within the next month.

These serious safety and economic problems can not be abated unless New York/New Jersey Harbor is dredged to safe depths. According to the Corps of Engineers, issuance of this rule as an interim final rule will enable it to issue seven dredging permits immediately, and to proceed with the review of the remaining 18 permits expeditiously, without resulting in any lesser protection of the ocean environment at the Mud Dump Site. The practical effect of this interim final rule clarifying the testing requirements will be limited to New York/New Jersey Harbor because this is the only area where the issue has arisen whether suspended particulate phase bioaccumulation testing is required. It is not conducted elsewhere in the ocean dumping program. Accordingly, EPA believes that delaying the issuance of this final rule to obtain public comment would be contrary to the public interest.

Immediate Effectiveness

The APA also generally requires that substantive rules be published 30 days prior to their effective date except:

``(1) A substantive rule which grants or recognizes an exemption or relieves a restriction;

* * * * *

or (3) as otherwise provided by the agency for good cause found and published with the rule''. 5 U.S.C. 553(d).

EPA is issuing today's interim final rule as immediately effective under the provisions of 5 U.S.C. 553(d). As detailed elsewhere in this notice, today's rule clarifies the regulations to eliminate potential unnecessary testing of material proposed for ocean disposal. It thus serves to ``relieve a restriction'' within the meaning of APA section 553(d)(1). In addition, for the reasons previously set forth in this preamble as to why public comment is unnecessary, EPA also believes there is ``good cause'' for issuing today's interim final rule in immediately effective form.

B. 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 effecting 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;

(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 rule is not a ``significant regulatory action'' under the terms of Executive Order 12866, and is therefore not subject to OMB review.

C. 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 rule would not establish or modify any information or record-keeping requirements, it is not subject to the requirements of the Paperwork Reduction Act.

D. Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA), 5 U.S.C. 601 et seq., EPA must prepare a 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 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 above in the discussion of Executive Order 12866, today's interim final rule does not impose economic burdens. Accordingly, EPA has determined that today's rule would not have a significant impact on a substantial number of small entities, and that a Regulatory Flexibility Analysis therefore is unnecessary.

List of Subjects in 40 CFR Part 227

Environmental protection, Water pollution control.

Dated: May 13, 1994.

Carol M. Browner,
Administrator, Environmental Protection Agency.

For the reasons set out in this preamble, part 227 of title 40 of the Code of Federal Regulations is amended as follows:

PART 227--[AMENDED]

1. The authority citation for part 227 continues to read as follows:

Authority: 33 U.S.C. 1412 and 1418.

2. Section 227.6 is amended by adding at the end of paragraph (c) (2) a footnote 1 to read as follows:

Sec. 227.6 Constituents prohibited as other than trace contaminants.

* * * * *

(c) * * *

(2) * * * \1\

\1\This provision shall not be interpreted as requiring bioaccumulation testing of the suspended particulate phase of dumped materials.

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3. Section 227.27 is amended by adding at the end of paragraph (b) a footnote 2 to read as follows:

Sec. 227.27 Limiting permissible concentration (LPC).

* * * * *

(b) * * *

\2\This provision shall not be interpreted as requiring bioaccumulation testing of the suspended particulate phase of dumped materials.

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