RULES and REGULATIONS

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 228

[FRL-3450-2]

Ocean Dumping; Designation of a Site

Tuesday, September 20, 1988

***36455** AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) today designates four dredged material disposal sites located offshore of Arecibo, Mayaguez, Ponce, and Yabucoa, Puerto Rico, for the disposal of dredged material removed from the Arecibo, Mayaguez, Ponce, and Yabucoa harbors, respectively. This action is necessary to provide acceptable ocean dumping sites for the current and future disposal of dredged material. These final site designations do not authorize any actual disposal of dredged material. Authorization to ocean dump dredged material at the sites is granted only by permit and other administrative proceedings conducted by the U.S. Army Corps of Engineers (COE).

EFFECTIVE DATE: These designations shall become effective on October 20, 1988.

ADDRESS: Mario P. Del Vicario, Chief, Marine and Wetlands Protection Branch, EPA, Region II, 26 Federal Plaza, Room 837, New York, New York 10278-0090.

The file supporting this proposed designation is available for public inspection at the above address.

The draft and final environmental impact statements for the designation of the Arecibo, Mayaguez, Ponce, and Yabucoa dredged material disposal sites evaluate the environmental impacts associated with the site designations. These documents are available for public review at the following locations:

U.S. Environmental Protection Agency, Environmental Impacts Branch, 26 Federal Plaza, Room 500, New York, New York 10278-0090

U.S. Environmental Protection Agency, Caribbean Field Office, 1413 Avenida Fernandez Juncos—Stop 20, Santurce, Puerto Rico

U.S. Environmental Protection Agency, Public Information Reference Unit, Room 2904 (Rear), 401 M Street SW., Washington, DC 20460

U.S. Army Corps of Engineers, Jacksonville District Office, 400 W. Bay Street, Jacksonville, Florida 32232

U.S. Army Corps of Engineers, San Juan Area Office, 400 Avenida Fernandez Juncos, San Juan, Puerto Rico

Puerto Rico Department of Natural Resources, Oficina 204, Centro Gubernamental, Avenida Rotarios, Arecibo, Puerto Rico

Puerto Rico Department of Natural Resources, Oficina A, Centro Commercial, 2 Alturas de Mayaguez Carr., Mayaguez, Puerto Rico

Puerto Rico Department of Natural Resources, 5 Calle Celenia, Humacao, Puerto Rico

Puerto Rico Department of Natural Resources, Hospital Sub-Regional, Ponce, Puerto Rico

FOR FURTHER INFORMATION CONTACT: Mario P. Del Vicario, Chief, Marine and Wetlands Protection Branch, EPA Region II, 26 Federal Plaza, Room 837, New York, New York 10278-0090 (212) 264-5170

SUPPLEMENTARY INFORMATION:

A. Background

Section 102(c) of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended, 33 U.S.C. 1401 et seq. (“the Act”), gives the Administrator of EPA the authority to designate sites where ocean dumping may be permitted. On October 1, 1986, the Administrator delegated the authority to designate ocean dumping sites for dredged material to the Regional Administrator of the EPA Region in which the site is located. These site designations are being made pursuant to that authority.

Section 103 of the Act gives authority to the Secretary of the Army to issue dredged material disposal permits. Such permits are evaluated according to criteria promulgated in the EPA Ocean Dumping Regulations (40 CFR Chapter I, Subchapter H, Part 227) and are reviewed by EPA for concurrence before issuance. In all cases, a need for ocean disposal must be established before issuance of a disposal permit. Section 103 of the Act also requires the Secretary to use recommended sites designated by EPA to the maximum extent feasible.

The EPA Ocean Dumping Regulations (40 CFR Chapter I, Subchapter H, § 228.4) state that ocean dumping sites will be designated by publication in Part 228. A list of “Approved Interim and Final Ocean Dumping Sites”, including the interim sites for Arecibo, Mayaguez, and Ponce, was published on January 11, 1977 (42 FR 2461 et seq.). The interim site for Yabucoa was added to the list on May 11, 1979 (44 FR 27662).

B. EIS Development

Section 102(c) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 et seq., requires that Federal agencies prepare an environmental impact statement (EIS) on proposals for major Federal actions significantly affecting the quality of the human environment. The objective of NEPA is to build into Agency decision-making processes careful consideration of all environmental aspects of proposed actions. Although NEPA does not apply to EPA activities of this type, EPA has voluntarily made a commitment to prepare EISs in connection with ocean dumping site designations (39 FR 16186; May 7, 1974).

The EPA has prepared a Final EIS entitled Final Environmental Impact Statement for the Designation of Ocean Dredged Material Disposal Sites for Arecibo, Mayaguez, Ponce, and Yabucoa, Puerto Rico. On May 27, 1988, a notice of availability of the EIS for public review and comment was published in the Federal Register. The com-

ment period closed on July 11, 1988. Comment letters were received from the Commonwealth of Puerto Rico, Environmental Quality Board, and the Department of Natural Resources, stating that they had no objections or further comments regarding the Final EIS. The State Office of Historic Preservation requested that they be ***36456** provided with the locations of the proposed disposal sites on U.S.G.S. quadrangles. They were advised that this information is not available since the sites are located offshore of the area covered by the quadrangles. Subsequently, they responded that they had no further concerns. The Puerto Rico Electric Power Authority agreed with the selection of the sites, but suggested that they be enlarged to accommodate dredging projects from nearby harbors. However, the scope of the EIS for these site designations did not incorporate expanding the sites. Need for modification and/or expansion of the sites to accommodate dredging in harbors other than those identified in the EIS is considered a separate action.

The Proposed Rule for these designations was published on May 24, 1988, and the comment period closed on July 8, 1988. The Caribbean Fishery Management Council requested an additional 60 days to review the Proposed Rule, but no further comments were received.

The action discussed in the EIS is the designation for continuing use of four ocean disposal sites for dredged material. The purpose of this designation is to provide an environmentally acceptable location for the ocean disposal of dredged material. Ocean disposal at the sites will only be allowed on a case-by-case basis after the U.S. Army Corps of Engineers (COE), Jacksonville District, has issued a permit authorizing disposal. EPA reviews the public notice announcing a complete permit application and provides comments on the proposed action prior to permit issuance. The EIS discusses the need for site designation and examines ocean disposal sites and alternatives to the proposed action. Three sites were examined for Arecibo (the interim site and two alternate sites); at all other locations, four sites were evaluated (the interim site and three alternate sites). Land-based disposal alternatives were examined in some detail in the draft EIS and will be re-examined during decision-making on individual permit applications for the ocean dumping of dredged material.

The EIS presents the information needed to evaluate the suitability of ocean disposal areas for final designation and includes the results of a disposal site environmental study completed in 1984. All activities associated with these final site designations were, or are, being conducted in accordance with the Act, the Ocean Dumping Regulations, and other applicable Federal environmental legislation.

C. Site Designations

The first site is located approximately 1.5 nautical miles north of Arecibo harbor, Puerto Rico, and occupies an area of approximately 1 square nautical mile. Water depths within the site range from 101 to 417 meters. The corner coordinates of the site are as follows:

18°31'00" N., 66°43'47" W.

18°31'00" N., 66°42'45" W.

18°30'00" N., 66°42'45" W.

18°30'00" N., 66°43'47" W.

The second site is located approximately 6 nautical miles west of Mayaguez harbor, Puerto Rico, and occupies an area of approximately 1 square nautical mile. Water depths within the site range from 351 to 384 meters. The

corner coordinates of the site are as follows:

18°15'30" N., 67°16'13" W.

18°15'30" N., 67°15'11" W.

18°14'30" N., 67°15'11" W.

18°14'30" N., 67°16'13" W.

The third site is located approximately 4.5 nautical miles south of Ponce harbor, Puerto Rico, and occupies an area of approximately 1 square nautical mile. Water depths within the site range from 329 to 457 meters. The corner coordinates of the sites are as follows:

17°54'00" N., 66°37'43" W.

17°54'00" N., 66°36'41" W.

17°53'00" N., 66°36'41" W.

17°53'00" N., 66°37'43" W.

The fourth site is located approximately 6 nautical miles east of Yabucoa harbor, Puerto Rico, and occupies an area of approximately 1 square nautical mile. Water depths within the site range from 549 to 914 meters. The corner coordinates of the site are as follows:

18°03'42" N., 65°42'49" W.

18°03'42" N., 65°41'47" W.

18°02'42" N., 65°41'47" W.

18°02'42" N., 65°42'49" W.

Use of the sites will be restricted to the disposal of dredged material associated with maintenance dredging projects originating within Arecibo, Mayaguez, Ponce and Yabucoa harbors. Continued use of a site will be restricted or terminated if disposal operations at the site at any time cause unacceptable adverse impacts.

D. Regulatory Requirements

Five general criteria are used in the selection and approval of ocean disposal sites for continuing use. Sites are selected so as to minimize interference with other marine activities, to keep temporary perturbations associated with the dumping from causing impacts outside the disposal site, and to permit effective monitoring to detect any adverse impacts at an early stage. Where feasible, locations off the Continental Shelf are chosen. If at any time disposal operations at an interim site cause unacceptable adverse impacts, the use of that site will be terminated as soon as a suitable alternate disposal site can be designated. The general criteria are given in § 228.5 of the EPA Ocean Dumping Regulations, while § 228.6 lists eleven specific factors used in evaluating a proposed disposal site to ensure that the general criteria are met.

Normally, EPA chooses sites where the dredged material can be contained within the site after disposal. This is generally feasible in shallow water (10 to 50 meters) environments where valuable natural resources will not be placed at risk. In Puerto Rico, however, shallow water environments typically are inhabited by corals. To avoid direct disposal on coral, deeper water sites are selected. As a consequence of selecting deeper water sites, a portion of the dredged material may be transported outside of the site boundaries; however, the effects of such transport is preferable to disposal on coral reefs.

The four sites designated are acceptable under the five general criteria. The characteristics of the sites are discussed below in terms of the eleven specific factors.

D.1 ARECIBO

D.1.1 Geographical position, depth of water, bottom topography, and distance from coast. (40 CFR 228.6(a)(1))

The Arecibo site is located within the coordinates listed in the previous section of this final rule and is approximately 1 nautical mile north of the nearest coastline. The bottom of the site slopes sharply to the north, with depths ranging from 101 to 417 meters.

D.1.2 Location in relation to breeding, spawning, nursery, feeding, or passage areas of living resources in adult or juvenile phases. (40 CFR 228.6(a)(2))

The Arecibo site is 1 to 2 nautical miles from the nearest significant breeding, spawning, or nursery area of near shore living resources. Because the site is typical of nearby well-flushed open ocean locations, there is no evidence to suggest that the site has any unique importance as feeding or passage areas for biota.

Endangered sea turtles and the brown pelican inhabit coastal Puerto Rico. Available information indicates that these species are most active in the nearshore coastal environment and are only transients in oceanic environments. ***36457** Consequently, ocean disposal of dredged material is not expected to adversely affect these species.

D.1.3 Location in relation to beaches and other amenity areas. (40 CFR 228.6(a)(3))

The Arecibo site is about 6 nautical miles from the nearest recreational beach. Because of the decreasing water depth in the westerly direction, dredged material deposited at the site is expected to settle within the confines of the designated site, or a short distance to the west within minimal time subsequent to disposal. Since virtually all dredged material will settle to the bottom near the release point, it is not anticipated that any released material will adversely affect the nearby shoreline. Due to ambient ocean currents, no dredged material is expected to be transported to the beach area should the site be used for disposal.

D.1.4 Types and quantities of wastes proposed to be disposed of, and proposed methods of release, including methods of packing the waste, if any. (40 CFR 228.6(a)(4))

The Arecibo site is expected to receive approximately 150,000 cubic yards of sandy dredged material once every 3 to 5 years. The material will be obtained during the maintenance dredging of navigational channels and berthing areas in Arecibo harbor. Dumping would occur from hopper dredges or barges, depending on the availability of equipment at the time of dredging.

D.1.5 Feasibility of surveillance and monitoring. (40 CFR 228.6(a)(5))

Surveillance is the responsibility of the U.S. Coast Guard, while monitoring activities are the responsibility of EPA and the COE. Because of its proximity to the shore, surveillance by shipriders, helicopters, or other vessels could be implemented at the Arecibo site. Water depths are not sufficient to impede either water quality sampling or benthic sampling during monitoring activities. The site could be monitored by ocean-going vessels. EPA has conducted monitoring and research activities in, and near, the proposed site.

D.1.6. Dispersal, horizontal transport, and vertical mixing characteristics of the area, including prevailing current direction and velocity, if any. (40 CFR 228.6(a)(6))

The waters near the Arecibo site are characterized by weak (3 to 5 cm/s) westerly subsurface currents. Because of the decreasing water depth in the westerly direction, dredged materials are expected to settle out within the dump site or a short distance to the west within a short time following disposal. Dispersal and horizontal mixing of the water column are weak because of the low current speeds. The dispersal, horizontal transport, and vertical mixing characteristics of the site are such that dumped dredged material is likely to remain within the confines of the site.

D.1.7 Existence and effects of current and previous discharges and dumping in the area (including cumulative effects). (40 CFR 228.6(a)(7))

A total of 584,477 cubic yards of dredged material has been previously disposed of at the Arecibo interim site. In 1984, a survey cruise detected a higher percentage of silty sand at the Arecibo site than in nearby sediments. Because the site has historically been used for dumping, it is presumed that the difference in sediment types is the result of previous dumping activities. Historical disposal of dredged material at the interim Arecibo site has not resulted in substantial adverse effects to biotic resources of the ocean or to other uses of the marine environment. The fauna of the site are more typical of those inhabiting sandy sediments than those inhabiting silty sediments (see D.1.9). Dredged material deposited at the proposed Arecibo site will bury benthic organisms. The effect of burial is expected to be temporary, because the site is inhabited by species that have either survived previous disposal or have recolonized the site after disposal. The deposited material will accumulate on the sea floor, but is not likely to interfere with other uses of the ocean. Impacts of dredged material disposal will be primarily limited to the sea floor.

D.1.8 Interference with shipping, fishing, recreation, mineral extraction, desalination, fish and shellfish culture, areas of special scientific importance, and other legitimate uses of the ocean. (40 CFR 228.6(a)(8))

There are no expected impacts on any of these factors. There are no designated shipping lanes within the coordinates of the site. Fishing areas are located east and south of the proposed site, but ocean currents would transport dredged material away from these areas. No dredged materials are expected to be transported toward shore-based recreational areas. No mineral extraction or desalination operations would be impacted. No fish or shellfish culture operations exist or are planned near the dumpsite. The site does not contain any known areas of special scientific importance.

D.1.9 The existing water quality and ecology of the site as determined by available data or by trend assessment or baseline surveys. (40 CFR 228.6(a)(9))

Water quality at the Arecibo site is good, typical of the well-flushed open ocean conditions in Puerto Rican coastal areas. The water is optically clear with little suspended material, and there is no evidence of organic enrichment or eutrophication. Oxygen concentrations are high and nutrient concentrations are low.

Species composition of benthic organisms at the site reflects the increased sand content found in the sediments at the disposal site. Among polychaete worms and crustaceans inhabiting the site, the percentage of species and individuals of ecological types suited to sandy environments is higher at the proposed site than at nearby locations. The fauna at the site are well-adapted to recolonize after future disposal operations.

D.1.10 Potential for the development or recruitment of nuisance species in the disposal site. (40 CFR 228.6(a)(10))

Previous disposal at the Arecibo site has not caused development of nuisance species at the site. There are no known components in the dedged material which would attract or recruit nuisance species at the site. In the unlikely event that pathogens were contained in the dedged material, it is considered improbable that they could survive and reproduce in the cold, 100- to 400-meter depth environment of the sea floor at the site.

D.1.11 Existence at or in close proximity to the site of any significant natural or cultural features of historical importance. (40 CFR 228.6(a)(11))

No such areas have been identified at the Arecibo site or in areas likely to be affected by dedged material disposal at the site.

D.2 MAYAGUEZ

D.2.1 Geographical position, depth of water, bottom topography, and distance from coast. (40 CFR 228.6(a)(1))

The site is located at the coordinates listed in the previous section of this final rule and is approximately 3.5 nautical miles west of the nearest coastline. The bottom of the site slopes slightly in a westerly direction from 351 to 384 meters.

***36458** D.2.2. Location in relation to breeding, spawning, nursery, feeding, or passage areas of living resources in adult or juvenile phases. (40 CFR 228.6(a)(2))*

The Mayaguez site is at least 3 nautical miles from the nearest significant breeding, spawning, or nursery area of nearshore living resources. Because the site is typical of nearby well-flushed open ocean locations, there is no evidence to suggest that the proposed site has any unique importance as feeding or passage areas for biota.

Endangered sea turtles and the brown pelican inhabit coastal Puerto Rico. Available information indicates that these species are most active in the nearshore coastal environment and are only transients in oceanic environments. Consequently, oceanic dredged material disposal is not expected to adversely affect these species.

D.2.3 Location in relation to beaches and other amenity areas. (40 CFR 228.6(a)(3))

The Mayaguez site is approximately 4 nautical miles from the nearest recreational beach. Modeling of the movement of the dredged material disposed of at the proposed Mayaguez site indicates that the material would not be transported to the shoreline.

D.2.4 Types and quantities of wastes proposed to be disposed of, and proposed methods of release, including methods of packing the waste, if any (40 CFR 228.6(a)(4))

Approximately 53,500 cubic yards of mixed sand, silt, and clay dredged material is expected to be disposed of at

the Mayaguez site once every 2 years. The material will be obtained during maintenance dredging of navigational channels and berthing areas in Mayaguez harbor. The dumping would occur primarily from hopper dredges.

D.2.5 Feasibility of surveillance and monitoring. (40 CFR 228.6(a)(5))

Surveillance is the responsibility of the U.S. Coast Guard, while monitoring activities are the responsibility of EPA and the COE. Because of its proximity to the shore, surveillance by shipriders, helicopters, or other vessels could be implemented at the Mayaguez site. Water depths are not sufficient to impede either water quality sampling or benthic sampling during monitoring activities. The site could be monitored by ocean-going vessels. EPA has conducted monitoring and research activities in, and near, the site.

D.2.6 Dispersal, horizontal transport, and vertical mixing characteristics of the area, including prevailing current direction and velocity, if any. (40 CFR 228.6(a)(6))

The waters near the Mayaguez site are characterized by weak (15 cm/s) southwesterly subsurface currents. The dredged materials are expected to be deposited within the dumpsite or within 1.5 nautical miles southwest of the dumpsite within a short time following disposal. Horizontal mixing of the water column is not sufficient to cause significant dispersal of the dredged material.

D.2.7 Existence and effects of current and previous discharges and dumping in the area (including cumulative effects). (40 CFR 228.6(a)(7))

Previous dredged material disposal has occurred at a nearby interim disposal site. There are no other current or previous discharges at or near the site. There has been no known dumping of dredged material at the Mayaguez site. A 1984 survey cruise detected no difference in species composition of bottom fauna between the designated site and nearby areas, including the interim site.

Dredged material disposed of at the Mazyaguez site will be deposited on the sea floor at and near the site. Benthic organisms will be buried by this action. However, due to the relatively fine nature of the dredged material, recolonization of the site subsequent to disposal will likely be accomplished in a short time period. Impacts of dredged material disposal will be primarily limited to the sea floor.

D.2.8 Interference with shipping, fishing, recreation, mineral extraction, desalination, fish and shellfish culture, areas of special scientific importance, and other legitimate uses of the ocean. (40 CFR 228.6(a)(8))

There are no designated shipping lanes within the coordinates of the site. Fishing will not be impacted since the disposal of dredged materials at the proposed site would not damage coral reefs or their associated fish or shellfish assemblages. No dredged materials are expected to be transported towards shore-based recreational areas. No mineral extraction proposals, or desalination plants would be impacted. There are no fish or shellfish culture operations near the Mayaguez site. The site does not contain any known areas of special scientific importance.

D.2.9 The existing water quality and ecology of the site as determined by available data or by trend assessment or baseline surveys. (40 CFR 228.6(a)(9))

Water quality at the Mayaguez site is good, typical of well-flushed open water conditions in Puerto Rican coastal areas. The water is optically clear with little suspended material, and there is no evidence of organic enrichment or eutrophication. Oxygen concentrations are high and nutrient concentrations are low.

Benthic organisms at the site are primarily deposit feeders, an ecological type well-adapted to living in the high turbidity that might be caused by dredged material disposal.

D.2.10 Potential for the development or recruitment of nuisance species in the disposal site. (40 CFR 228.6(a)(10))

There are no known components in the dredged material which would attract or recruit nuisance species at the site. In the unlikely event that pathogens were contained in the dredged material, it is considered improbable that they could survive and reproduce in the deep ocean waters. The dredged material to be disposed of would be similar in nature to that existing at the site, and would result in a similar fauna at the site.

D.2.11 Existence at or in close proximity to the site of any significant natural or cultural features of historical importance. (40 CFR 228.6(a)(11))

Although there is a shipwreck within 1 nautical mile of the Mayaguez site, predominant currents are expected to carry dredged material away from this location. Other known shipwrecks in the area are unlikely to be affected by dredged material disposal.

D.3 PONCE

D.3.1 Geographical position, depth of water, bottom topography, and distance from coast. (40 CFR 228.6(a)(1))

The Ponce site is located within the coordinates listed in the previous section of this final rule and is approximately 4 nautical miles south of the nearest coastline. The bottom of the site slopes from 329 to 457 meters in a southwesterly direction.

D.3.2 Location in relation to breeding, spawning, nursery, feeding, or passage areas of living resources in adult or juvenile phases. (40 CFR 228.6(a)(2))

The Ponce site is at least 4 nautical miles from the nearest significant breeding, spawning, or nursery area of nearshore living resources. Because the ***36459** site is typical of nearby well-flushed open ocean locations, there is no evidence to suggest that the site has any unique importance as feeding or passage areas for biota.

Endangered sea turtles and the brown pelican inhabit coastal Puerto Rico. Available information indicates that these species are most active in the nearshore coastal environment and are only transient in oceanic environments. Consequently, oceanic dredged material disposal is not expected to adversely affect these species.

D.3.3 Location in relation to beaches and other amenity areas. (40 CFR 228.6(a)(3))

The Ponce site is several nautical miles from the nearest recreational beach. Modeling of the movement of dredged material at the Ponce site indicates that the prevailing ocean currents would not transport dredged material to the shore.

D.3.4 Types and quantities of wastes proposed to be disposed of, and proposed methods of release, including methods of packing the waste, if any. (40 CFR 228.6(a)(4))

Between 250,000 and 290,000 cubic yards of silty dredged material is expected to be disposed of at the Ponce site once every 2 years. The material will be obtained during maintenance dredging of navigational channels and

berthing areas in Ponce harbor. The disposal would occur primarily from clamshell unloading of scows, but hopper dredges might be used if available.

D.3.5 Feasibility of surveillance and monitoring. (40 CFR 228.6(a)(5))

Surveillance is the responsibility of the U.S. Coast Guard, while monitoring activities are the responsibility of EPA and the COE. Because of its proximity to the shore, surveillance by shipriders, helicopters, or other vessels could be implemented at the Ponce site. Water depths are not sufficient to impede either water quality sampling or monitoring activities. Benthic sampling at deep water sites presents logistic difficulties. However, techniques have been devised to resolve these problems, and previous sampling activities at the site have been successful. The site could be monitored by ocean-going vessels. EPA has conducted monitoring and research activities in, and near, the proposed site.

D.3.6 Dispersal, horizontal transport, and vertical mixing characteristics of the area, including prevailing current direction and velocity, if any. (40 CFR 228.6(a)(6))

The waters near the Ponce site are characterized by weak (5 to 10 cm/s) west-northwesterly subsurface currents. Because of the fine nature of the dredged material, transport over considerable distances, potentially up to 10 nautical miles, may occur before the material settles to the sea floor. However, significant transport occurs only at depths in excess of 300 meters. Any transport in the direction of the coastline would be limited since dredged material would settle out as shallower water is encountered. Of the alternatives considered, the designated site has the least potential for dispersion to affect nearshore areas that may contain coral reefs. Fine dredged materials may be transported great distances over a long period of time. However, although the water column is not dispersive in nature, the material is laterally dispersed over a wide area as well. Consequently, desposition at any one location will be minimal.

D.3.7 Existence and effects of current and previous discharges and dumping in the area (including cumulative effects). (40 CFR 228.6(a)(7))

Previous dredged material disposal has occurred at a nearby interim disposal site. There are no other current or previous discharges at or near the site.

There has been no known dumping of dredged material at the Ponce site. A 1984 survey cruise detected no difference in bottom fauna or sediments between the designated site and nearby areas, including the interim site.

Dredged material disposal at the Ponce site will be widely distributed over the sea floor. Thus, only thin layers of dredged material will be deposited at any given location. Deposition of this material is therefore expected to have only minimal impacts on the benthic biota and physical environment at the site.

D.3.8 Interference with shipping, fishing, recreation, mineral extraction, desalination, fish and shellfish culture, areas of special scientific importance, and other legitimate uses of the ocean. (40 CFR 228.6(a)(8))

There are no designated shipping lanes within the coordinates of the site. Although dispersal will occur over a wide area, it is not expected that disposal of dredged material at the site would damage coral reefs or their associated fish or shellfish assemblages. No mineral extraction or desalination operations would be impacted. There are no fish or shellfish culture operations near the designated Ponce site. No known areas of scientific importance area located near the site.

D.3.9 The existing water quality and ecology of the site as determined by available data or by trend assessment or baseline surveys. (40 CFR 228.6(a)(9))

Water quality at the Ponce site is good, typical of the well-flushed open water conditions in Puerto Rican coastal areas. The water is optically clear with little suspended material, and there is no evidence of organic enrichment or eutrophication. Oxygen concentrations are high and nutrient concentrations are low.

Benthic organisms at the site are primarily deposit feeders, an ecological type well-adapted to living in the high turbidity that might be caused by dredged material disposal. It is not likely that use of the site will have a detrimental effect on benthic communities because of the wide dispersal of the material.

D.3.10 Potential for the development or recruitment of nuisance species in the disposal site. (40 CFR 228.6(a)(10))

There are no known components in the dredged material which would attract or recruit nuisance species at the site. In the unlikely event that pathogens were contained in the dredged material, it is considered improbable that they could survive and reproduce in the deep ocean waters. The dredged material to be disposed of would be similar in nature to that existing at the site, and would result in a similar fauna at the site.

D.3.11 Existence at or in close proximity to the site of any significant natural or cultural features of historical importance. (40 CFR 228.6(a)(11))

No such features have been identified at the Ponce site or in areas that will be affected by disposal at the site.

D.4 YABUCOA

D.4.1 Geographical position, depth of water, bottom topography, and distance from coast. (40 CFR 228.6(a)(1))

The site is located at the coordinates listed in the previous section of this final rule and is approximately 4.5 nautical miles east of the nearest coastline. The bottom of the site slopes sharply to the southeast, with depths ranging from 548 to 914 meters.

***36460** D.4.2 Location in relation to breeding, spawning, nursery, feeding, or passage areas of living resources in adult or juvenile phases. (40 CFR 228.6(a)(2))*

The Yabucoa site is at least 4 nautical miles from the nearest significant breeding, swawning, or nursery area of nearshore living resources. Because the site is typical of nearby well-flushed open ocean locations, there is no evidence to suggest that the site has any unique importance as feeding or passage areas for biota.

Endangered sea turtles and the brown pelican inhabit coastal Puerto Rico. Available information indicates that these species are most active in the nearshore coastal environment and are only transient in oceanic environments. Consequently, oceanic dredged material disposal is not expected to adversely affect these species.

D.4.3 Location in relation to beaches and other amenity areas. (40 CFR 228.6(a)(3))

The Yabucoa site is 4 to 5 nautical miles from the nearest recreational beach. Modeling of dispersion of the dredged material at the Yabucoa site indicated that the material would not be transported to the shoreline.

D.4.4 Types and quantities of wastes proposed to be disposed of, and proposed methods of release, including

methods of packing the waste, if any. (40 CFR 228.6(a)(4))

Approximately 150,000 cubic yards of predominantly silty dredged material mixed with some sand is expected to be disposed of at the Yabucoa site once every 3 to 5 years. The material will be obtained during maintenance dredging of navigational channels and berthing areas in Yabucoa harbor. The dumping would occur primarily from clamshell unloading of scows, but hopper dredges might be used if available.

D.4.5 Feasibility of surveillance and monitoring. (40 CFR 228.6(a)(5))

Surveillance is the responsibility of the U.S. Coast Guard, while monitoring activities are the responsibility of EPA and the COE. Because of its proximity to the shore, surveillance by shipriders, helicopters, or other vessels could be implemented at the Yabucoa site. Water depths are not sufficient to impede either water quality sampling or monitoring activities. Benthic sampling at deep water sites presents logistic difficulties. However, techniques have been devised to resolve these problems, and previous sampling activities at the site have been successful. The site could be monitored by oceangoing vessels. EPA has conducted monitoring and research activities in, and near, the designated site.

D.4.6 Dispersal, horizontal transport, and vertical mixing characteristics of the area, including prevailing current direction and velocity, if any. (40 CFR 228.6(a)(6))

The waters near the Yabucoa site are characterized by moderate (15 cm/s) west-southwesterly subsurface currents. Because of the fine nature of the dredged material, transport over considerable distances, potentially up to 10 nautical miles, may be expected before settling occurs. Significant transport only occurs at depths in excess of 300 meters. Any transport in the direction of the coastline would be limited since dredged material would settle out as shallower water is encountered. Fine dredged material may be transported great distances over a long period of time. However, although the water column is not dispersive in nature, the material is laterally dispersed over a wide area as well. Consequently, deposition at any one location will be minimal.

D.4.7 Existence and effects of current and previous discharges and dumping in the area (including cumulative effects). (40 CFR 228.6(a)(7))

Previous dredged material disposal has occurred at a nearby interim site. There are no other current or previous discharges at or near the site. There has been no known dumping of dredged material at the designated Yabucoa site. A 1984 survey cruise detected no difference in bottom fauna or sediments between the designated site and nearby areas, including the interim site.

Dredged material disposal at the Yabucoa site will be widely distributed over the sea floor. Thus, only thin layers of dredged material will be deposited at any given location. Deposition of this material is therefore expected to have only minimal impacts on the benthic biota and physical environment at the site. Impacts of dredged material will be primarily limited to the sea floor.

D.4.8 Interference with shipping, fishing, recreation, mineral extraction, desalination, fish and shellfish culture, areas of special scientific importance, and other legitimate uses of the ocean. (40 CFR 228.6(a)(8))

There are no designated shipping lanes within the coordinates of the designated site. Although dredged material will be dispersed over a wide area, it is not expected that disposal of dredged material at the site would damage coral reefs or their associated fish or shellfish assemblages. No mineral extraction or desalination operations

would be impacted. There are no fish or shellfish culture operations near the site. The site contains no known areas of scientific importance.

D.4.9 The existing water quality and ecology of the site as determined by available data or by trend assessment or baseline surveys. (40 CFR 228.6(a)(9))

Water quality at the designated Yabucoa site is good, typical of the well-flushed open water conditions in Puerto Rican coastal areas. The water is optically clear with little suspended material, and there is no evidence of organic enrichment or eutrophication. Oxygen concentrations are high and nutrient concentrations are low.

Benthic organisms at the site are primarily deposit feeders, an ecological type well-adapted to living in the high turbidity that might be caused by dredged material disposal. It is not likely that use of the proposed site will have a detrimental effect on benthic communities because of the wide dispersal of the material.

D.4.10 Potential for the development or recruitment of nuisance species in the disposal site. (40 CFR 228.6(a)(10))

There are no known components in the dredged material which would attract or recruit nuisance species at the site. In the unlikely event that pathogens were contained in the dredged material, it is considered improbable that they could survive and reproduce in the deep ocean waters. The dredged material to be disposed of would be similar in nature to that existing at the site, and would result in a similar fauna at the site.

D.4.11 Existence at or in close proximity to the site of any significant natural or cultural features of historical importance. (40 CFR 228.6(a)(11))

One shipwreck has been identified near the interim site for Yabucoa. Due to prevailing currents, use of the designated site will have no effect on this feature.

E. Action

The EIS concludes that the sites may appropriately be designated for use. The sites are compatible with the general criteria and specific factors used for site evaluation.

The designation of the Arecibo, Mayaguez, Ponce, and Yabucoa sites as EPA approved Ocean Dumping Sites is being published as final rulemaking. Management of these sites has been ***36461** delegated to the Regional Administrator, EPA Region II.

It should be emphasized that, if an ocean dumping site is designated, such a site designation does not constitute or imply EPA's approval of actual disposal of materials at sea. Before ocean dumping of dredged material at a site may commence, the COE must evalaute a permit application according to EPA's ocean dumping criteria. EPA has the right to disapprove the actual dumping if it determines that environmental concerns under the Act have not been met.

F. Regulatory Assessments

Under the Regulatory Flexibility Act, EPA is required to perform a Regulatory Flexibility Analysis for all rules that may have a significant impact on a substantial number of small entities. EPA has determined that this action will not have a significant impact on small entities, because the site designation will only have the effect of

providing a disposal option for dredged material. Consequently, this rule does not necessitate preparation of a Regulatory Flexibility Analysis.

Under Executive Order 12291, EPA must judge whether a regulation is “major” and therefore subject to the requirement of a Regulatory Impact Analysis. This action will not result in an annual effect on the economy of $100 million or more or cause any of the other effects that would result in its classification as a major rule under the Executive Order. Consequently, this rule does not necessitate preparation of a Regulatory Impact Analysis.

This Final Rule does not contain any information collection requirements subject to Office of Management and Budget review under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq.

List of Subjects in 40 CFR Part 228

Water pollution control.

Dated: September 9, 1988.

William J. Muszynski,

Acting Regional Administrator.

In consideration of the foregoing, Subchapter H of Chapter I of Title 40 is amended as set forth below.

PART 228—[AMENDED]1. The authority citation for Part 228 continues to read as follows:

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

40 CFR § 228.12

§ 228.12 [Amended]

40 CFR § 228.12

2. Section 228.12 is amended by removing the following entries from the “dredged material site” list in paragraph (a)(3): Arecibo Harbor, PR; Mayaguez Harbor, PR; and Ponce Harbor, PR; and by adding paragraphs (b)(56), (57), (58), and (59) to read as follows:

* * * * *

(b)(56) Arecibo Harbor, PR Dredged Material Disposal Site—Region II.

Location: 18°31'00" N., 66°43'47" W.; 18°31'00" N., 66°42'45" W.; 18°30'00" N., 66°42'45" W.; 18°30'00" N., 66°43'47" W.

Size: Approximately 1 square nautical mile.

Depth: Ranges from 101 to 417 meters.

Primary Use: Dredged material disposal.

Period of Use: Continuing Use.

Restrictions: Disposal shall be limited to dredged material from Arecibo Harbor, PR.

(b)(57) Mayaguez Harbor, PR Dredged Material Disposal Site—Region II.

Location: 18°15'30" N., 67°16'13" W.; 18°15'30" N., 67°15'11" W.; 18°14'30" N., 67°15'11" W.;18°14'‘30" N., 67°16'13" N.

Size: Approximately 1 square nautical mile.

Depth: Ranges from 351 to 384 meters.

Primary Use: Dredged material disposal.

Period of Use: Continuing Use.

Restrictions: Disposal shall be limited to dredged material from Mayaguez Harbor, PR.

(b)(58) Ponce Harbor, PR Dredged Material Disposal Site—Region II.

Location: 17°54'00" N., 66°37'43" W.; 17°54'00" N., 66°36'41" W.; 17°53'00" N., 66°36'41" W.; 17°53'00" N., 66°37'43" W.

Size: Approximately 1 square nautical mile.

Depth: Ranges from 329 to 457 meters.

Primary Use: Dredged material disposal.

Period of Use: Continuing Use.

Restrictions: Disposal shall be limited to dredged material from Ponce Harbor, PR.

(b)(59) Yabucoa Harbor, PR Dredged Material Disposal Site—Region II.

Location: 18°03'42" N., 65°42'49" W.; 18°03'42" N., 65°41'47" W.; 18°02'42" N., 65°41'47" W.; 18°02'42" N., 65°42'49" N.

Size: Approximately 1 square nautical mile.

Depth: Ranges from 549 to 914 meters.

Primary Use: Dredged material disposal.

Period of Use: Continuing Use.

Restrictions: Disposal shall be limited to dredged material from Yabucoa Harbor, PR.

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53 FR 36455-01, 1988 WL 252839 (F.R.)
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