

RULES and REGULATIONS  
ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 228

[FRL-3694-6]

Ocean Dumping: Designation of Site

Friday, December 8, 1989

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA today designates an existing dredged material disposal site located in the Gulf of Mexico near the Barataria Bay Waterway (BBWW) for the continued disposal of dredged material removed from the BBWW. This action is necessary to provide an acceptable ocean dumping site for the current and future disposal of this material. This final site designation is for an indefinite period of time, but the site is subject to monitoring to insure that unacceptable adverse environmental impacts do not occur.

DATE: This designation shall become effective on January 8, 1990.

ADDRESSES: Norm Thomas, Chief, Federal Activities Branch (6E-F), U.S. EPA, 1445 Ross Avenue, Dallas, Texas 75202-2733.

Information supporting this designation is available for public inspection at the following locations:

EPA, Region 6, 1445 Ross Avenue, 9th Floor, Dallas, Texas 75202.

Corps of Engineers, New Orleans District, Foot of Prytania Street, room 296, New Orleans, Louisiana 70160.

FOR FURTHER INFORMATION CONTACT: Norm Thomas 214/655-2260 or FTS/255-2260.

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 December 23, 1986, the Administrator delegated the authority to designate ocean dumping sites to the Regional Administrator of the Region in which the site is located. This site designation is being made pursuant to that authority.

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" was

published on January 11, 1977 (42 FR 2461 et seq.). That list established the BBWW site for the disposal of material dredged from the BBWW. In January 1980, the interim status of the BBWW site was extended indefinitely.

## B. EIS Development

Section 102(2)(c) of the National Environmental Policy Act of 1969, [42 U.S.C. 4321](#) et seq., (“NEPA”) requires that Federal agencies prepare Environmental Impact Statements (EISs) on proposals for major Federal actions \*50620 significantly affecting the quality of the human environment. While NEPA does not apply to EPA activities of this type, EPA has voluntarily committed to prepare EISs in connection with ocean dumping site designations such as this (39 FR 16186, May 7, 1974).

EPA and the New Orleans District Corps of Engineers (COE) have jointly prepared a Final Environmental Impact Statement entitled “Environmental Impact Statement (EIS) for the Barataria Bay Waterway, Louisiana Ocean Dredged Material Disposal Site Designation.” On August 11, 1989, a notice of availability of the Final EIS for public review and comment was published in the Federal Register. The public comment period on this final EIS closed on September 11, 1989. No comments were received on the Final EIS.

In accordance with the requirements of the Endangered Species Act, EPA and the COE have completed a biological assessment. The COE has coordinated a no adverse effect determination with the National Marine Fisheries Service (NMFS) and NMFS has concurred with this determination. The State of Louisiana has indicated that EPA's action is not consistent with the Louisiana Coastal Zone Management Program. However, EPA has determined that designation of the BBWW site is consistent, to the maximum extent practicable, with the Coastal Zone Management Act.

The action discussed in the EIS is designation for continuing use of an ocean disposal site for dredged material. The purpose of the designation is to provide an environmentally acceptable location for ocean disposal. The appropriateness of ocean disposal is determined on a case-by-case basis. Prior to each use the Corps will comply with 40 CFR part 227 by providing EPA a letter containing all the necessary information.

The EIS discussed the need for the action and examined ocean disposal sites and alternatives to the proposed action. Land based disposal alternatives were examined in a previously published EIS and the analysis was updated in the Final EIS based on information from the COE. The nearest land disposal area occurs about 3.5 miles north of the disposal site. However, this area is already used for disposal of material dredged from the bay portion of the BBWW. Using this or other sites would increase costs considerably and reduce their life expectancy, necessitating acquisition of new areas. Accordingly, this alternative was not considered feasible. Marsh creation and beach nourishment with BBWW material were also evaluated. Because of increased transportation costs, these alternatives were also determined not practicable.

Four ocean disposal alternatives—two shallow water areas (including the proposed site), a mid-shelf area and a deepwater area—were evaluated. Use of the mid-shelf and deepwater sites would involve: (1) Increased transportation costs without any corresponding environmental benefits; (2) the removal of sediments from the nearshore environment making them unavailable for movement and deposition by longshore currents; and (3) increased safety hazards resulting from transporting dredged material greater distances through areas of active oil and gas development. Because of these reasons, the mid-shelf area and the deepwater area were eliminated from further consideration. An alternate shallow-water site located further east or immediately west of the existing site was also evaluated. However, no environmental benefits would be gained by its selection.

The EIS presented the information needed to evaluate the suitability of ocean disposal areas for final designation and is based on a disposal site environmental study. The study and final designation process are being conducted in accordance with the Act, the Ocean Dumping Regulations and other applicable Federal environmental legislation. This final rulemaking notice fills the same role as the Record of Decision required under regulations promulgated by the Council on Environmental Quality for agencies subject to NEPA.

### C. Site Designation

On August 18, 1989, EPA proposed designation of this site for the continuing disposal of dredged materials from the BBWW. The public comment period on this proposed action closed on October 2, 1989. No comments were received on the proposed rule.

The BBWW ocean disposal site is located off the Barataria Basin of southeast Louisiana. The northern end of the site is about 1.25 miles southeast of Grand Terre Island and about 2.0 miles east of Grand Isle in Jefferson Parish. The site extends approximately three miles offshore. Water depths at the site range from 8 to 20 feet. The coordinates of the rectangular shaped site are as follows: 29°16'10" N., 89°56'20" W.; 29°14'19" N., 89°53'16" W.; 29°14'00" N., 89°53'36" W.; 29°16'29" N., 89°55'59" W.

### 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 any temporary perturbations from 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 a site cause unacceptable adverse impacts, further use of the site may be terminated or limitations placed on the use of the site to reduce the impacts to acceptable levels. The general criteria are given in § 228.5 of the EPA Ocean Dumping Regulations; § 228.6 lists eleven specific factors used in evaluating a proposed disposal site to assure that the general criteria are met.

EPA has determined, based on information presented in the Final EIS, that the existing site is acceptable under the five general criteria. The Continental Shelf location is not feasible and no environmental benefit would be obtained by selecting such a site. Historical use of the existing site has not resulted in substantial adverse effects to living resources of the ocean or to other uses of the marine environment. The characteristics of the site are reviewed below in terms of the eleven specific factors.

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

Geographical position, average water depth, and distance from the coast for the disposal site are given above. Bottom topography gently slopes to the southeast (2.0 feet per mile).

#### 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 northern Gulf of Mexico is a breeding, spawning, nursery and feeding area for shrimp, menhaden and bottomfish. Migration of fish and shellfish through the area is heaviest during spring and fall. The BBWW ocean disposal site represents a small area of the total range of the fisheries resource. Impacts to endangered or threatened turtles and whales that might utilize the area for the listed activities are negligible. Grand Terre Island

harbors a bird nesting colony consisting of black skimmers. This colony is located about 2.5 miles from the disposal site.

**\*50621** 3. Location in relation to beaches and other amenity areas. (40 CFR 228.6(a)(3).)

The existing ocean disposal site is about 1 mile from the nearest beach on Grand Terre Island. The Grand Terre beach is sparsely used because it is small and accessible only by boat. There is a beach on the eastern end of Grand Isle in Grand Isle State Park, about 1.5 miles to the east, that attracts visitors. The turbidity plume resulting from disposal would be diluted to ambient levels well before reaching either of these beaches.

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

The material to be disposed of is from the adjacent area of the BBWW and consists of a mixture of sand, silt and clay obtained by hydraulic dredge. Sediment grain size generally decreases in the offshore direction, with sands being predominant in the disposal site. Approximately 500,000 cubic yards of material are disposed of in the site during each use. The material is removed with a hydraulic dredge and released in the disposal site. The material is not packaged in anyway. The Corps of Engineers would likely be the only user of the site.

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

Surveillance is possible by shore-based radar, aircraft, or day-use boats. No surveillance is currently performed by the U.S. Coast Guard. Monitoring would be facilitated by the fact that the disposal site is nearshore, in shallow waters, and has baseline data available. The primary purpose of monitoring is to determine whether disposal at the site is significantly affecting areas outside the disposal area and to detect any unacceptable adverse effects occurring in or around the site. Based on historic data, an intense monitoring program is not warranted. However, in order to provide adequate warning of environmental harm, EPA will develop a monitoring plan in coordination with the COE. The plan would concentrate on periodic depth soundings and sediment and water quality testing.

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).)

Mixing processes, current characteristics, and sediment transport in the nearshore region off Barataria Pass are influenced by tidal currents, winds, and storms. Chemical and physical parameters generally indicate a fairly homogenous water column in the area. Density stratification can occur seasonally to a minor extent with fresher water from the Mississippi River on the surface. In the summer, bottom waters on the Louisiana shelf are occasionally oxygen depleted, which can cause mortality of benthic organisms. During a site study in December 1980, waters were supersaturated with oxygen at all depths. During June 1981, waters were partially saturated or supersaturated with oxygen down to about sixteen feet. Velocities of 3 to 4 knots may occur during storm events. It appears that the predominant current is to the west, but easterly currents occur with storm events. Data on the specifics of currents in the area are sparse.

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

Dredged materials from the construction and maintenance of the BBWW have been disposed of at the site since

1960, and no significant adverse impacts have resulted. Previous disposals have caused minor effects, such as temporary increases in suspended sediment concentrations, temporary turbidity, sediment mounding, smothering of some benthic organisms, release of nutrients, possible minor release of trace metals, and a temporary change in sediment grain size. Since the effects of disposal are temporary, there are no cumulative effects.

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).)

In the vicinity of the disposal site the majority of shipping traffic is confined to the BBWW. Dredging facilitates shipping; periodic use of the disposal site has some potential for interfering with ship movement in the BBWW during disposal operations.

Nearshore areas contain a productive "high-use" fishing ground for a number of commercial and recreational species. The BBWW site represents a very small portion of the total nearshore fishing grounds in the Deltaic Plain. Adverse impacts from disposal would be temporary and minor. Interferences with fishing may occur if any shoals are created by dredged material disposal, since this could cause groundings of shrimp boats within disposal site boundaries. If the material is spread evenly, it will raise bottom elevations within the site by 0.4 feet, which should not result in vessel groundings.

The nearest oyster leases are on the north side of Grand Terre Island about 2.0 miles to the northwest of the site. Designation of the disposal site would not impact these or any other lease areas. Desalination areas do not occur in the vicinity of the disposal site. The site is located near the Grand Isle State Park recreation area. There has been no apparent impact to the park from use of the disposal site and no impact is expected to occur in the future.

Petroleum and mineral-extracting activities occur offshore within 8.0 miles of the site and are not impacted by use of the site. Also there are pipelines that occur throughout the area that have not been impacted by the deposition of dredged material. There is a major oil and gas collection facility that occurs on the eastern end of Grand Isle; it has not been impacted by the use of the disposal site. Intermittent dumping does not interfere with the exploration of production phases of resource development, or with other legitimate uses of the ocean.

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 column concentrations of trace metals were below EPA's water quality criteria during the 1980-1981 study. Chlorinated hydrocarbon concentrations (CHC) in and near the BBWW disposal site were below detection limits, except for dieldrin and DDE. These chemicals were found at slightly higher levels than EPA's 24-hour average criteria, but at levels well below the single measurement criteria.

Nutrient concentrations, turbidity, and suspended solids are controlled in large part by Mississippi River discharge, and are generally low in the summer/fall and increase in the winter/spring.

During the 1980-1981 study, concentrations of chemicals in sediments were strongly related to grain size, with highest levels in silts and clays. Concentrations of heavy metals and CHC's were comparable inside and outside the disposal site for similar sediment types. Total hydrocarbon concentrations were three to four times higher in June than in December, probably due to riverine sources. The presence of unresolved high molecular weight hydrocarbons showed evidence of chronic petroleum contamination. Concentrations of cyanide, phenol and oil and

grease were low and were comparable inside and outside the disposal site.

The benthos at the site was found to exhibit a patchy distribution, spatially and temporally and was dominated by \*50622 polychaete worms and the little surf clam. The little surf clam only became dominant during summer on sand substrate. Polychaetes tended to reach highest densities in fine grained sediments. Statistical analyses demonstrated a high variance between dominant species inside and outside of the site. No effects of previous dredged material disposal on benthic organisms could be identified at the disposal site and the macrofauna were characteristic of shallow areas offshore from southern Louisiana.

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

Past disposal of dredged material at the existing site has not resulted in the development or recruitment of nuisance species. Considering the similarity of the dredged material with the existing sediments, it is not expected that continued disposal of dredged material will result in the development of such species.

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).)

Fort Livingston is a registered historic site on the west end of Grand Terre Island, due north of the disposal site. This landmark has undergone marked subsidence and cannot be restored. A survey to identify other archeological and historical resources is not required at this time. However, a Nautical Resources Plan for the Corps is being prepared in consultation with the Louisiana State Historic Preservation Officer. Under guidelines established by this plan, studies may be done in the future to evaluate impacts to historic shipwrecks that may result from use of the disposal site.

#### E. Action

The EIS concludes that the site may appropriately be designated for use. The site is compatible with the general criteria and specific factors used for site evaluation. The designation of the BBWW site as an EPA approved Ocean Dumping Site is being published as final rulemaking.

It should be emphasized that, if an ocean dumping site is designated, such site designation does not constitute or imply EPA's approval of actual disposal of materials at sea. And although the Corps does not administratively issue itself a permit, the requirements that must be met before dredged material derived from Federal projects can be discharged into ocean waters are the same as where a permit would be required. EPA has the authority to approve or to disapprove or to propose conditions upon dredged material permits for ocean dumping.

#### F. Regulatory Assessments

Under the Regulatory Flexibility Act, EPA is required to perform a Regulatory Flexibility Analysis for all rules which 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 since 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 which would result in its being classified by the Executive Order as a “major” rule. Consequently, this rule does not necessitate preparation of a Regulatory Impact Analysis.

This Final Rule does not contain any information collection requirements subject to the 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: October 16, 1989.

Robert E. Layton, Jr.,

Regional Administrator of Region 6.

In consideration of the foregoing, subchapter H of chapter I of title 40 is proposed to be 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](#)

2. [Section 228.12](#) is amended by removing from paragraph (a)(3) under “Dredged Material Sites” the entry for Barataria Bay Waterway, La.—Bar Channel and adding paragraph (b)(81) to read as follows:

#### [40 CFR § 228.12](#)

[§ 228.12](#) Delegation of management authority for ocean dumping sites.

\* \* \* \* \*

(b) \* \* \*

(81) Barataria Bay Waterway, Louisiana—Region 6:

Location: 29°16'10" N., 89°56'20" W.; 29°14'19' " N., 89°53'16" W.; 29°14'00" N., 89°53'36" W.; 29°16'29" N., 89°55'59" W.

Size: 1.4 square nautical miles.

Depth: Ranges from 8-20 feet.

Primary Use: Dredged material.

Period of Use: Continuing use.

Restriction: Disposal shall be limited to dredged material from the vicinity of Barataria Bay Waterway, Louisiana.

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54 FR 50619-01, 1989 WL 290798 (F.R.)  
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