

RULES and REGULATIONS  
ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 228

[FRL-4010-2]

Ocean Dumping; Designation of Site

Thursday, September 19, 1991

**\*47410** AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA today is designating a dredged material disposal site located offshore of the mouth of the Chetco River, Oregon, for the disposal of dredged material removed from the federal navigation project at the Chetco River, Oregon, and for materials dredged during other actions authorized by Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA). This action is necessary to provide an acceptable ocean dumping site for the current and future disposal of this material. This site designation is for an indefinite period of time, but the site is subject to continuing monitoring to insure that unacceptable, adverse environmental impacts do not occur.

EFFECTIVE DATE: September 19, 1991.

FOR FURTHER INFORMATION CONTACT: John Malek, 206/553-1286.

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 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 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 site will be designated by publication in part 228. A list of "Approved and Final Ocean Dumping Sites" was published on January 11, 1977 (42 FR 2461 et seq.) and was last updated on February 2, 1990 ([55 FR 3688](#) et seq.). That list established this site an interim site.

B. EIS Development

Section 102(c) of the National Environmental Policy Act of 1969, [42 U.S.C. 4321](#) et seq., (NEPA) requires that Federal agencies prepare an Environmental Impact Statement (EIS) on proposals for legislation and other major Federal actions significantly **\*47411** affecting the quality of the human environment. The object of NEPA is to build into agency de-

cision-making processes careful consideration of all environmental aspects of proposed actions. While NEPA does not apply to EPA activities of this type, EPA has voluntarily committed to prepare EIS's in connection with ocean dumping site designations such as this, 39 FR 16186 (May 7, 1974).

EPA prepared a draft and final EIS entitled "Chetco, Oregon, Dredged Material Disposal Site (ODMDS) Designation". Three letters of comment were submitted, which EPA assessed and responded to in the final EIS. As a separate but concurrent action, a notice of availability of the final EIS was published in the Federal Register. Anyone desiring a copy of the final EIS may obtain one from the address given above.

The action discussed in the final 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 of dredged material. The appropriateness of ocean disposal is determined on a case-by-case basis as part of the process of issuing permits for ocean disposal.

The final EIS provides documentation to support designation of an ocean dredged material disposal site (ODMDS) for continuing use to be located in the Pacific Ocean off the mouth of the Chetco River, in the State of Oregon. The designated ODMDS is the existing interim site located one mile south of the mouth of the Chetco River. Site designation studies were conducted by the Portland District, Corps of Engineers, in consultation with EPA, Region 10. This ODMDS is located in the area best suited for dredged material disposal in terms of environmental and navigational safety factors. No significant or long-term adverse environmental effects are predicted to result from the designation. The designated ODMDS would continue to receive sediments dredged by the Corps of Engineers to maintain the federally authorized navigation project at the Chetco River, Oregon, and for disposal of materials dredged during other actions authorized in accordance with section 103 of MPRSA. Before any disposal may occur, a specific evaluation by the Corps must be made using EPA's ocean dumping criteria. EPA makes an independent evaluation of the proposal and has the right to disapprove the actual disposal.

The study and final designation process were conducted in accordance with the Act, the Ocean Dumping Regulations, and other applicable Federal environmental legislation.

### C. Site Description

On April 10, 1990, EPA proposed designation of the Chetco ODMDS for the continuing disposal of dredged material. The public comment period for the proposed rule and draft EIS were concurrent and closed on May 25, 1990. Three letters of comment were received commenting on the draft EIS. No comments were received specifically referencing the proposed rule. These comments were responded to in the final EIS. The comments requested clarification and were not considered substantive. No one raised serious concerns regarding designation of management of the Chetco site. During the time between the draft EIS and the final EIS, additional species were added to the list of threatened and endangered species and reauthorization of the Coastal Zone Management Act (CZMA) occurred. Consultation with the National Marine Fisheries Service on the newly listed species resulted in a determination that designation and use of the ODMDS would not affect any listed species which is described in the final EIS. Additional coordination also occurred with the coastal zone management agency for the State of Oregon regarding federal consistency.

The proposed site is located approximately 1 mile offshore of the Chetco River entrance and occupies an area of about 74 acres (0.09 square nautical miles). Water depths within the area average 21 meters. The coordinates of the site (NAD 83) are as follows:

42°01'55" N.

124°16'37" W.

42°01'55" N. 124°16'13" W.

42°01'37" N. 124°16'13" W.

and

42°01'37" N. 124°16'37" W.

If at any time disposal operations at the site cause unacceptable adverse impacts, further use of the site will be restricted or terminated.

#### 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, the use of that site will be terminated as soon as suitable alternate disposal sites can be designated. The general criteria are given in § 228.5 of the EPA Ocean Dumping Regulations, and § 228.6 lists eleven specific factors used in evaluating a proposed disposal site to assure that the general criteria are met.

The site, as discussed below under the eleven specific factors, is acceptable under the five general criteria, except for the preference for sites located off the Continental Shelf. EPA has determined, based on the information presented in the EIS, that a site off the Continental Shelf is not feasible and that no environmental benefits would be obtained by selecting such a site instead of that proposed in this action. Historical use at 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 proposed site are reviewed below in terms of the eleven factors.

1. Geographical position, depth of water, bottom topography, and distance from coast. [40 CFR 228.6\(a\)\(1\)](#). The site is in 50 to 70 feet (15-21 m) of water, approximately 1.0 nautical mile offshore of the entrance to the Chetco River. Coordinates are:

42°01'55" N. 124°16'37" W.

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The site's center line is on a 270 degree azimuth from the mouth of the Chetco River. Bottom topography within the site is varied.

2. Location in relation to breeding, spawning, nursery, feeding, or passage areas of living resources in adult and juvenile phases. [40 CFR 228.6\(a\)\(2\)](#). Aquatic resources at and near the site are described in detail in Appendix A of the EIS. The existing disposal site is located in the nearshore area and many nearshore pelagic organisms occur in the water column over the site. These include zooplankton (copepods, euphausiids, pteropods, and chaetognaths) and meroplankton (fish, crab and other invertebrate larvae). These organisms generally display seasonable changes in abundance. Since they are present over most of the coast, those from Chetco are not critical to the overall coastal population. Based on evidence from previous zooplankton and larval fish studies, it appears that there will be no impacts to organisms in the water column. The site is also adjacent to neritic reefs and haystack rocks. These reefs are unusual features along the coast and support a variety of aquatic organisms, including bull kelp (*Nerocystis luteana*) and its associated **\*47412** fish and invertebrate community. Recently, the Oregon Department of Fish and Wildlife (ODFW) has identified a squid spawning area offshore of the disposal site.

Based on the analysis of benthic samples collected from the Chetco disposal site and the adjacent areas to the north and south, the disposal site contains a benthic fauna characteristic of nearshore, sandy, wave-influenced regions common along the coasts of the Pacific Northwest. The abundance and density of the infaunal community was found to be low at the disposal site, typical of shallow, nearshore, high energy habitats. The fauna is dominated by polychaete annelids (marine worms), small crustaceans (amphipods and cumaceans), molluscs (clams and snails), and echinoderms (sand dollars). The particular species identified from the disposal site are adapted to high energy environments and are able to withstand large sediment fluxes.

The disposal site is in an area where concentrations of common murre, gulls and other marine foraging species occur. Large concentrations have been observed shoreward of the interim site extending to and within the confines of the jetties. Concentrations undoubtedly occur at the site periodically. Concentrations of shorebirds, gulls, waterfowl, and other species occur in the Chetco estuary or on adjacent beaches.

Portland District requested an endangered species listing for the ODMDS from U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) as part of their coordination of the Site Evaluation Report. At that time only the brown pelican and the gray whale were listed. Based on previous biological assessments conducted along the Oregon coast regarding impacts to the brown pelican and the gray whale, it was concluded that no impact to either species is anticipated from the proposed designation and use. This information was presented in the draft EIS. Subsequently, the Corps was informed by the NMFS that they had revised their list of threatened/endangered species. Species listed by the NMFS included the gray, humpback, blue, fin, sei, right, and sperm whales; northern (Steller) sea lions; leatherback sea turtles, and Sacramento River winter run chinook salmon. A biological assessment was prepared addressing the newly listed species and revising previous biological assessment on the gray whale. The assessment concluded that no impact to any of the species is anticipated by designation and use of the Chetco ODMDS. This information is presented in appendix F of the EIS, including a letter of concurrence from NMFS.

In summary, the proposed ODMDS contains living resources that could be affected by disposal activities. Evaluation of past disposal activities do not indicate that unacceptable adverse effects to these resources have occurred. There is no evidence that past disposal has seriously impacted the resources in proximity to the interim site. Accordingly, this site is considered an acceptable site for designation.

3. Location in relation to beaches and other amenity areas. [40 CFR 228.6\(a\)\(3\)](#). Due to depth of disposal operations and

the presence of the south reef, there is little possibility of beach nourishment by natural onshore movement of dredged material from the existing site. Summer wave conditions may transport some sediment from the site shoreward and south, but the limiting depth for this movement is probably 40 to 50 feet (12-15 m) mean lower low water. The majority of disposal material is deeper than 50 feet, so shoreward transport of dredged material is unlikely.

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 proposed disposal site will continue to receive dredged materials transported by either government or private contractor hopper dredges. The current dredges available for use at Chetco have hopper capacities from 800 to 1,500 cubic yards. Barges have a greater capacity, up to 4,000 cubic yards, but have not been routinely used at this project in the past. This would be the range in volumes of dredged material disposed of in any one dredging/disposal cycle. The approximately 48,000 cubic yards estimated to be removed annually from the Chetco project can be placed at the site in one dredging season by any combination of private and government plants. The dredges would be under power and moving while disposing. This allows the ship to maintain steerage.

The material dredged consists of medium to fine grain marine sands and coarser materials, including gravels and cobbles (Appendix C of the EIS provides detailed grain size information for the disposal area and the dredged area). These materials are predominant throughout the entire project length, RM 0 to 2.8. The materials are very similar to bottom materials at the site and the entire nearshore area. All sediments destined for ocean disposal are subject to specific evaluation, including independent review by EPA. Past sediments discharged at the interim site have typically met the exclusion criteria ([40 CFR 227.13\(b\)](#)).

5. Feasibility of surveillance and monitoring. [40 CFR 228.6\(a\)\(5\)](#). The proximity of the disposal site to shore facilities creates an ideal situation for shore-based monitoring of disposal activities. There is, routinely, a Coast Guard vessel patrolling entrance and nearshore areas, so surveillance can also be accomplished by surface vessel.

Following designation of ODMDs, EPA, Region 10, and the Corps District develop a site management plan which addresses the need for post-disposal monitoring. All Oregon ODMDs are periodically monitored jointly by the Corps and EPA already. Several research groups are available in the area to perform any required work. The work could be performed from small surface research vessels at a reasonable cost.

6. Dispersal, horizontal transport and vertical mixing characteristics of the area, including prevailing current direction, and velocity. [40 CFR 228.6\(a\)\(6\)](#). The sediments dredged from the Chetco River entrance are predominantly marine sands and fluvial gravels. These are generally similar to sediments at the disposal site. Under winter wave conditions common to this part of the Pacific Coast, the sand component is highly mobile to a depth of 90-120 feet (27-37 m). Summer wave conditions commonly mobilize sands to a depth of 40-60 feet (12-18 m). Studies at Coos Bay show wave-generated currents can move this size sediment over 60 percent of the time during summer and winter and over 50 percent of the time during spring and fall. While waves are responsible for resuspending bottom sediments, including dredged materials, it is the long-term mean current that determines the extent and direction of dispersal. While some winter storms would move gravels at the disposal site, these coarse sediments do not migrate very far away from the site and probably stay in the general area where they have been disposed.

The nearshore mean circulation is alongshore, closely paralleling the bathymetric contours, with a lesser onshore-offshore component. Circulation patterns are variable with season and weather conditions. In winter, the general shelf circulation is to the north, although short periods of southerly flow occur. Coos Bay studies suggest that offshore flow is more common in winter. This would indicate a tendency for sediment in the disposal site to move north and west under winter circulation conditions. During the \*47413 remainder of the year, flow is southerly with lower current velocities than in

winter. Periodic changes in summer wind direction lead to episodes of upwelling in which near-shore ocean water transport causes a compensating near-bottom onshore flow. These upwelling events occur between April and July and continue for several days at a time. Near-bottom flow in the vicinity of the disposal site during summer should be generally southerly with onshore/offshore flow varying due to local wind conditions.

7. Existence and effects of current and previous discharges and dumping in the area (including cumulative effects).[40 CFR 228.6\(a\)\(7\)](#). Appendix B of the EIS gives annual volumes of materials disposed for the last 10 years. On the average, 48,000 cubic yards have been annually disposed. Future volumes are expected to be similar; although probably showing some increase as other disposal options are exhausted.

Sidescan sonar of the disposal site and adjacent areas shows an area of coarse sand/gravel covering about half of the site and extending north and west of the site up to 1200 feet (31 m), both offshore and toward the river entrance. This is most likely an accumulation of the coarser dredged material fractions that have remained in the same general area since disposal. There are no bathymetric anomalies associated with this deposit (no mounding). The feature will persist as long as coarse sediments are disposed in this area. This has not caused adverse impacts on habitat, however, since the overall area is characterized by a wide range of bottom types.

No biological information has been found to exist regarding the interim site prior to any disposal having occurred. It is expected that no significant impacts to the interim site have occurred beyond the yearly, site-specific effects of past disposals. Oregon Department of Fish and Wildlife biologists have recommended that the site be left at its present location.

Sediments disposed in the past have been physically similar to the sample collected in close proximity to the disposal site, and have met the exclusion criteria. Elutriate analysis performed in the past show minimal contaminant releases during this simulated disposal operation with receiving water from the interim disposal site.

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\(a\)\(8\)](#). The EIS identified no legitimate uses of the ocean that would be interfered with as a result of designation of an ODMDS or its use. The following paragraphs summarize conclusions:

**Commercial Fishing:** Two active commercial fisheries occur in the inshore area, salmon trolling and Dungeness crab fishing. The length of the salmon fishing season varies each year depending upon the established quota; however, it normally extends from July to September. During this period, the potential exists for conflicts between the dredge and fishing boats. The Coast Guard and ODFW indicated that they were unaware that this had ever been a problem. The Dungeness crab season is from December 1 to August 15 each year; however, most of the fishing is done prior to June and usually ends early because of the increase in soft shell crabs in the catch which are not marketable. As a result, most crab fishing occurs outside of the normal dredging season and it is unlikely that a conflict would result. ODFW has identified a potential squid fishery offshore from the existing site. No fishery exists at present, but stocks may be sufficient to support a fishery if a market develops. There are no existing commercial fish or shellfish aquaculture operations that would be impacted by continued use of the existing disposal site.

**Recreational Fishing:** Recreational fishing opportunities are extensive and varied in the Chetco area. The small boat harbor is used extensively in the summer by recreational fishermen. Private party and charter boat recreational fishing for both salmon and rock and reef fish occur. The salmon fishing season coincides with the commercial season and extends from early summer until the quota for the area is reached. Recreational fishing boats have a potential for conflicting with dredging operations; however, none have been reported to date. It is unlikely that any significant conflict will develop in the near future.

Offshore Mining Operations: All considerations for offshore mining and oil/gas leases are in the development stages. The disposal site is not expected to interfere with any of the proposed operations, as most exploration programs are scheduled for the outer continental shelf.

Navigation: No conflicts with commercial navigation traffic have been reported and none are expected, due to the light traffic in the Chetco River area. This situation is not expected to change substantially. Rock pinnacles that are navigation hazards occur nearshore and south of the ODMDS. Avoidance of these submerged and emergent pinnacles by navigation traffic and the dredges was considered during final positioning of the ODMDS.

Scientific: There are no identified scientific study locations that could be impacted by the disposal site.

Coastal Zone Management: In reviewing proposed ODMDS for consistency with the Coastal Zone Management (CZM) plan, they are evaluated against Oregon's Statewide Goal 19 (Ocean Resources). Local comprehensive land use plans for the Chetco area have been approved by the State of Oregon. These plans discuss ocean disposal and recognize the need to provide for suitable offshore sites for disposal of dredged materials. The requirements of the ocean dumping regulations are broad enough to meet the needs of Goal 19. Therefore, the designation of this site for ocean disposal of dredged material following the ocean dumping regulations would be consistent with Goal 19 and the State of Oregon's Coastal Zone Management Plan.

Pursuant to an EPA, Office of Water, policy memorandum dated October 23, 1989, EPA has evaluated the proposed site designation for consistency with the State's approved coastal zone management program. The State of Oregon has concurred with this determination (appendix F of final EIS). In addition, as part of the NEPA process, EPA has consulted with the State of Oregon regarding the effects of dumping at the site on the State coastal zone. EPA has taken the State's comments into account in preparing the final EIS for the site, in determining whether the proposed site should be designated, and in determining whether restrictions or limitations should be placed on use of the site.

9. The existing water quality and ecology of the site as determined by available data or by trend assessment of baseline surveys. [40 CFR 228.6\(a\)\(9\)](#). Water quality off the mouth of the Chetco River is considered excellent, typical of unpolluted seawater along the Pacific Northwest coast. Water and sediment quality analyses conducted at several Oregon ODMDS are discussed in appendix C of the EIS. These studies have not shown adverse water quality impacts from ocean disposal of entrance shoal sands. The ecology of the area is discussed in appendix A in the EIS. The offshore area within and adjacent to the ODMDS is a typical northwest Pacific mobile sand community, shifting to the north and southeast to a neritic reef system. The sand communities are ubiquitous to nearshore ocean habitats \*47414 off Oregon. The site is sufficiently removed from rock and kelp habitats so that they would not be impacted by ocean disposal. Designation and use of the proposed ODMDS is not expected to have significant ecological consequences.

10. Potentiality for the development or recruitment of nuisance species in the disposal site. [40 CFR 228.6\(a\)\(10\)](#). It is highly unlikely that any nuisance species could be established at the disposal site as a result of dredging and disposal activities.

11. Existence at or in close proximity to the site of any significant natural or cultural features of historical importance. [40 CFR 228.6\(a\)\(11\)](#). Neritic reefs, common off the southern Oregon coast, comprise a unique ecological feature. They support a wide variety of invertebrates and fish species unique to rocky areas, as well as bull whip kelp communities. These areas are sheltered from wave action and, when receiving nutrients from both the ocean and the estuaries, are unusually productive. The ODMDS is removed from these areas.

A cultural resource literature search of the Chetco River study area did not document any wrecked vessels in the project



area. This is consistent with the fact that the Chetco River historically has not been a major shipping point on the coast. Most export commodities, especially timber products, have been transported by rail and barge rather than by lumber schooner or ship. Wrecks could have occurred in the area that have not yet been discovered. However, based on previous investigations in other Oregon coastal settings (Yaquina Bay, Coquille, Columbia River Mouth), beaches, surf zones, neritic reefs, and shallow waters are the most likely areas for shipwreck occurrence. The ODMDS is removed from these areas. Also, there were no indications of wrecks from the side scan sonar survey completed during geophysical investigations.

No cultural resources impacts are expected to result from designation of the Chetco ODMDS. Existing information, along with supplementary side scan sonar data, has been reviewed by the Oregon State Historic Preservation Officer (SHPO). The SHPO letter of concurrence is included in the final EIS.

#### E. Action

The EIS concludes that the Chetco River site may be appropriately designated for use. The proposed site is compatible with the general criteria and specific factors used for site evaluation.

The designation of the Chetco River ODMDS as an EPA approved Ocean Dumping Site is being published as final rule-making. Management of this site will be delegated to the Regional Administrator of EPA Region 10.

It should be emphasized that, if an ocean dumping site is designated, such a designation does not constitute or imply EPA's approval of actual disposal of material at sea. Before ocean dumping or dredged material at the site may commence, the Corps of Engineers must evaluate a permit application according to EPA's ocean dumping criteria. EPA has the right to disapprove the actual dumping, 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 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 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 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 10, 1991.

Dana A. Rasmussen,



Regional Administrator for Region 10.

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. sections 1412](#) and [1418](#).

[40 CFR § 228.12](#)

2. [Section 228.12](#) is amended by removing the entry for “Chetco River Entrance” from the Dredged Material Site listing in paragraph (a)(3), and by adding paragraph (b)(85) to read as follows:

[40 CFR § 228.12](#)

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

\* \* \* \* \*

(b) \* \* \*

(85) Chetco River—Region 10. Location: 42°01'55"N., 124°16'37"W.; 42°01'55"N., 124°16'13"W.; 42°01'37"N., 124°16'13"W.; and 42°01'37"N., 124°16'37"W. (NAD 83),

Size: .09 square nautical miles.

Depth: 21 meters (average).

Primary Use: Dredged material.

Period of Use: Continuing use.

Restrictions: Disposal shall be limited to dredged material determined to be suitable for unconfined disposal from the Chetco Estuary and River and adjacent areas.

[FR Doc. 91-22623 Filed 9-18-91; 8:45 am]

BILLING CODE 6560-50-M

56 FR 47410-01, 1991 WL 183179 (F.R.)

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