that GMC uses in the facility is required to meet an emission limitation of 1.5 pounds of VOC per gallon of solids. Furthermore, GMC must maintain monthly records on material usage for each of the miscellaneous paints and solvents. The records shall be maintained at the Framingham facility for not less than 3 years. The records shall include amounts of each material used, the amount disposed of as waste, the associated VOC emissions, and the number of vehicles painted. These materials are required to be submitted to the DEP's Northwest Regional Office on a quarterly basis.

Final Action

EPA is approving the Amended Plan Approval dated and effective June 8, 1990, which imposes RACT on General Motors Corporation's facility in Framingham as a revision to the Massachusetts SIP.

This action has been classified as a Table 3 action by the Regional Administrator under the procedures published in the **Federal Register** on January 19, 1989 (54 FR 2214-2225).

The Office of Management and Budget has exempted this action from the requirements of section 3 of Executive Order 12291.

Nothing in this action should be construed as permitting or allowing or establishing a precedent for any future request for revision to any State implementation plan. Each request for revision to the State implementation plan shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by April 22, 1991. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

The Agency has reviewed this request for revision of the federally-approved State implementation plan for conformance with the provisions of the 1990 Amendments enacted on November 15, 1990. The Agency has determined that this action conforms with those requirements irrespective of the fact that the submittal preceded the date of enactment.

List of Subjects in 40 CFR Part 52

Air pollution control, Hydrocarbons, Incorporation by reference, Ozone, Reporting and recordkeeping requirements.

Note: Incorporation by reference of the State Implementation Plan for the Commonwealth of Massachusetts was approved by the Director of the Federal Register on July 1, 1982.

Dated: February 5, 1991. Julie Belaga,

Regional Administrator, Region I.

PART 52-[AMENDED]

Part 52 of chapter I, title 40 of the Code of Federal Regulations is amended as follows:

Subpart W-Massachusetts

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401-7642.

2. Section 52.1120 is amended by adding paragraph (c)(89) to read as follows:

§ 52.1120 Identification of plan.

* * *

(c) * * *

(89) Revisions to the State Implementation Plan submitted by the Massachusetts Department of Environmental Protection on July 9, 1990.

(i) Incorporation by reference.

(A) Letter from the Massachusetts Department of Environmental Protection dated July 9, 1990 submitting a revision to the Massachusetts State Implementation Plan.

(B) An Amended Plan Approval dated and effective June 8, 1990 imposing reasonably available control technology on General Motors Corporation in Framingham, Massachusetts.

(ii) Additional materials.

(A) Nonregulatory portions of the State submittal.

3. Table 52.1167 is amended by adding as the last entry under "310 CMR 7.18(17)" the following:

TABLE 52.1167—EPA-APPROVED RULES AND REGULATIONS

State citation	Title/subject	Date submitted by State	Date approved by EPA	Federal Register citation	52.1120(c)	Comments/unapproved sections
* 310 CMR 7.18(17)	• RACT	• July 9, 1990	• 2/19/91	• [FR citation from published date]	• 89	• RACT for General Motors Corpo- ration in Framingham, Amend-
•	•	•	•	•	•	ed Plan Approval dated June 8, 1990.

[FR Doc. 91-3712 Filed 2-15-91; 8:45 am] BILLING CODE 6560-50-M

40 CFR Part 228

[FRL-3906-1]

Ocean Dumping; Designation of Site

AGENCY: Environmental Protection Agency (EPA). **ACTION:** Final rule.

SUMMARY: EPA today designates a dredged material disposal site located off Palos Verdes, California (LA-2) for disposal of suitable dredged material removed from the Ports of Los Angeles and Long Beach and other nearby harbors or dredging sites. The center of LA-2 is located 5.2 nautical miles (9.6 kilometers) south of Point Fermin and occupies an area of 0.77 square nautical miles (2.6 square kilometers). Water depths within the area are between 360 to 1,060 feet (110 to 320 meters). The center coordinates of the site are: 33° 37.10' North latitude by 118° 17.40' West longitude (North American Datum from 1983), with a radius of 3,000 feet (910 meters). This action is necessary to provide an acceptable ocean dumping site for disposal of dredged material. Final designation of LA-2 is for an indefinite period, subject to findings of the site management and monitoring program and preparation of a revised coastal consistency determination after 5 years of monitoring.

DATES: This designation shall become effective on March 21, 1991.

FOR FURTHER INFORMATION CONTACT: Mr. Patrick Cotter, Ocean Disposal Coordinator, U.S. Environmental Protection Agency, Region IX (W-7-1), 75 Hawthorne Street. San Francisco. California 94105, telephone (415) 744-1985 or FTS 484-1985. The supporting documents for this designation. including the Proposed Rule, the Final Environmental Impact Statement, the Coastal Consistency Determination, the Science Applications International Corporation (1990) survey, the fish block data from 1984 to 1988, EPA Region IX's August 1989 sediment testing requirements, the Site Management Plan and Site Monitoring Program, are available for public inspection at the following locations:

A. EPA Public Information Reference Unit (PIRU), room 2904 (rear), 401 M Street, SW., Washington, DC.

B. EPA Region IX, Library, 75 Hawthorne Street, 13th Floor, San Francisco, California.

C. U.S. Army Corps of Engineers, Los Angeles District, Library, 300 North Los Angeles Street, Los Angeles, California.

D. Port of Long Beach, Environmental Planning Office, 925 Harbor Plaza, 4th Floor, Long Beach, California.

E. Port of Los Angeles, Environmental Management Division, 425 South Palos Verdes Street, San Pedro, California.

SUPPLEMENTARY INFORMATION:

A. Background

Section 102(c) of the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972, as amended, 33 U.S.C. 1401 *et seq.*, gives the Administrator of EPA authority to designate sites where ocean dumping may be permitted. On October 1, 1986 the Administrator delegated authority to designate ocean dredged material disposal sites (ODMDS) to the EPA Regional Administrators in which the sites are located. The LA-2 site designation action is being made pursuant to that authority.

The EPA Ocean Dumping Regulations state that ocean dumping sites will be designated by publication in 40 CFR part 228 (40 CFR 228.4). A list of "Approved Interim and Final Ocean Dumping Sites" was published on January 11, 1977 (42 FR 2462) and was last extended on August 24, 1984 (49 FR 33647). That list established the LA-2 site as an interim site.

The center of LA-2 is located 5.2 nautical miles (9.6 kilometers) south of Point Fermin and occupies an area of 0.77 square nautical miles (2.6 square kilometers). Water depths within the area are between 360 to 1,060 feet (110 to 320 meters). The center coordinates of the site are: 33½ 37.10' North latitude by 118½ 17.40' West longitude (North American Datum from 1983), with a radius of 3,000 feet (910 meters).

Interim designation status of the LA-2 site was cancelled after December 31, 1988 when time expired on the 1980 Consent Agreement signed between EPA and the National Wildlife Federation (*National Wildlife* Federation v. Costle, 14 ERC 1680, et seq., 1980). EPA Region IX now designates LA-2 as an ODMDS for continued use, subject to a Management Plan. The Management Plan incorporates a Site Monitoring Program and MPRSA Section 103 permit review.

B. EIS Development

Section 102(c) of the National Environmental Policy Act (NEPA) of 1969, 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 object of NEPA is to build into the Agency decision-making process careful consideration of all environmental aspects of proposed actions. NEPA does not apply specifically to designation of ocean disposal sites; however, EPA voluntarily prepares EISs for these actions (39 FR 37419, October 21, 1974).

A Proposed Rule was published in the Federal Register on August 17, 1988 discussing EPA Region IX's intent to designate the LA-2 site (53 FR 31052). EPA Region IX prepared a Final EIS titled: Los Angeles/Long Beach (LA-2) Ocean Dredged Material Disposal Site Designation. On August 19, 1988, notice of availability for public review and comment on the FEIS was published in the Federal Register (53 FR 31760).

C. Responses to FEIS and Proposed Rule Comments

During the public comment period on the Proposed Rule and the FEIS, which closed on October 1, 1988, EPA Region IX received 29 comment letters. The following substantive comments were discussed in these letters.

1. Coastal Consistency Determination

The California Coastal Commission commented that a Coastal Consistency Determination may be required. EPA Region IX has evaluated the proposed LA-2 site designation for consistency with the State of California's approved coastal management program. We determined that the designation of LA-2 is consistent to the maximum extent practicable with section 307(c)(1) of the Coastal Zone Management Act, as amended (18 CFR 1451 et seq.) and the State of California's Coastal Management Program (Chapters 1, 3 and 8 of the California Coastal Act of 1976, as amended). EPA Region IX's determination was submitted to the California Coastal Commission for review on November 16, 1990. An addendum to the consistency determination, containing the **Management Plan and Site Monitoring** Program was sent on December 20, 1990. An amendment to the consistency determination responding to the Commission's concerns about additional information needs was sent on December 26, 1990.

In addition, as part of the NEPA process, EPA Region IX has consulted with the California Coastal Commission on the effects of disposal at LA-2 on California's coastal zone. EPA Region IX has taken the California Coastal Commission's comments into account in preparing this Final Rule, in determining whether the proposed site should be designated, and in determining whether restrictions or limitations should be placed on the use of the site.

Several concerns were expressed by the California Coastal Commission during their public hearing on the LA-2 site designation (January 9, 1991). The following issues were raised by members of the Commission.

a. "Evaluate all proposed dredging projects using the procedures defined in the newest version of the Ocean **Dumping Implementation Manual." EPA** Region IX agreed that all proposed dredging projects received after January 9, 1991 would use the new Ocean **Dumping Implementation Manual** procedures. However, any projects evaluating sediment under EPA Region IX's August 1989 sediment testing requirements can continue using the older procedures. The main differences in the new manual compared to EPA Region IX's August 1989 procedures are: A sequential tiered testing approach, use of whole sediment for the solid phase bioassays, and exposure of bioaccumulation test species for 28 days instead of 20 days.

b. "During the initial 5 years of the site management and monitoring process, continue to investigate the deep water and shallow water sites if it becomes necessary to move the ocean disposal site." EPA Region IX agreed to continue to evaluate these sites if significant adverse impacts were detected at the LA-2 site.

c. "Coordinate with the California Coastal Commission staff annually on the results of the site management and monitoring programs." EPA Region IX agreed to keep the Commission staff informed annually and to prepare a report on the monitoring program after 3 years. Monitoring would continue 2 years after the report and EPA Region IX would present the Commission with an amended coastal consistency determination after 5 years which incorporated all monitoring data and management decisions for continued designation of LA-2 or other appropriate decisions.

d. "The local commercial and sport fishermen should be used as a monitoring and surveillance resource near the LA-2 site." EPA Region IX welcomed the support of the fishermen and is committed to protecting fisheries resources. The Region will work with the fishermen to monitor disposal operations, either as ship riders or by reports from the fishermen.

e. "Additional data should be evaluated to determine what would happen to material dumped at the LA-2 site and in the deep water site." EPA Region IX agreed to model oceanographic currents at the LA-2 and deep water site.

After these issues were discussed and EPA Region IX responded favorably to the Commissions requests, the members of the Commission voted 10 to 1 for approval of the LA-2 coastal consistency determination.

2. Deep Water Site

The Oceanic Society, the California Coastal Commission and the Pacific Coast Federation of Fishermen's Associations suggested that further analysis of the deep water site and the LA-2 site as well as a site off the California continental shelf should be performed for environmental impacts. The Oceanic Society also suggested that an improved EIS should be issued and made available for review.

EPA's Ocean Dumping Regulations (40 CFR 228.5(e)) require the Agency to consider designation of ocean dumping sites beyond the continental shelf and sites that have been historically used. The distance from San Pedro Bay and the Palos Verdes Peninsula to the edge of the continental shelf is about 126 r.autical miles (233 kilometers), which makes designating a site at that location infeasible. Therefore, a deep water site 9.4 nautical miles (17.4 kilometers) south from Point Fermin was considered as a reasonable alternative for evaluation in the FEIS. However, EPA Region IX selected the LA-2 site, located on the outer edge of the San Pedro Shelf in 360 to 1,060 feet of water, as the preferred alternative for the disposal of suitable dredged material.

The designation of the LA-2 site satisfies the site selection criteria specified by the Ocean Dumping Regulations at 40 CFR 228.6(a) as presented in detail in section F of this Final Rule. As described in section 2.2.2 of the FEIS and as discussed below, the site also complies with the five general criteria specified in 40 CFR 228.5:

a. Disposal operations at the site have not and will not interfere with activities in the marine environment;

b. Temporary water quality perturbations will be reduced to normal ambient sea water levels, or to undetectable concentrations or effects before reaching any beach, shoreline, marine sanctuary, or known geographically limited fishery or shellfishery;

c. A Site Management Plan and site Monitoring Program for the LA-2 site have been developed so EPA Region IX can evaluate whether ocean dumping of dredged material will meet the criteria for site selection stated in 40 CFR part 228, and if significant effects are detected, EPA Region IX will modify site use to mitigate the effects;

d. The Site Monitoring Program has been designed for the LA-2 site to detect any adverse impacts at an early stage within the 3,000 feet disposal site radius as well as areas adjacent to the site boundaries; and

e. The LA-2 site is located on the outer edge of the San Pedro Shelf and has been used for disposal of dredged material since 1977.

EPA Region IX discussed these issues in relation to EPA's Ocean Dumping Criteria in a comprehensive environmental impact statement. The Region determined that additional NEPA documents were not necessary because issues were resolved and clarified in the coastal consistency determination and in the LA-2 management plan.

3. Contaminants at the Site

The Oceanic Society, the California Coastal Commission and Representative Mel Levine expressed concern over the possible cumulative effects of toxic contaminants disposed of at the LA-2 site. EPA Region IX and the U.S. Army Corps of Engineers (Corps) Los Angeles District will evaluate the suitability of all sediments proposed for disposal at the LA-2 site. In August 1989, EPA Region IX prepared a guidance document titled: "General Requirements for Sediment Testing of Dredged Material Proposed for Ocean Dumping." EPA Region IX and the Corps' South **Pacific Division and Los Angeles District** are revising these procedures specifically for sediments proposed for ocean disposal off of southern California. The revisions will be based on new national guidance for the ocean dumping program. Adherence to these procedures and careful review of the test results by EPA Region IX and the Corps' Los Angeles District will insure that toxic materials are not disposed of at LA-2.

6571

Sediments will be considered suitable for ocean disposal only if the sediments comply with the EPA Ocean Dumping Criteria and significant undesirable effects are not expected to occur based on the results of sediment physical and chemical tests. toxicity tests and bioaccumulation tests. The site will be restricted to disposal of dredged sediments only, and will not be used for the disposal of any other wastes. A Management Plan and a Site Monitoring Program have been prepared for the LA-2 site. Guidelines listed in the Management Plan will help to insure that cumulative effects of contaminants will not occur and that significant adverse impacts can be avoided.

Effects from other discharges into nearby waters will not be affected by designation of the LA-2 site because the outfalls are more than 5 nautical miles away. The following outfalls are known to exist in the area:

a. The Joint Water Pollution Control Project (JWPCP) outfall for Los Angeles County is 5.0 nautical miles (9.3 kilometers) north of the LA-2 site and 11.4 nautical miles (21.1 kilometers) northwest of the LA-2 reference site. The LA-2 reference site is located at 33½ 33.20' North latitude by 118½ 10.80' West longitude (North American Datum from 1983) at the 600-foot depth contour, 7.8 nautical miles (12.6 kilometers) east of LA-2.

b. The Orange County outfall is located 14.0 nautical miles (25.9 kilometers) east of the LA-2 site and 8.7 nautical miles (16.1 kilometers) east of the LA-2 reference site.

c. The Avalon outfall is located 16.5 nautical miles (30.5 kilometers) south of the LA-2 site and 14.0 nautical miles (25.9 kilometers) southwest of the LA-2 reference site.

d. The Hyperion outfall is located 22.0 nautical miles (40.7 kilometers) northwest of the LA–2 site and 28.7 nautical miles (53.2 kilometers) northwest of the LA–2 reference site. The municipal discharge effects are limited to local areas near the outfalls and do not extend to the vicinity of the dredged material disposal site. There is little likelihood of cumulative interaction between dredged material disposal and the existing JWPCP, Orange County, Avalon and Hyperion outfall discharges. No other outfalls or point sources of pollution exist near the LA-2 site.

Impacts of sediment disposal will be confined to the LA-2 site. Estimates of sediment accumulation at the disposal site have been made by mathematical modeling (Tetra Tech, 1990). Based on an average annual deposition of 200,000 cubic yards (150,000 cubic meters) of 10 percent clumped material dumped in a 990-foot (300 meter) radius dumping zone, bottom accumulation will average 2.8 inches (7.0 centimeters). The average annual disposal amount is based on a range of previous disposal at the LA-2 site between 8,200 and 688,000 cubic yards per year (FEIS page 1-3). Hopper dredges or towed disposal barges (scows) must dump within the central dumping zone, unless otherwise directed based on current patterns, sediment accumulation or type of disposal vessel. Dumps of 1,500 cubic yards (1,150 cubic meters) and 3,000 cubic yards (2,300 cubic meters) were modeled. Deposit thickness at the LA-2 site boundary is predicted to decrease to an average of 0.5 inch (1.3 centimeters) at a radial distance of about 3,000 feet (910 meters) for both types of discharges. Beyond the site boundary, sediment accumulation will be insignificant. For dredged material with a higher percentage of clumped sediment, the corresponding footprint is smaller, with higher accumulation near the center of LA-2 and lower accumulation at the same distances to the disposal boundary.

4. Site Degradation by Dumping Activities

The Oceanic Society was concerned that the elevated contaminant levels at the site suggest that the site has been degraded by dumping activities. They also commented that the environmental effects of dredged material disposal are most certainly long-term, especially at sites as shallow as the LA-2 site where contaminated levels continue to rise as more and more contaminated sediments are added and accumulated in a small well defined area. Representative Levine wrote that some other less significant environment must be identified for disposal of the contaminated dredged material. The American Oceans Campaign also commented that if disposal continues at the LA-2 site, not only will restoration be impossible but concentration of

contaminants will continue to increase, thereby increasing the potential for further degradation of Santa Monica Bay.

Rigorous sediment testing requirements specified by EPA Region IX will prevent disposal of contaminated sediment at LA-2. In accordance with the August 1989 EPA Region IX Sediment Testing Requirements, all proposed dredged material will undergo physical and chemical analysis, bioassay tests and bioaccumulation tests before the beginning of any dredging and disposal activities. When new national guidance is published as a final document, sediment testing for ocean dumping permits will be based on tiered testing. As specified in the applicable sections of 40 CFR part 227. sediments that may cause undesirable or adverse impacts due to acute toxicity, bioaccumulation of contaminants. adverse impacts on the marine environment or human health will be prohibited from ocean disposal. Santa Monica Bay is more than 5 nautical miles away from LA-2, and disposed dredged material is not expected to affect the bay. EPA Region IX will monitor currents near LA-2 for a minimum of 1 year to confirm that impacts to Santa Monica Bay water quality are not occurring.

5. Environmental Acceptability of Ocean Dumping and Alternatives to Ocean Disposal

The Oceanic Society commented that the EPA has not sufficiently demonstrated the environmental. acceptability of dumping the dredged material at sea and the EPA's decision to rely solely on ocean dumping for disposal of dredged material is inappropriate and violates international and national law. All possible upland disposal options must be considered. **Representative Levine commented that** inadequate consideration has been given to land based disposal sites, including sanitary landfilling. The Oceanic Society also requested that actual plans for short-term dumping be submitted.

Designation of the LA-2 ocean disposal site does not prevent other uses of dredged material. Criteria for evaluating the need for ocean dumping and alternatives to ocean dumping under 40 CFR 227.14 to 227.16 will be evaluated by the EPA Region IX and the Corps' Los Angeles District on a caseby-case basis during the permitting process. Dredged material will preferentially be used for beach replenishment if the material complies with the exemption criteria listed at 40 CFR 227.13(b) and the sediment is

compatible with the proposed receiving beach. This section of the regulations exempts dredged material from further testing if the sediment is composed predominantly of sand, gravel, or shell with particle sizes compatible with material on receiving beaching (40 CFR 227.13(b)(2)). When dredged material meets these criteria EPA Region IX and the Corps' Los Angeles District consider the dredged material as a resource and may use it to replenish beaches or some other constructive purpose. Acceptable beach material or suitable construction material will not be proposed for dumping at LA-2. However, it is unlikely that most of the sediments from Los Angeles or Long Beach Harbors proposed for disposal at the ocean site will be suitable for beach nourishment of other beneficial uses due to incompatible grain size.

The average, annual volume of material from short-term dredging projects expected to be disposed of at the LA-2 site is approximately 200,000 cubic yards. EPA Region IX is aware of 6 dredging projects planned by the Port of Los Angeles and one Corps of Engineers civil works project in Marina Del Rey. The actual amount of material planned for ocean disposal is unknown. EPA Region IX and the Corps' Los Angeles District will also determine whether the amount of material proposed for disposal at LA-2 is acceptable. If the amount of dredged material proposed for disposal exceeds the LA-2 site capacity, an alternate site will be evaluated for disposal.

According to the August 1989 EPA **Region IX Sediment Testing** Requirements, all material will undergo physical and chemical analysis, bioassay tests and bioaccumulation tests before any dredging and disposal activities are permitted. Projects proposed after January 9, 1991 will be evaluated under the new national guidance from EPA and Corps Headquarters. Sediments that cause undesirable effects due to either acute toxicity or to bioaccumulation of contaminants will be found unsuitable for ocean disposal. If an applicant wishes to proceed with dredging and disposing material that is unsuitable for ocean disposal, alternatives to unconfined ocean disposal must be evaluated.

The Corps' South Pacific Division questioned the need to evaluate land based disposal alternatives. FEIS addresses designation of an ocean dredged material disposal site; however, discussion of land based disposal is an appropriate alternative for consideration in the FEIS, as required by 40 CFR 1502.14. Land disposal is one of the six alternatives considered in the LA–2 FEIS.

6. Anoxic Conditions at the Deep Water Site

The Oceanic Society commented on anoxic conditions at the deep water site. They also asked whether adding more sediment capable of becoming anoxic under the low oxygen regime would cause significant changes in the deep basin environment. The deep water site is located in the San Pedro Basin. Dissolved oxygen conditions in the San Pedro Basin off Los Angeles have been measured at 0.2 ml/L (Emery, 1960). A study of deep basin characteristics by Maltouta et al. (1981) states: "Oxygen concentration of incoming deep water is decreased due to oxygen demand of the organic matter falling through the water column, and as a result of exchange of pore water between bottom sediments and overlying water. Since the intermediate water oxygen content is low, the additional oxygen demand rapidly lowers to [a] content near zero. In the inner basins, San Pedro, Santa Monica, and Santa Barbara, the oxygen content is in the dysaerobic to anaerobic range (0.1 to 0.3 ml/L)."

In the 1983–1984 Southern California **Coastal Water Research Project** (SCCWRP) Biennial Report, Thompson et al. commented: "on the San Pedro Basin Floor (downslope, 878 meters) the DO [dissolved oxygen] was found to be 0.16 ml/L (0.23 mg/L), the organic material increased to 10.3%, and the mean number of infaunal species (per sample) decreased to 4. These circumstances suggest that, although there is adequate [organic] material, DO may limit the size of the [biological] assemblage." Further, in a phone conversation on May 17, 1988, Dr. Thompson said that in the San Pedro Basin, any additional oxygen demand will pose a risk of anoxia.

EPA Region IX believes that the potential for anoxic conditions is greater at the deep water site than at LA-2 site on the edge of the San Pedro Shelf. It is possible that organic-rich dredged material may cause additional demands on the already low levels of dissolved oxygen in the San Pedro Basin. As discussed in the FEIS, the benthic invertebrate and demersal fish fauna of the deep water site are less diverse and less abundant than those of the LA-2 site; however, they do exist in an oxygen depleted environment. The deep basin environment is an undisturbed environment and any significant impacts predicted for the deep water site would be new impacts with unknown consequences.

7. Optimal Depth for Dredged Material Disposal

The Oceanic Society commented that an explanation was not given in the FEIS about why the depth interval 65 to 170 fathoms is optimal for dredged material disposal. EPA Region IX and Corps' Los Angeles District did not propose final designation of the LA-2 site based on the principle that a specific depth was optimal for dredged material disposal. As discussed in the FEIS and Section D of this Final Rule, three candidate disposal sites were evaluated according to the general site selection criteria at 40 CFR 228.5 and the specific site selection criteria at 40 CFR 228.6(a) of EPA's Ocean Dumping **Regulations. Site characteristics,** including depth, are only one factor in the disposal site evaluation process (40 CFR 228.6(a)(1)). As discussed in Sections E and F, and Response 2 above of this Final Rule, the LA-2 site was chosen as the preferred alternative.

One important factor in the site selection process associated with depth is dissolved oxygen concentrations. As discussed in Response 6 above and on pages 3-19, 4-16, 4-29 and 4-35 of the FEIS, increased biological oxygen demand (BOD) and chemical oxygen demand (COD) associated with disposal at the deep water site creates a potentially more serious impact than at the shallower water sites. The dissolved oxygen levels at the deep water site are, at times, severely depleted and any increase in BOD or COD may further reduce the dissolved oxygen available for respiration. Significant impacts in this type of marine environment may pose a risk of anoxia.

8. Interference With Fisheries and Other Activities

There were several comments that expressed concern over the interference of ocean disposal activities on other uses of the ocean, primarily commercial and sport fishing. As discussed in Article 4 of the Coastal Consistency Determination, designation of the LA-2 site is not expected to affect commercial fishing operations, which target pelagic species such as Pacific Mackerel, Northern Anchovy, Swordfish, Pacific Bonito, Pacific Sardine, and Jack Mackerel.

Recreational fishing species dominated by pelagic fish such as Pacific Mackerel, California Barracuda and Pacific Bonito, will not be affected either. These determinations are based on fish block data from the California Department of Fish and Game from 1984 to 1988.

There is a recreational fishing area close to LA-2 named Potter's Reef or Horseshoe Deep. The California Department of Fish and Game conducted a creel census of recreational fishing in 1989. Data from boats that fished at Potter's Reef show that about half of the fish caught are rockfish (a benthic fish) and half of the fish are pelagic species. The creel census data shows similar rockfish species and diversity at all of the recreational fishing sites on the San Pedro Shelf. Comparing the Potter's Reef data to data from other nearby recreational fishing areas, EPA Region IX has determined that the rockfish community is not a geographically limited fishery and the benthic fish will not be adversely affected by designating LA-2. It is important to note that recreational fishing and dredged material disposal have coexisted at the LA-2 site since 1977 with no significant reduction in the rockfish community at Potter's Reef. EPA Region IX will continue to evaluate the recreational fish data gathered by the California Department of Fish and Game, and we will enlist the aid of local fishermen in monitoring and surveillance near the LA-2 site in the future.

Disposal operations at the LA-2 site may have an effect on recreational boating. However, EPA Region IX believes that the chance of accidents is negligible because the frequency of ocean disposal activity is so low (averaging about 50 trips per year), and the disposal operations rarely occur on the weekends when recreational boating is expected to be highest (FEIS, section 4.2.3.5.2). No recreational boating accidents have been reported from the LA-2 site between 1977 and 1988 when ocean disposal was permitted.

EPA Region IX does not expect hazards to commercial shipping at the LA-2 site from disposal trips (FEIS, section 4.2.3.2). The site is south of the Southbound Coastwise Traffic Lane boundary for the Los Angeles/Long Beach Harbor. No commercial shipping accidents have been reported since 1977, the beginning of ocean disposal at the site. EPA Region IX and Corps' Los Angeles District will also require more accurate navigation to insure disposal within a 990-foot radius circle at the center of LA-2, unless otherwise directed based on current direction or type of disposal vessel.

No oil and gas developments have occurred near the LA-2 site and lease sale 95 in September 1989 has been canceled. Therefore, impacts to this industry are not expected.

9. Turbidity

The California Coastal Commission, the Oceanic Society, the Sportfishing Association of California. **Representative Levine and the American** Oceans Campaign expressed concern over the effects of recurring tubidity from disposal operations. Additional modeling using 1,500 cubic yards and 3,000 cubic yards disposal quantities has been conducted to determine the turbidity effects at the LA-2 site (Tetra Tech, 1990). Parameters chosen for this modeling are conservative and overestimate potential impacts of disposal operations. The results show that suspended solid levels in the plume decrease as the material settles and disperses from the dump area. Sand and other heavy particles will settle to the bottom within 90 to 100 seconds after initial disposal (Tetra Tech, 1990). Clay and silt will remain in the water column longer and will be affected more by dispersal than settlement.

Assuming an average current speed of 0.26 ft/sec (7.95 cm/sec), a disposal plume dumped at the upcurrent edge of the dumping zone will clear the downcurrent boundary in approximately 2 hours. Therefore, overlapping of the plumes is not predicted to occur provided individual dumps are separated by at least 2.5 hours. As a conservative measure, EPA Region IX and the Corps' Los Angeles District may restrict repetitive dumping to a minimum interval of 3 hours to insure that overlapping plumes will not occur, and to assure that long-term build-up of suspended solids concentrations does not occur at the LA-2 site. Restrictions depend on the type of material proposed for disposal and the type of dumping vessel used. The interval may be revised based on observed plume movements and current measurements made near the disposal site as part of the Site Monitoring Program.

10. Biological Impacts

The Oceanic Society commented on the acceptability of impacts within the LA-2 site boundary and outside the site, the inadequacy of the assessment of the biological community, the likelihood of the site returning to its pre-disposal condition, and the potential biological effects from dredged material disposal as well as the effects of previous disposal. In response to the Oceanic Society's concerns, a reconnaissance survey at the LA-2 site was performed by Science Applications International Corporation (1990) for EPA Region IX.

The survey found that past disposal at the LA-2 site has resulted in a footprint extending "9,515 feet (2,900 meters)

north-northeast and 5.578 feet (1.700 meters) southwest of the LA-2 disposal site boundary. Smaller, apparently isolated patches of dredged material also are observed 5,578 feet (1,700 meters) northwest and 3.609 feet (1.100 meters) southeast of the site." Evidence in the SAIC report strongly suggests that dredged material outside the site boundary to the north-northeast, is the result of a "considerable amount of errant dumping which has occurred in the past," and "periodic down-slope slumping of both natural or disposed dredged material at the top of the canyon." According to SAIC dredged material to the southwest outside the site boundary may also "result from post-disposal down-slope redistribution since the seafloor grades away from the disposal site to the west and southwest.'

To prevent further errant dumping, to reduce downslope slumping and to insure compliance with permit conditions, the Management Plan prepared for the LA-2 site includes strict regulatory and monitoring procedures. Surveillance and monitoring may consist of one or more of the following activities:

a. On-board inspection staff to assure proper dredging, transportation, and disposal of the sediment within the 990foot radius central dump zone.

b. Disposal of material at another specific location within LA-2 based on current direction, sediment distribution, or the type of disposal vessel used.

c. More accurate navigation using an electronic positioning system.

d. Submission to EPA Region IX and the Corps Los Angeles District of navigation courses before, during and following release of the dredged material to insure compliance with permit conditions.

e. U.S. Coast Guard surveillance assisted by EPA Region IX and the Corps' Los Angeles District.

f. Tiered monitoring of the disposal site.

Appendix A (Report of Field Survey) and Appendix B (Detailed Field Survey Data) of the FEIS contain the baseline data for LA-2 as it existed in the mid-1980s. The chances of restoring the LA-2 site to a similar, pre-disposal condition are not expected. Previous ocean disposal activities at the LA-2 site have changed the grain size characteristics by introducing large shell fragments and fine sediments which have altered the infaunal community. Final designation of LA-2 will continue these disturbed conditions, but as stated in the SAIC report and discussed below, there are signs of recolonization in disturbed areas outside the site boundaries.

The SAIC (1990) REMOTS sediment profile survey included a multiparameter **REMOTS** organism-sediment index (OSI) to characterize habitat quality. The index has been found "to be an excellent parameter for mapping disturbance gradients in an area and documenting ecosystem recovery after disturbance. OSI values range from -10to +11. The lowest value (-10) is assigned to benthic habitats which have low or no dissolved oxygen in the overlying bottom water, no apparent macrofaunal life, and methane gas present in the sediment. At the other end of the scale [is a REMOTS OSI value of +11 characterizing an aerobic bottom type,] with a deeply depressed RPD [reduction-oxidation potential discontinuity], evidence of a welldeveloped macrofaunal assemblage, and no apparent methane gas bubbles." OSI values less than +7 are indicative of disturbed benthic environments.

Results of the survey showed three areas of low OSI values (OSI < 6.0) on the dredge material deposit footprint which indicate a disturbed benthic environment. The largest area was within the LA-2 site boundary (5.0 < OSI < 6.3), a second large area was outside the boundary to the southwest (5.0 < OSI < 5.5), and a third small area was also outside the boundary to the north (OSI = 5.6). However, most of the area outside the LA-2 site boundary had high OSI values (OSI > 8) which suggests recolonization of macrofaunal assemblages in these areas.

From these indices, EPA Region IX concludes there are areas outside the LA-2 site boundaries where the benthic environment may be disturbed from past disposal operations. However, upon final designation of the LA-2 site, the Management Plan will insure tighter controls over all disposal operations by requiring that disposal be performed at a central area of the site using a more accurate electronic positioning system for navigation. This will confine potential impacts within the site boundaries. The permittee will be required to provide plots all disposal trips to EPA Region IX and the Corps' Los Angeles District as proof of compliance. Surveillance and monitoring programs will provide data on permit compliance and any adverse impacts at the LA-2 site.

Strict surveillance and monitoring procedures outlined in the Management Plan will keep short-term physical impacts or smothering risks to benthic organisms confined to the dump site. These impacts within the dump site are

considered acceptable given: (1) Historical use of the site has resulted in minimal degradation, (2) detailed review of sediment testing by the EPA Region IX and Corps' Los Angeles District will require physical and chemical analysis, bioassay tests and bioaccumulation tests on all proposed dredged material as necessary, (3) enforcement of permit conditions will be monitored by EPA Region IX, the Corps' Los Angeles District and the U.S. Coast Guard, and (4) a long-term site monitoring program is planned. If significant adverse environmental impacts are detected. EPA Region IX will modify site use to mitigate the effects or initiate new site designation procedures.

11. Impacts to Human Health

Representative Levine and the American Oceans Campaign expressed concern over the adverse impacts to human health as a result of possible contamination to the fish population. A comprehensive evaluation of proposed dredged material will be implemented according to the August 1989 EPA Region IX Sediment Testing Requirements (or new national ocean dumping program guidance) and 40 CFR part 227. Sediment will undergo physical and chemical analysis, bioassay tests and bioaccumulation tests before permitting and the start of any dredging and disposal activity. Sediments that will cause undesirable effects due to either acute toxicity or to bioaccumulation of contaminants, will not be considered suitable for ocean disposal.

In addition to sediment testing, the Management Plan for this site includes a Site Monitoring Program and decision options for determining whether site use or designation should be modified if the potential for unacceptable impacts become apparent. Implementation of these programs assures appropriate site management based on data collection through progressive tiers of study. Water column and sediment transport monitoring in Tier 1 will focus on the physical environmental impacts of disposal at LA-2.

Monitoring of biological resources will be evaluated in Tiers 2 and 3 of the Site Monitoring Program. Initially, a determination will be made about whether sediment at the LA-2 site is significantly affecting benthic community structure. If significant changes in the benthic community are detected compared to the reference site (located at 33½ 33.20' North latitude by 118½ 10.80' West longitude), then a body burden analysis of resident infauna will be conducted. Species will be collected at the reference site, at LA- 2 and the area surrounding LA-2. Should the body burden analysis of benthic infauna species indicate that significant adverse impacts are possible, EPA Region IX could modify site use, permit conditions and sediment testing requirements to mitigate the effects, or close the site after a new site was designated.

12. Capping of Contaminated Sediment

The Oceanic Society suggested that sediment capping may be useful for moderating the effects of contaminated dredged materials already deposited during approved open ocean dumping procedures. The issue of sediment capping has never been evaluated for this site. Designation of a site under MPRSA Section 102 is not for material that needs to be capped. Dredged material requiring capping would fail EPA Region IX testing requirements and would require a waiver from EPA's criteria under 40 CFR 225.3 and 225.4.

Capping of dredged material has never been attempted in water depihs greater than 200 feet (60 meters), and the LA-2 site water depth is 360 to 1,060 feet. Therefore, capping is not now a realistic alternative at the LA-2 site. Disposal of dredged material at the LA-2 site that meets the EPA sediment testing criteria at 40 CFR part 227, will not be contaminated with heavy metals, PCBs, petroleum hydrocarbons, pesticides, PAHs or other organic chemicals which would have an adverse impact on the marine environment.

13. Impacts to Birds and Mammals

The Oceanic Society expressed concern over the potential impacts to coastal birds, marine mammals and endangered species. As stated by the National Marine Fisheries Service in Exhibit 11, page 5-26 of the FEIS, "We have reviewed your [Corps' Los Angeles District November 11, 1984 determination that populations of listed endangered, threatened or candidate species will not be affected adversely by the proposed final designation of the LA-2 and LA-5 ocean disposal sites for dredged materials. We agree with your conclusion." Expected impacts to fish and feeding coastal birds would be minor and temporary since commercially or recreationally productive fishing operations target pelagic species (see Response 8 above). The impacts of dredged material disposal on the upper water column will be intermittent and short-term. Therefore, the impact to coastal birds and marine mammals is considered to be insignificant. In addition, after physical and chemical analysis. bioassay tests and bioaccumulation

tests on all proposed dredged material, EPA Region IX and the Corps' Los Angeles District will prohibit ocean disposal of any material that is found to cause undesirable effects on the marine environment due to acute toxicity or to bioaccumulation of contaminants.

14. Minimum Requirements for Environmental Parameters

The Oceanic Society commented that the minimum requirements within each environmental parameter listed in Table 2–2 of the FEIS should be specified. The classification system in the FEIS is similar to the system used by the Minerals Management Service in several of the EISs prepared for Southern California (FEIS page 4–1). The ranking system is a qualitative assessment of environmental impacts that is used to rate impacts. The following excerpt is from the beginning of Chapter 4 in the FEIS:

Class I—Significantly adverse impacts that cannot be mitigated to insignificance. This means that no measures could be taken to avoid or reduce these adverse effect to insignificant or negligible levels.

Class II—Significant adverse impacts that can be mitigated to insignificance. These impacts are potentially similar in significance to Class I impacts, but the severity of the impact can be reduced or avoided by implementation of mitigation measures discussed under each heading.

Class III—Adverse but insignificant impacts or no effect anticipated. No mitigation measures are required for these impacts or effects.

Class IV—Beneficial impacts. These impacts would improve conditions relative to the pre-project baseline conditions. They are further subdivided as significant or insignificant.

15. Sediment Testing Requirements

The Oceanic Society, the City Attorney of Long Beach and **Representative Levine commented on** the adequacy of the sediment testing requirements. Sediment testing proposals received by EPA Region IX before January 9, 1991 requesting disposal at LA-2 will be evaluated using the August 1989 EPA Region IX General **Requirements for Sediment Testing of Dredged Material Proposed for Ocean** Disposal and procedures in the 1977 EPA/Corps Implementation Manual for the Ocean Dumping Program (U.S. EPA and U.S. Army Corps of Engineers, 1977). All tests after that date will be evaluated using the new national guidance on ocean dredged material disposal from EPA and Corps Headquarters. Revised regional testing requirements will be prepared soon after the national guidance is published in final form. Sediments shown to cause

undesirable effects due to either acute toxicity or to bioaccumulation of contaminants will not be considered suitable for ocean disposal.

Revisions to the EPA Region IX August 1989 testing procedures will be made by EPA Region IX and the Corps' South Pacific Division and Los Angeles District to define the permit process, to further define the physical and chemical analyses, bioassay tests and bioaccumulation tests, and to reflect new national guidance. When the two agencies agree on new procedures, a Public Notice will be issued to allow the public to comment on the proposed changes to the sediment testing program.

16. Need for Testing All Dredged Sediments

The Corps' South Pacific Division questioned the need for testing of all dredged sediments and the procedures used for evaluating the test results. The Corps is correct that some sediments may be exempt from chemical and biological testing requirements based upon the physical characteristics of the material and its location in relation to known sources of contamination (40 CFR 227.13(b)). However, much of the material expected to be disposed at the LA-2 site may not satisfy this exemption.

The Ocean Dumping Regulations require the EPA Regional Administrator to make an independent evaluation of the proposed dumping according to the ocean dumping criteria (40 CFR 225.2(c)). This evaluation includes reviewing results of physical, chemical and biological testing of the sediments proposed for disposal. EPA Region IX's procedures for testing sediments were now defined in the August 1989 General **Requirements for Sediment Testing of Dredged Material Proposed for Ocean** Disposal. The 1989 testing procedures will be revised by EPA Region IX and the Corps' South Pacific Division and Los Angeles District to define the permit process and reporting requirements for dredging and disposal operations. The revisions will further define the physical and chemical analyses, bioassay tests and bioaccumulation tests required for ocean dumping permits based on the latest national guidance.

17. Monitoring of the LA-2 Site

The Corps' South Pacific Division questioned the need to monitor the disposal site. The Regional Administrator may initiate a monitoring program if necessary (40 CFR 228.9). EPA Region IX has determined that a Site Monitoring Program is an essential part of the LA-2 Management Plan for evaluating the extent of potential impacts at the LA-2 site. The Site Monitoring Program has been developed to address concerns raised by regulatory agencies, resource agencies and the public in response to the Draft EIS and Final EIS on water and sediment quality, dispersion of the disposed material, and impacts upon biota near the site. In consultation with EPA Region IX, the Corps' South Pacific Division and Los Angeles District agree that a Management Plan and a Site Monitoring Program are required.

The City of Los Angeles Department of Public Works suggested that a continuous monitoring program be provided to include the various environmental parameters on a systematic, long-term basis. The Oceanic Society also suggested that a proposed monitoring and management plan should be issued and subject to review. A Management Plan, which includes a Site Monitoring Program, has been prepared and is based on tiered testing of null hypotheses. Evaluation of disposal impacts on the marine environment will be based on sequential tiered testing of the following parameters: sediment accumulation at the disposal site boundary and currents near the site, impacts on the benthic communities beyond the site boundary, and the body burden of contaminants in benthic species within the site and adjacent areas. In addition, monitoring data will supplement previous oceanographic surveys and projected sediment deposition at LA-2. If significant adverse impacts are detected, EPA Region IX will modify site use to mitigate the effects or make other management options to reduce impacts at the site.

18. Experimental Designation of LA-2

The California Coastal Commission suggested that the LA-2 site should be designated on an experimental basis to allow monitoring of disposal operations, and a re-evaluation of the designation based upon the monitoring results. EPA Region IX discussed this issue with the Commission staff. The two agencies agreed that the site could be designated for continued use, subject to a 5 year monitoring program. At the end of 3 years a monitoring report will be issued to evaluate potential impacts at LA-2. Management decisions on site use will be made and monitoring will continue for 2 more years. This 2-year time will give EPA Region IX the opportunity to mitigate any problems, initiate management options, or complete required documents to designate a new site if impacts at LA-2 are found to be significantly adverse. At the end of 5 years, EPA Region IX will provide a new coastal consistency determination to the California Coastal Commission.

19. Site Selection Criteria

Several letters commented on the selection criteria for the preferred alternative. The selection criteria for all ocean dredged material disposal sites are defined at 40 CFR 228.5 and 228.6(a). EPA Region IX determined that LA-2 complied with all of these criteria (see Section F, Regulatory Requirements in this Final Rule).

20. Request for a Public Hearing

The Mayor of Long Beach and the City Attorney of Long Beach requested that a public hearing be held. EPA Region IX determined that a public hearing would not be held for this proposed action. EPA Region IX decided this because only two requests were received for a public hearing and opportunity for public comment also occurred at the California Coastal Commission's hearing on the Coastal Consistency Determination on January 9, 1991.

21. Cost of Disposal as a Site Selection Factor

The Corps' South Pacific Division suggested that the cost of disposal should be included as a site selection factor. Cost is considered initially in determining how far we should look for feasible alternative sites. However, in the final selection of a site, economics is not one of the EPA criteria listed at 40 CFR 228.5 and 228.6(a).

22. Public Involvement in the EIS Development

The Oceanic Society commented that, considering the superficial nature of the EIS, it could not have taken much time to prepare. They also assumed that public input was minimal because there were no public workshops and no attempt to solicit public participation in the site selection process. EPA Region IX disagrees with the comment and has provided ample opportunity for public comment on this site designation.

A Notice of Intent (NOI) to prepare an environmental impact statement was published in the **Federal Register** on November 10, 1983 (FEIS Exhibit 1, page 5–2). The NOI was published concurrently with a Los Angeles District Public Notice (84–LA2–S(HB)) (FEIS Exhibit 2, page 5–3). Public and regulatory agency comments were accepted on the scope of the EIS for the designation of the LA–2 interim site as an ODMDS for continued use. Several Federal, State and local agencies, and interested public groups submitted comments by the closing date of January 16, 1984. At that time, no comments or concerns were received from the Oceanic Society.

An interagency workshop on the designation of the LA-2 interim ODMDS as a final site was held on June 26, 1984 and a list of attendees is provided (FEIS Table 5-2, page 5-18). The DEIS and FEIS were distributed to more than 200 agencies and individuals listed in Exhibit 15 on pages 5-30 through 5-40 in the FEIS on October 9, 1987. The Oceanic Society was one of the private organizations given the opportunity to comment, but again there were no comments of concerns received. The Proposed Rule and the FEIS were published for review in August, 1988. The California Coastal Commission held a public hearing on January 9, 1991 to discuss the LA-2 site designation coastal consistency determination. The Commission voted 10 to 1 for the LA-2 site designation. Therefore, EPA Region IX believes that an adequate amount of time, and government and public participation was provided during the site selection process to designate the LA-2 site as the final ODMDS.

23. Spacing of Site Characterization Sampling Times

The Oceanic Society commented that the spacing of sampling dates was arbitrary and having 4 different days spanning 3 seasons does not provide any more information than more intensive sampling at one time could have provided. EPA Region IX and the Corps' Los Angeles District chose the sampling times, August, December, March and April-May, to cover the three oceanographic seasons, (Summer, Winter and Spring) off the California coast (Owen, 1974 and Karl et al. 1980). The physical and biological environment of the LA-2 site and the reference site were investigated during these oceanographic periods to examine seasonal variations in the water column, sediment and marine fauna. A long-term investigation was not needed because inter-site comparisons were made over the same oceanographic periods. Longterm trends will be evaluated at LA-2 as part of the Management Plan and Site Monitoring Program.

24. Oceanographic Suitability of the LA-2 Site

The Oceanic Society commented that descriptions of current patterns, upwelling, coastal eddies and wave action raise serious questions about the suitability of the LA-2 site. The description of eddies moving through the nearshore waters brings into question their effect on disposal of dredged sediments as they are dumped at the LA-2 site or as they are resuspended. The Oceanic Society also commented that, given the characteristics of the site, it would be logical to prohibit dumping of dredged material during the upwelling period (March to June).

The relative impact of various oceanographic processes affecting sediment transport were observed during an upwelling period from mid-April to early June, 1978 (Karl et al. 1980). The study found that during 2 to 3 months of the year upwelled water moved onto the San Pedro Shelf near the San Pedro Sea Valley, about 1 nautical mile (1.8 kilometers) north of the LA-2 site, and spread southeasterly over the shelf. "Before the onset of upwelling, suspended particulate matter was concentrated nearshore. As the upwelled water moved over the shelf, it transported suspended matter seaward, dramatically increasing total suspended material concentration in the surface and bottom layers." During nonupwelling periods the general movement of sediment is westward toward the San Pedro Valley. Bottom sediments move off the San Pedro Shelf during the other 9 to 10 months. The SAIC (1990) report shows that most of the dredged material movement has been off the San Pedro Shelf, not toward the east where most of the recreational fishing areas are found.

EPA Region IX recognizes that the oceanographic processes affecting sediment transport on the San Pedro Shelf vary during the three oceanographic period (FEIS page 3-10), and that the prevailing processes at a particular time and place during these seasons are changeable and difficult to predict. Therefore, the Site Monitoring Program includes deployment of current meters in Tier 1 to measure oceanographic currents for at least one year to evaluate the temporal changes in ocean currents that may affect disposal of dredged materials. Current data and a bathymetric survey of the LA-2 site will be used to assess the impact of dredged material disposal in Tier 1. If significant adverse impacts to marine resources, (i.e., benthic communities and fisheries) are detected, then EPA Region IX will modify site use and permit conditions to mitigate the effects, or continue monitoring in Tiers 2 and 3 of the Site Monitoring Program.

25. Bioaccumulation

The Oceanic Society commented that the bioaccumulation tests usually are not conducted long enough. The Oceanic Society's comments about the earlier tests being too short are valid and the exposure times have been increased. EPA Region IX and Corps' Los Angeles District will require 20-day bioaccumulation tests for suspected trace metal and organic chemical contamination. These tests will be increased up to 28 days when new national guidance is approved. The new test period was determined scientifically by EPA and Corps researchers studying effects on marine organisms exposed to contaminated sediments from Black Rock Harbor, Connecticut. In response to the California Coastal Commissions request, EPA Region IX will require that all laboratory tests for bioaccumulation proposed after January 9, 1991 have an exposure time of 28 days as defined in the new national guidance manual.

26. Classification of FEIS Alternatives

The Oceanic Society commented that the classification system used in the EIS to determine levels of environmental impact is based on an evaluation system that does not reveal any distinction between the LA-2 site and deep water site. EPA Region IX believes that the classification system used in the FEIS is a ranking tool and shows similarities between the LA-2 site and the deep water site. The LA-2 site was chosen as the preferred alternative because it has been used historically, it satisfies the site selection criteria (40 CFR 228.5 and 228.6(a)), the environmental impacts have been determined to be acceptable, the anticipated future use of the site will not cause significant adverse environmental impacts, and conflicts with other uses of the ocean, especially fisheries, are minimal.

D. Analysis of Alternatives

The action discussed in the 1988 FEIS and Proposed Rule is the designation of the LA-2 ODMDS for continuing use. The purpose of the designation is to provide an environmentally acceptable location for ocean disposal. Approval of specific ocean dredged material disposal permit applications is a completely separate process from site designation. MPRSA section 103 permit applications are reviewed on a case-by-case basis to determine whether the proposed dredged materials are suitable for disposal at LA-2.

The FEIS discussed the need for the site designation and examined a range of alternatives to the proposed action, including 3 ocean disposal sites. Land based disposal alternatives were examined in the FEIS and found to be unacceptable for disposal of large amounts of dredged material. However, land disposal alternatives will be evaluated by EPA Region IX and the Corps' Los Angeles District on a caseby-case basis during the permitting process. The following alternatives were evaluated in the FEIS:

1. No action—Selection of this alternative would prevent final designation of the LA-2 site. No action on the site designation could force the Corps' Los Angeles District to designate a site under section 103 of MPRSA, or modify, cancel or recommend no Federal participation on dredging projects that rely on ocean disposal of suitable material. This alternative has been rejected by EPA Region IX because the LA-2 site has been used successfully in the past and the environmental impacts at the site are acceptable.

2. Delayed action alternative—The need for an ODMDS is a continuing concern for dredging projects in Los Angeles and Long Beach Harbors and other areas in the vicinity. Resolving this concern requires conclusion of the site designation process in the most expeditious manner possible. Therefore, EPA Region IX is designating LA-2 for continued use and we will manage the site to prevent significant adverse environmental impacts.

3. Upland disposal (including beach replenishment, landfilling in port areas and disposal at sanitary landfills)-These alternatives are considered on a case-by-case basis during the Corps' MPRSA section 103 permit application review process. Beach replenishment may be preferred to ocean disposal if the dredged materials are compatible with the receiving beach and studies show that the dredged materials will replenish the beach. Permitting for beach replenishment is regulated under Section 404 of the Clean Water Act. Disposal of large amounts of dredged material at upland sites is not a feasible long-term solution for management of dredged material disposal because capacities of these sites are limited in the Los Angeles/Long Beach area.

4. LA-2 ODMDS (preferred alternative)-This site was selected as the preferred alternative because it has been used historically and it satisfies the site selection criteria (40 CFR 228.5 and 228.6(a)). The center of LA-2 is located 5.2 nautical miles south of Point Fermin and occupies an area of 0.77 square nautical miles. Water depths within the area are between 360 to 1,060 feet. The center coordinates of the site are: 33 1/2 37.10' North latitude by 118 1/2 17.40' West longitude (North American Datum from 1983), with a radius of 3,000 feet. The environmental impacts at the site have been determined to be acceptable, though benthic communities have been altered by past dumping. The ocean site will be managed to accommodate disposal of a yearly average of about 200,000 cubic yards of

dredged material, based on past disposal at LA-2. Anticipated future use of the site will not cause significant adverse environmental impacts. Conflicts with other uses of the ocean, including recreational and commercial fishing have been minimal and are not expected to change.

5. Shallow water site-This site is located in 66 to 540 feet (20 to 165 meters) of water, adjacent to the Palos Verdes Peninsula and the Whites Point municipal outfall. Synergistic effects from the Whites Point outfall; proximity to fishing and boating areas; and effects on kelp beds, benthic resources, cultural resources, navigation and shoreline processes were evaluated in the FEIS. EPA Region IX determined that the environmental impacts of designating the Shallow Water Site were not acceptable because the site could potentially impact the major resources listed above.

6. Deep water ODMDS-The candidate area for the deep water site is located 9.4 nautical miles (17.4 kilometers) south of Point Fermin in 2,840 feet (860 meters) of water. This area has not been used previously as a disposal site for dredged material. The major reason for not selecting this deep site is that disposal of dredged material would cause new impacts to an undisturbed habitat and low dissolved oxygen conditions in the San Pedro Basin would be compounded by introduction of dredged material with high chemical and biological oxygen demands. The LA-2 site, in contrast, has been used for disposal of dredged material since the 1970s and impacts at the site have been acceptable. Another reason for not selecting the deep site is the larger size of the area affected by disposal.

The FEIS presents the information needed to evaluate the suitability of ocean disposal areas for final designation of LA-2 and is based on a disposal site environmental study. The Final Rule is being promulgated in accordance with MPRSA, the EPA Ocean Dumping Regulations, and other applicable Federal environmental legislation. This Final Rule for designation of LA-2 as an ocean dredged material disposal site fills the same role as the Record of Decision required under regulations promulgated by the Council on Environmental Quality for agencies subject to NEPA.

E. Site Designation

On August 17, 1988 (53 FR 31052), EPA Region IX proposed designation of the LA-2 site for the continuing use as a dredged material disposal site for suitable sediments from Long Beach and Los Angeles Harbors and other locations in the vicinity. The public comment period on this proposed action closed October 1, 1988.

Today EPA Region IX designates LA-2 as an ocean dredged material disposal site. The LA-2 disposal site is located 5.2 nautical miles south of Point Fermin and occupies an area of 0.77 square nautical miles. Water depths within the area are between 360 and 1,060 feet. The center coordinates of the site are: 33¹/₂ 37.10' North latitude by 118¹/₂ 17.40' West longitude (North American Datum from 1983).

Designation of LA-2 is for continued use, subject to a Management Plan and 5 vears of site monitoring. EPA Region IX will prepare a report on the monitoring results after 3 years of site monitoring. The report and site management options will be evaluated by EPA Region IX, the Corps' Los Angeles District and the California Coastal Commission. Site monitoring will continue during the following 2 years and any additional information required by the above agencies will be obtained. At the end of 5 years EPA Region IX will present a revised coastal consistency determination to the California Coastal Commission. If disposal operations at the site are shown to cause unacceptable adverse environmental impacts, further use of the site will be restricted or terminated as soon as a suitable alternative disposal site can be designated.

F. Regulatory Requirements

Five general criteria are used in the selection and approval of ocean disposal sites for continuing use (40 CFR 228.5). Sites are selected to minimize interference with other marine activities, to keep any temporary perturbations from causing impacts outside the disposal site, and to permit effective monitoring which is designed to evaluate specific areas of concern, such as water quality impacts, significant movement of sediment outside the site and unacceptable impacts to the marine environment or human health. Where feasible, locations off the continental shelf and historical sites are chosen. The 11 specific site selection criteria are listed in 40 CFR 228.6(a) of the EPA **Ocean Dumping Regulations. These** specific factors are used to evaluate all candidate disposal sites.

The LA-2 site, as discussed below under the 11 specific factors, complies with the 5 general criteria (40 CFR 228.5). Historical use at the existing site has not resulted in significantly adverse effects on fisheries, living sources of the ocean, or other uses of the marine environment.

1. Geographical position, depth of water, bottom topography and distance from coast (40 CFR 228.6(a)(1)). The center of LA-2 is located 5.2 nautical miles south of Point Fermin and occupies an area of 0.77 square nautical miles. Water depths within the area are between 360 to 1.060 feet. The center coordinates of the site are: 33½ 37.10' North latitude by 118½ 17.40' West longitude (North American Datum from 1983), with a radius of 3,000 feet. The seafloor at the site is a gently sloping silty-sands bottom (FEIS page 3-26).

2. Location in relation to breeding, spawning, nursery, feeding, or nesting areas of living resources in adult or juvenile phases (40 CFR 228.6(a)(2)). The LA-2 site provides feeding and breeding areas for common resident benthic species. Designation of the site will not affect any geographically limited habitats, breeding sites or critical areas that are essential to commercially important species or rare or endangered species.

3. Location in relation to beaches and other amenity areas (40 CFR 228.6(a)(3)). The LA-2 site is 5.2 nautical miles south of Point Fermin (the nearest mainland shoreline), 14.3 nautical miles (26.5 kilometers) from Huntington Beach and 13.3 nautical miles (24.3 kilometers) from Long Point (the nearest Santa Catalina Island shoreline). EPA Region IX and the Corps' Los Angeles District have determined that aesthetic impacts of plumes, transport of dredged material to any shoreline and alteration of any habitat of special biological significance or marine sanctuary will not occur if this site is designated.

Reversals in the prevailing current flow are common near LA-2; therefore, suspended solids from the LA-2 site will move either northwest or southeast. Initial modeling results using a conservative approach indicate that suspended solid levels would decrease to background levels before the plume reached all but one local sportfishing area (Potter's Reef, also known as Horseshoe Deep) next to the disposal site. Discussion of Potter's Reef and EPA Region IX's analysis of recreational fisheries information are presented in Comment 8 above.

The following recreational fishing areas are near LA-2: the OLYMPIC Wreck located 3.7 nautical miles (7.0 kilometers) northeast of LA-2, Horseshoe Kelp located 4.0 nautical miles (7.4 kilometers) northeast of LA-2, the Rockpile located 4.8 nautical miles (8.9 kilometers) northeast of LA-2, the Green Buoy located 5.0 nautical miles (9.3 kilometers) east of LA-2, and three oil rigs located 7.5 nautical miles (13.9 kilometers) southeast of LA-2. More detailed current data from the Site of Monitoring Program will be used in future modeling analyses to determine potential impacts to these areas when Tier 1 current meter data are available.

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)). An annual average of approximately 200,000 cubic yards (151,000 cubic meters) of predominantly silts and clays dredged from the ports in San Pedro Bay and other nearby harbor areas are expected to be disposed at the LA-2 ODMDS once it is designated. These projections are based on historical use of the site. The actual amount of disposal may vary from the annual average for any given year. EPA Region IX and the Corps' Los Angeles District will evaluate and manage the amount of dredged material proposed for disposal at LA-2 through the MPRSA section 103 permit process.

All dredged material proposed for disposal at the site must be suitable for ocean disposal. This determination will be made by EPA Region IX and the Corps' Los Angeles District based upon the results of physical, chemical and biological tests before a MPRSA Section 103 permit can be issued. Certain dredged material may be exempted from chemical and biological testing based upon the physical characteristics of the sediments and their location in relation to sources of contamination (40 CFR 227.13(b)(1)). Disposal will occur from hopper dredges or barges towed by tugboats to the site. Dumping of prohibited materials or other industrial or municipal wastes will not be permitted at the site.

5. Feasibility of surveillance and monitoring (40 CFR 228.6(a)(5)). The U.S. Coast Guard (USCG) is the Federal agency with authority to conduct surveillance and monitoring of disposal activities at sea. EPA Region IX and the Corps' Los Angeles District will assist the USCG with surveillance within the limits of their jurisdiction.

A Site Monitoring Program has been developed by EPA Region IX and the Corps' South Pacific Division and Los Angeles District. The major components are listed below.

a. Physical and biological concerns will be key factors in the three-tiered Site Monitoring Program.

(1) Tier 1 monitoring begins with a physical survey of the disposal site to determine whether disposed dredged material is remaining at LA-2.

The types of physical surveys could include: Precision bathymetry, side-scan

sonar, REMOTS sediment profile photography, sub-bottom profiling, or other similar procedures. Additional monitoring activities in a higher tier may not be necessary if a management decision can be made with the data obtained from the physical survey. If more data are needed to make a management decision, Tier 2 monitoring may be initiated.

EPA Region IX will deploy current meters near LA-2 for at least one year. Oceanographic current data will be used to predict the movement of disposed sediment and plumes at LA-2.

(2) Tier 2 monitoring will focus on the physical effects of dredged material movement out of the LA-2 site on sensitive benthic biological resources of concern. The benthic resources of concern include infauna, epifauna and demersal fishes identified in the FEIS and in the 1984 to 1988 fish block data from the California Department of Fish and Game. The benthic community at the boundary of LA-2 and the adjacent areas will be compared to the benthic community at the same reference site used to determine whether proposed dredged material is suitable for ocean disposal. The reference site is located at 331/2 33.20' North latitude by 1181/2 10.80' West longitude (North American Datum from 1983) at the 600-foot depth contour. Additional monitoring activities in a higher tier may not be necessary if a management decision can be made with the data obtained from the benthic community comparisons. If more data are needed to make a management decision, Tier 3 monitoring may be initiated.

(3) Tier 3 monitoring will be conducted as part of EPA Region IX's responsibilities for site designation. This tier involves the assessment of benthic body burdens of contaminants if Tier 2 shows unacceptable environmental impacts on the resources of concern. EPA Region IX will determine whether LA–2 is a source of significant bioaccumulation in the tissues of benthic species collected at LA-2 and the adjacent area compared to the reference site. These data will be the basis for continuing use of LA-2, management options to further limit disposal times, quantities or characteristics of the dredged material, or the possible closure of the site after another site is designated.

b. The Site Monitoring Program will be a part of the LA–2 Management Plan. Guidelines for site use included in the Management Plan are:

(1) Use of the site shall be restricted to disposal of dredged sediments only, regulated under section 103 of MPRSA.

(2) All sediments proposed for dredging must be determined to be suitable for ocean disposal by EPA Region IX and the Corps' Los Angeles District. Suitability for ocean disposal will be determined after review of the results of physical, chemical and biological testing of the sediments, except those sediments specifically exempted from such testing. When the material does not qualify for an exemption, testing and reporting procedures shall be conducted as described in procedures approved by EPA Region IX and the Corps' Los Angeles District.

(3) No dredged material will be disposed of at LA-2 without a MPRSA section 103 permit issued by the Crops' Los Angeles District, or as authorized in a Corps' Civil Works project. All such permits or Corps' Civil Works projects are subject to the approval of EPA Region IX. All disposal operations will be carried out according to special conditions and other procedures set out in the MPRSA section 103 permits or specifications of the Corps' Civil Works project.

(4) If the dredged material is expected to form significant surface plumes, the timing of disposal operations may be restricted to no more than once every 3 hours and the permittee may be required to monitor the movement of surface plumes.

(5) Disposal is expected to average about 200,000 cubic yards per year.

(6) All sediments will be disposed within a 990-foot radius circle centered at coordinates of the disposal site, unless otherwise directed.

(7) There are no restrictions on the type of disposal equipment that can be used; however, it is anticipated that most of the dredged material will be excavated with clamshell dredges and disposed from towed split hull scows or barges; or excavated by hopper dredges and disposed from the hopper dredge or a towed barge.

(8) The USCG is responsible for surveillance of vessels disposing of dredged material at the site. As staff and equipment availability permit, EPA Region IX, the Corps' Los Angeles District or the USCG may provide a vessel rider, an escort, or impose other requirements to confirm that disposal occurs within the central dumping zone.

(9) The following reporting requirements shall be incorporated into all MPRSA Section 103 permits for use of the LA-2 site:

(a) The permittee shall notify EPA Region IX, the Corps' Los Angeles District and the USCG Marine Safety Office in Long Beach at least two weeks before to the start of the disposal activity.

(b) Each permittee shall provide EPA Region IX, and the Regulatory Branch of the Corps' Los Angeles District, with the following information within 30 days following the end of the disposal operation:

Project information: Project name; permittee; permit number; project beginning and ending dates; project description, including map of area dredged, depth of dredging, side slopes and tolerance dredging (overdredging depth); and type of dredging, either construction or maintenance.

Disposal information (For each trip to the disposal site): Date; hopper dredge or towing vessel and scow or barge name, number and owner; master of the hopper dredge or towing vessel; capacity of disposal vessel, hopper dredge, scow or barge (in cubic yards and cubic meters); volume discharged (actual volume, not pay volume); a certified plot of all hopper dredge, barge or scow disposal tracks once inside the boundaries of the LA-2 disposal site, including the time and coordinates for the beginning and ending of disposal; and any unusual conditions affecting disposal on any trip (i.e., heavy seas, equipment malfunction, etc.).

Post-dredging information: A copy of the post-dredging hydrographic survey taken after dredging is completed, a copy of the pre-dredging hydrographic survey taken at the site shortly before dredging began, and a comparison of the two hydrographic surveys to determine the extent of dredging at the project site; number of disposal trips; total amount of dredged material dumped at LA-2 in cubic yards and cubic meters, and dredged quantity calculations necessary to determine the extent of dredging at the project site; and if the dredged material is not exempt from testing, the mass loading of materials disposed at the LA-2 site should be calculated based on chemical analyses used to characterize the dredged material before the permit was issued.

c. If significant adverse impacts are detected at or beyond the site boundary, site use or designation can be modified by EPA Region IX to reduce adverse environmental impacts. These modifications will be governed by the following criteria:

(1) Exceedance of Federal water quality criteria no more than 4 hours after a disposal within the site, or at any time beyond the LA-2 site boundary.

(2) Movement of disposed material toward significant biological resource areas, marine sanctuaries or beaches. (3) Significant adverse changes in the structure of the benthic community outside the disposal site boundary.

(4) Significant adverse bioaccumulation in organisms collected from the disposal site or areas adjacent to the LA-2 site boundary compared to the reference site.

(5) Significant adverse impacts upon commercial or recreational fisheries resources near the site.

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 LA-2 site is subject to variable currents, eddies and upwelling conditions that form a complicated system with both large-scale and smallscale variations. Based on observations made by Hendricks (1980 and 1982), Hendricks and Stubbs (1984) and Winant (1983), the prevailing surface current near the LA-2 site is northwest at 0.26 ft/sec (7.95 cm/sec). A southeasterly flow at the same speed was also evaluated in the model as this is a common reversal in the area. During a period of spring upwelling, Karl et al. (1980) found that water moved onto the San Pedro Shelf in the vicinity of the LA-2 site and spread southeasterly, winds moved the surface flow in similar direction, and a mid-water wedge is hypothesized to have moved shoreward.

Very little resuspension of deposited sediments is expected. However, bottom currents are not yet well defined at the site, but can be expected to be comparable in direction and variability to those at the shallower Orange County, Outfall station, for which there are current data, located 14 nautical miles (26 kilometers) east of LA-2 site in 260 feet (80 meters) of water. These currents will be better defined during the initial year of monitoring because EPA Region IX will place a current meter array near the site to measure currents.

7. Existence and effects of current and previous discharges and dumping in the area (including cumulative effects) (40 CFR 228.6(a)(7)). LA-2 was used as an interim site for disposal of dredged material from the Ports of Los Angeles and Long Beach as well as other nearby locations from the late 1970s through 1988. Comparison to a reference site suggests that some site characteristics have been modified by disposal activities. These characteristics include:

a. A greater range of grain sizes at the site.

b. Elevated concentrations of trace metals and chlorinated hydrocarbons.

c. Lower species diversity and abundance of demersal fish.

d. Lower diversity of benthic infauna and epifauna.

These effects are considered to be acceptable localized impacts within the disposal site because disposal of dredged material is expected to affect the bottom physically within the disposal site boundary. Impacts on the water column associated with disposal events are minimal and temporary.

The associated municipal discharge effects from the Whites Point outfall, the Orange County outfall, the Avalon outfall and the Hyperion outfall, are limited to local areas near the outfalls and do not extend to the vicinity of the dredged material 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 288.6(a)(8)). Interference with shipping is minimal because of the low volume of material to be discharged at LA-2, approximately 200,000 cubic yards per year, and because the disposal site is located outside the USCG Precautionary Area and major shipping lanes. Impacts on commercial and recreational fishing activities are expected to be minor and temporary since most of the catch near LA-2 consists of pelagic species. The impacts of dredged material disposal on the upper water column are intermittent and short-term.

The most important impacts of dredged material disposal are localized changes in the bottom community. The benthic fish community at LA-2 site is somewhat smaller compared to the reference site. This effect is localized and not expected to affect the major recreational and commercial fishing activities which concentrate on pelagic species. However, a creel census by the California Department of Fish and Game showed that rockfish caught at Potter's Reef adjacent to LA-2 accounted for nearly 50% of the catch surveyed. Impacts to fisheries will be evaluated with the assistance of local sport fishermen who offered their services at the California Coastal Commission hearing on January 9, 1991. EPA Region IX shares the recreational fishermen's desire to prevent significant impacts to the sport fishing industry. The Agency will actively seek the assistance of the local recreational fishermen during the Site Monitoring Program. Sportfishing, pleasure boating, and dredged material disposal have coexisted at LA-2, and no changes are expected. Oil and gas development will not be affected by designation of the LA-2 site.

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 LA-2 is indistinguishable from the water quality of nearby areas. Sediment quality differs from the reference site in grain size distribution, and levels of trace metals and organic chemicals. Species diversity of benthic epifauna, infauna, and demersal fish are lower at the LA-2 site than at the reference site. Many of the same species exist at both sites. These differences are expected based on historical disposal of dredged material at the LA-2 site and the disturbed benthic conditions at the disposal site. If initial monitoring results show that unacceptable impacts have affected the benthic community at LA-2, then evaluation of the effects on the benthic community will be conducted as part of the Site Monitoring Program. Management decisions will be evaluated also the mitigate environmental impacts where possible.

10. Potentiality for the development or recruitment of nuisance species in the disposal site (40 CFR 228.6(a)(10)). **Opportunistic benthic species** characteristic of disturbed conditions are expected to be present and abundant at any ODMDS in response to physical deposition of sediments. Opportunistic polychaetes, such as Capitella, may colonize the disposal site. These worms can become food items for bottom feeding fish and are not directly harmful to other species. No recruitment of species capable of harming human health or the marine ecosystem is expected.

11. Existence at or in close proximity to the site of any significant natural or cultural feature of historical importance (40 CFR 228.6(a)(11)). The California State Historic Preservation Officer has determined there are no known historic shipwrecks nor any known aboriginal artifacts at the LA-2 site or in the vicinity. During a vessel disposal operation on June 20, 1990 the PRINCESS LOUISE, a 330 foot long derelict vessel, sank near the LA-2 site as a result of an emergency during the towing process. This vessel may pose a risk to oceanographic sampling gear deployed near the site. Before any equipment is placed in the ocean, the exact position of the vessel will be determined.

G. References

- Emery, K.O. 1960. The Sea off Southern California. Wiley, New York. 366 pp.
- Hendricks, T.J. 1980. Currents in the Los Angeles area. Southern California Coastal Water Research Project, biennial report, 1979–1980, W. Bascom (ed.), Long Beach, CA.
- Hendricks, T.J. 1982. Shelf and slope currents of Newport Beach. Southern California Coastal Water Research Project, biennial

report, 1981–1982, W. Bascom (ed.), Long Beach, CA.

6581

- Hendricks, T.J. and H.H. Stubbs. 1984. Currents in San Gabriel Canyon. Southern California Coastal Water Research Project, biennial report, 1983–1984, W. Bascom (ed.), Long Beach, CA.
- Karl, H.A., D.A. Cacchione and D.E. Drake. 1980. Erosion and Transport of Sediments and Pollutants in the Benthic Boundary Layer on the San Pedro Shelf, Southern California. U.S. Geological Survey, Menlo Park, CA.
- Maltouta, D.N., D.S. Gorsline and S.E. Thornton. 1981. Processes and rates of recent (Holocene) basin filling in an active transform margin: Santa Monica Basin, California continental borderland. J. Sed. Pet., 51(4):1077-1095.
- Owen Jr., R.W. 1974. Distribution of primary production, plant pigments and Secchi depth in the California Current region, 1969. CalCOFI Atlas, No. 20.
- SAIC. 1990. Survey of the Ocean Dredged Material Disposal Site (LA-2) Off Los Angeles, California. Final Report submitted to U.S. Environmental Protection Agency under Contract No. 68–C8–0061.
- Tetra Tech. 1990. Initial Sedimentation and Dispersion Analysis: LA-2 Ocean Disposal Site. Final Report prepared for EPA Region IX. 51 pages and 3 Appendices.
- Thompson, B. et al. 1983–1984. Sediment and Biological Conditions on Coastal Slopes. Southern California Coastal Water Research Project, biennial report, pages 37– 67.
- U.S. Environmental Protection Agency, Region IX. 1988. Final Environmental Impact Statement (EIS) for the Los Angeles/Long Beach (LA-2) Ocean Dredged Material Disposal Site Designation.
- U.S. Environmental Protection Agency, Region IX. August 1989. General Requirements for Sediment Testing of Dredged Material Proposed for Ocean Disposal. 8 pages.
- U.S. Environmental Protection Agency and U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. 1977. Ecological Evaluation of Proposed Discharge of Dredged Material into Ocean Waters: Implementation Manual for section 103 of Public Law 92–532 (Marine Protection, Research and Sanctuaries Act of 1972). Second Printing, Environmental Effects Laboratory, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MI.
- Winant, C.D. 1983. Longshore coherence of currents on the southern California shelf during the summer. Journal of Physical Oceanography 13:54–64.

H. Action

EPA Region IX has concluded that the LA-2 site may be designated for continued use, subject to a revised coastal consistency determination after 5 years of site management and monitoring. Designation of the LA-2 site complies with the general and specific criteria used for site evaluation. The designation of the LA-2 site as an EPA- approved Ocean Dumping Site is being published as final rulemaking. Management of this site will be the responsibility of the Regional Administrator of EPA Region IX in cooperation with the Corps' South Pacific Division Engineer and the Los Angeles District Engineer, based on objectives defined in the Management Plan for LA-2.

It should be emphasized, if an ocean dumping site is designated, such a site designation does not constitute or imply EPA Region IX's or the Corps' Los Angeles District's approval of actual ocean disposal of dredged materials. Before ocean dumping of dredged material at the site may begin, EPA Region IX and the Corps' Los Angeles District must evaluate permit applications according to EPA's Ocean Dumping Criteria. EPA Region IX or the Corps' Los Angeles District have the right to deny permits if either agency determines that the Ocean Dumping Criteria of MPRSA have not been met.

I. 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.

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 Rules 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: February 7, 1991.

Daniel W. McGovern,

Regional Administrator, EPA Region IX.

In consideration of the foregoing, subchapter H of chapter 1 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.

2. Section 228.12 is amended by adding paragraph (b)(68) to read as follows:

§ 228.12 Delegation of management authority for interim ocean dumping sites.

(b) * * *

(68) Los Angeles/Long Beach (LA–2) Ocean Dredged Material Disposal Site—Region IX.

Location: Center coordinates of the site are: 33°37.10' North latitude by 118°17.40' West longitude (North American Datum from 1983), with a radius of 3,000 feet (910 meters).

Size: 0.77 square nautical miles. Depth: 360 to 1,060 feet (110 to 320 meters). Primary use: Ocean dredged material disposal. Period of use: Continuing use, subject to submission of a revised Coastal Consistency Determination to the California Coastal Commission after 5 years of site management and monitoring.

Restrictions: Disposal shall be limited to dredged sediments that comply with EPA's Ocean Dumping Regulations.

[FR Doc. 91-3852 Filed 2-15-91; 8:45 am] BILLING CODE 6560-50-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 0 and 80

[PR Docket No. 90-205; FCC 91-25]

Frequency coordinator for Puget Sound

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: The Federal Communications Commission will amend the Maritime Services Rules in PR Docket No. 90–205, FCC 91–25, to recognize the North Pacific Marine Radio Council (NPMRC) as the frequency coordinator for the Puget Sound area and to establish procedures for recognizing frequency coordinators in the future. This rulemaking was requested by the North Pacific Marine Radio Council.

EFFECTIVE DATES: March 22, 1991.

FOR FURTHER INFORMATION CONTACT: Susan Jones, Private Radio Bureau, (202) 632–7175.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Report and Order, PR Docket No. 90–205, Adopted January 22, 1991 and released February 7, 1991. The full text of this Commission document and the proposed rules are available for inspection and copying during normal hours in the FCC Dockets Branch (room 230), 1919 M Street, NW., Washington, DC. The full text of this decision may also be

purchased from the Commission's copy contractor, Downtown Copy Center, (202) 452–1422. 1114 21st Street, NW., Washington, DC 20036.

Summary of Report and Order

This Report and Order will recognize the NPMRC as the frequency coordinator in the Puget Sound area. Under this amendment, applicants for very high frequency (VHF) private coast station licenses must now coordinate their frequency selections through NPMRC or submit a field study to show minimization of interference to other stations. The Puget Sound area affected includes the counties of: Clallam, Island, Jefferson, Kind, Kitsap, Mason, Pierce, San Juan, Skagit, Snohomish, Thurston, and Whatcom.

The Commission noted that the purpose of a frequency coordinating committee is to coordinate applications for new or modified VHF private coast stations so that interference can be reduced in areas of marine VHF radio congestion. The Commission commented that the benefits of reducing radio interference by employing such frequency coordinating committees are well recognized. The Commission noted further that applicants still have an alternative to the frequency coordinator. Rather than submit an application to the committee, an applicant may submit a field study showing the degree of interference the proposed station might cause to stations already existing in the area.

In the Order, the Commission also established procedures for processing future requests for recognition as frequency coordinating committees. Such requests will be placed on public notice and given 30 days for comments. If the organization meets the Commission's rules and no substantive or novel issues are raised in comments, a notice and comment proceeding will be considered unnecessary. The Chief of the Private Radio Bureau, under delegated authority, will then issue an order adding the organization to the list of recognized coordinating committees.

Ordering Clause:

Authority for issuance of this Notice is contained in sections 4(i), 303 (f) and (r) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 303 (f) and (r).

List of Subjects in 47 CFR Part 80

Maritime services, Coast stations, Frequencies, Radio.