RULES and REGULATIONS

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 228

[FRL-3539-2]

Ocean Dumping; Site Designation; Gulf of Mexico; Pensacola, FL

Friday, March 17, 1989

***11189** AGENCY: U.S. Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA today designates a new Ocean Dredged Material Disposal Site (ODMDS) in the Gulf of Mexico offshore Pensacola, Florida, i.e., the Pensacola (offshore) ODMDS, as an EPA-approved ocean disposal site for the disposal of dredged material. This action is necessary to provide an acceptable ODMDS option for anticipated future disposal of restricted suitable dredged material.

The Pensacola (offshore) ODMDS is located outside of Florida State waters and is restricted to disposal of predominantly fine-grained dredged material from the greater Pensacola, Florida, area that meets the Ocean Dumping Criteria, but is not suitable for beach nourishment or disposal in the existing, EPA-designated Pensacola (nearshore) ODMDS located closer to shore. The Pensacola (nearshore) ODMDS is restricted to suitable dredged material with a median grain size of >0.125 millimeters (mm) and a composition of >10% fines.

Review comments on the Final Environmental Impact Statement (FEIS) for this action were not addressed in the preceding Proposed Rule (53 FR 50977 [December 19, 1988]) but are addressed in this Final Rule. Comments on the Proposed Rule are also addressed herein.

DATE: This designation shall become effective on April 17, 1989.

ADDRESSES: Send comments to: Frank M. Redmond, Chief, Wetlands and Coastal Programs Section, Water Management Division, U.S. Environmental Protection Agency, 345 Courtland Street, NE., Atlanta, Georgia 30365.

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

EPA Public Information Reference Unit (PIRU), Room 2904 (rear), 401 M Street, SW., Washington, DC 20460.

EPA/Region IV, 345 Courtland Street, NE., Atlanta, Georgia 30365.

FOR FURTHER INFORMATION CONTACT: Christian M. Hoberg, 404/347-2126 or FTS 257-2126.

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 the authority to designate sites where ocean disposal may be permitted. On December 23, 1986, the Administrator delegated the authority to designate ocean disposal sites to the Regional Administrator of the Region in which the sites are located. The Pensacola (offshore) ODMDS is in Region IV and the designation is being made pursuant to that authority.

The EPA Ocean Dumping Regulations (40 CFR Chapter I, Subchapter H, § 228.4) indicate that ocean disposal sites will be designated by promulgation in this Part 228. A list of "Approved Interim and Final Ocean Dumping Sites" was published on January 11, 1977 (42 FR 2461 [January 11, 1977]).

B. Environmental Impact Statement Development

Section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969, as amended, 42 U.S.C. 4321 et seq., requires that Federal agencies prepare an Environmental Impact Statement (EIS) on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment.

The object of NEPA is to build careful consideration of all environmental aspects of proposed actions into the agency decision-making process. While NEPA does not apply to EPA activities of this type, EPA has voluntarily committed to prepare EISs in connection with ocean disposal site designations such as this (see 39 FR 16186 [May 7, 1974]). EPA, in cooperation with the U.S. Army Corps of Engineers (COE) and the U.S. Navy, has prepared a Draft Environmental Impact Statement (DEIS) and FEIS entitled "Designation of a New Ocean Dredged Material Disposal Site, Pensacola, Florida."The preceding Proposed Rule (53 FR 50977 [December 19, 1988]) and this Final Rule are procedural follow-ups to the EIS. This Final Rule includes excerpts from the Proposed Rule which included excerpts from the EIS. The EIS may be used as reference, especially for literature citations, which are not cited herein (two exceptions in this Final Rule).

The action proposed in the EIS is the designation of a new ODMDS offshore Pensacola, Florida. The purpose of this Final Rulemaking action is to designate, on a permanent basis, a new environmentally-acceptable ODMDS as an ocean option for the disposal of restricted suitable dredged material. The need for ocean disposal is determined on a case-by-case basis as part of the process of issuing permits for the transport of dredged material for disposal.

The COE and EPA evaluate all dredged material disposal projects in accordance with the EPA criteria given in the Ocean Dumping Regulations (40 CFR Parts 220-229), the COE regulations (33 CFR 209.120 and 209.145), and any State comments concerning consistency with a State coastal zone management program. The COE also issues permits to all applicants for transport of dredged material intended for disposal after compliance with the same regulations is determined. The COE also undergoes a public review process for its own disposal actions. EPA has the right to disapprove any ocean disposal project if it believes that all provisions of MPRSA and the associated implementing regulations have not been met. Although State permits may be required for dredging activities, they would not be needed at the Pensacola (offshore) ODMDS since the disposal site is located outside Florida State waters.

The Notice of Intent to prepare an EIS was published in the Federal Register on January 29, 1988 (53 FR 2640 [January 29, 1988]).

On June 10, 1988, the Notice of Availability of the DEIS for public review and comment was published in the Federal Register (53 FR 21914 [June 10, 1988]). The public comment period on the DEIS closed July 25, 1988. Distribution of the DEIS resulted in some mailing returns; attempts were made to redistribute such returns.

The Notice of Availability of the FEIS for public review and comment was published in the Federal Register on September 23, 1988 (53 FR 37044 [September 23, 1988]). The public comment period was to close on October 24, 1988, but was extended by EPA to November 14, 1988 (see announcement in Federal Register in 53 FR 44658 [November 4, 1988]). The FEIS addressed the comments received on the DEIS. Distribution of the FEIS also resulted in some mailing returns; attempts were again made to redistribute such returns. Also, replacement pages for Appendix B in the FEIS were distributed to the FEIS mailing list addressees at the end of the original FEIS review period (original review period was extended to allow some review time for Appendix B replacement pages). Review comment letters received by EPA on the FEIS are addressed in this Final Rule as opposed to the preceding Proposed Rule.

***11190** On December 19, 1988, the Proposed Rule for the Pensacola (offshore) ODMDS was published in the Federal Register (53 FR 50977 [December 19, 1988]). The public comment period for the Proposed Rule closed on January 18, 1989. One comment letter from the U.S. Department of the Interior (DOI) dated within the Proposed Rule comment period was received by EPA. In addition, a related follow-up letter was requested and received by EPA from the Minerals Management Service (MMS) within DOI, written comments from the COE were requested and received by EPA, EPA provided a letter (with COE's letter attached) to DOI requesting a DOI follow-up letter, and DOI provided the follow-up letter to EPA. Also during this general time, telephone coordination occurred between EPA and the COE (Mobile District and Panama City, FL office), MMS (New Orleans (Metairie), LA), DOI (Washington, DC), State of Florida (Tallahassee, FL), the U.S. Navy (Charleston, SC) and the Escambia County Florida Marine Recreation Committee (MRC: Pensacola, FL). Topics included artificial reef permitting, oil and gas lease block/ODMDS use conflicts, FEIS comment letters, DOI's lease block comments on the Proposed Rule, Final Rule publication and designation schedule, Final Rule development and/or artificial reef use. As a follow-up to discussions with MRC, in which EPA primarily requested information on artificial reef use, MRC provided a letter dated January 16, 1989, discussing artificial reef use as well as providing other comments/concerns. Although this letter was received after the close of the FEIS comment period, it was dated within the Proposed Rule comment period and concerned the FEIS and site designation in general. This letter is addressed in this Final Rule in association with the responses to the comment letters on the FEIS.

The EIS discusses the need for the designation of the Pensacola (offshore) ODMDS. EPA is designating the new ODMDS off Pensacola, Florida at this time to accommodate the Navy's anticipated disposal needs for predominantly fine-grained dredged material that meets the Ocean Dumping Criteria, but is not suitable for beach nourishment or disposal in the existing, EPA-designated Pensacola (nearshore) ODMDS (that site is restricted to disposal of suitable sandy dredged material). The U.S. Navy has proposed to establish a new homeport at Pensacola for the aircraft carrier USS Kitty Hawk and one naval reserve patrol craft. The USS Lexington, currently based at Pensacola, will be moved to Corpus Christi, Texas as part of the overall Gulf Coast Strategic Homeport Project. The proposed project will require deepening of the existing channel to the Naval Air Station (NAS) at Pensacola. Approximately 4.1 million cubic yards (mcy) of new work dredged material from the turning basin and channel is initially proposed for disposal in the new ODMDS. The U.S. Navy has applied for a section 103 permit for the transport of this material to the new ODMDS.

In the future, the ODMDS could also be used for disposal of maintenance material dredged from the Navy's channel, the Pensacola Harbor Ship Channel, or other private or Federal dredging projects provided the material

meets the criteria specified in MPRSA. Additional section 103 permit review would be required prior to the use of the new ODMDS for any dredged material other than the initial 4.1 mcy proposed for disposal. Additional dredged material testing and NEPA documentation may also be required. Only material that meets the Ocean Dumping Criteria and is not suitable for beach nourishment would be placed in the site.

Ocean disposal site alternatives to the ODMDS being designated were examined in the EIS. Three alternative sites (Sites “A”, “B” and “C”) located in the mid-Continental Shelf area were initially selected for study. All three sites were located within an economically and operationally feasible radius (20 miles) from Pensacola Pass. The sites chosen for detailed investigation, Sites “B” and “C”, covered approximately 19 square miles each. This area was considered large enough that an ODMDS could be located within the area.

Alternative Site “A” is located within Florida State waters, as defined by the State of Florida (10.36 statute miles).

(Note: EPA defines the breadth of Florida State waters as three miles per the Clean Water Act, as amended.)

Alternative Site “A” is a four-mile area located approximately 13 statute miles southwest of Pensacola Pass in depths of 60 to 70 feet. During the initial evaluations, this site was eliminated because it had no apparent environmental advantages, would be more expensive to use than either of the two other alternative sites because it was farther from Pensacola Pass, and was adjacent to Alabama State waters which would complicate the coordination process.

Alternative Site “B” is also located within Florida State waters, as defined by Florida. The northern side of the site is approximately seven statute miles southeast of Pensacola Pass. Depths in the area range from 60 to 87 feet and the bottom is generally classified as compacted sand. Site B was not selected for locating the ODMDS because one permitted and two existing artificial reefs were located within the eastern portion of the site. It should also be noted that water depths at the safety fairway portion of Site B (western portion of Site B) are generally shallow for receipt of dredged material disposal relative to the minimum 65-foot water-depth clearance specified by the U.S. Coast Guard, New Orleans District.

Alternative Site “C”, the selected site, is located seaward of State waters, as defined by Florida, with the exception of a small portion of the northwest corner. The northern side of Site “C” is approximately 11 statute miles south of Pensacola Pass. Depths in the area range from 60 to 95 feet and the bottom is generally classified as compacted sand and shell hash.

The present Final Rulemaking action is the final designation of a new ODMDS for Pensacola located within the selected alternative Site “C”. This ODMDS is located entirely outside of State waters. A numerical dispersion model (Disposal From An Instantaneous Dump: DIFID Model), available at the U.S. Army Engineer Waterways Experiment Station, was used to simulate the disposed material as it descends through the water column and spreads over the ocean bottom under varying hydrodynamic conditions. The results of all the model simulations indicated that 100% of the sand and silt/clay clumps fell to the bottom within less than 100 seconds of the beginning of the disposal operation. In addition, the simulations indicated that this material fell directly beneath the discharge barge, regardless of the input data, describing the oceanographic conditions of the site. The actual deposits of each of these solids fractions were different in that the sand tended to cover a large area of bottom at a lesser thickness than did the silt/clay clumps. The non-cohesive silts and clays did not behave in a similar fashion with a large percentage of these particles remaining suspended in the water column after disposal. Depending upon the ambient conditions, these particles can be transported from the dump location as a turbidity plume.

The area affected by the plume varies greatly, depending primarily upon the type of material disposed. The area with suspended solids concentrations of more than 10 parts per million (ppm) would cover approximately 300 acres, 90 minutes after discharge, under worst***11191** -case conditions, i.e., 95% silt/clay. Since approximately 93% of the 4.1 mcy to be disposed can be classified as sand or silt/clay clumps, a management plan was devised to utilize this material to form a submerged containment area (a horseshoe-shaped berm) into which the non-cohesive material would then be disposed. The model results, the management plan, and the comments received on the DEIS were used to define the actual coordinates of the area to be designated as the ODMDS. For additional details on the model and the management plan, see Appendices H and I of the FEIS, respectively.

Nineteen comment letters on the FEIS were received from sixteen commenters by EPA by the close of the extended comment period (November 14, 1988). The three additional letters were comprised of two follow-up letters (one within the comment period and one subsequently) and one inadvertent duplicate (but individually dated) letter. One additional letter provided comments on the FEIS and site designation in general. This letter, which was received after the FEIS comment period but was dated within the Proposed Rule comment period, is addressed below in association with FEIS responses.

Comments from nine of the sixteen commenters were not substantive. These commenters were Florida State University (Department of Biology: Tallahassee, FL), Department of Health & Human Resources (Centers for Disease Control, Atlanta, GA), Department of the Air Force (Eastern Region: Atlanta, GA), Northwest Florida Water Management District (Havana, FL), Florida Department of Agriculture & Consumer Services (Tallahassee, FL), U.S. Department of Housing and Urban Development (Atlanta Regional Office: Atlanta, GA), West Florida Regional Planning Council (Pensacola, FL; cover letter with comments attached), the Department of the Navy (Naval Air Station: Pensacola, FL), and the Department of the Army (South Atlantic Division: Atlanta, GA). The nature of these comments were either complimentary, and/or of the no comments, no adverse impact, or general compliance variety. Also, in one instance, no comments were provided due to reviewer scheduling problems. The West Florida Planning Council provided a follow-up letter to their initial comments, which indicated “[n]o additional comments” for the Appendix B replacement pages. One inadvertent duplicate letter was also received.

Comments from the remaining seven commenters were substantive. These commenters were Florida State University (Department of Oceanography: Tallahassee, FL), U.S. Department of the Interior, Minerals Management Service (Gulf of Mexico OCS Region: New Orleans, LA), Sport Fishing Institute (Washington, DC), Mote Marine Laboratory (Sarasota, FL), Florida Department of State (Division of Historical Resources: Tallahassee, FL; cover letter with previous letter to the U.S. Navy attached); Board of County Commissioners (Escambia County: Pensacola, FL; cover letter with comments attached); and the State of Florida (Office of the Governor: Tallahassee, FL; cover letter with comments attached). In addition to these seven letters, a follow-up letter was received from the Florida Department of State (Division of Historical Resources: Tallahassee, FL). Also, a letter providing comments on the FEIS and site designation in general was received from the Escambia County, Florida, Marine Recreation Committee (Pensacola, FL; cover letter with comments attached) after the FEIS comment period but dated within the Proposed Rule comment period. The comments in these nine letters are briefly summarized below, with responses provided.

The comments in the Florida State University letter were technical, critical, and concerned the original Appendix B of the FEIS relative to modeling and “* * * the extent to which the model reproduces the observed currents.”The commenter summarized the FEIS as concluding that observed currents were longshore in direction and principally wind-driven, which the commenter felt was “not surprising” since this was a documented phe-

nomenon. Of interest to the commenter was that "* * * we would hope to learn the extent the flow would be onshore or offshore, particularly in the near bottom layer—as we are concerned about the motion of dumped dredging materials."The commenter also summarized the FEIS as indicating that subtle differences in direction (about 10°) "* * * determine whether flow is onshore or offshore" depending on water column stratification (when stratified, flow is onshore in the bottom layer versus offshore when unstratified). The commenter felt that important differences in current transport patterns due to stratification were "ignored" in the modeling work and that the difficulty associated with model calibration to include stratification aspects was not justification for assuming neutral stratification. Instead, the difficulty of the problem was justification for first-rate modeling.

The commenter cited several figures in the FEIS (e.g., Fig. 5) that presented "* * * comparisons between modeled and observed flow direction" and exhibited a difference in direction of typically 20° (45° in Fig. 8), so that "* * * the observed flow is usually more towards the coast than the modeled flow."Therefore, it was indicated that the likelihood of dredged material being carried back to shore would be considerably greater than the model predicted. The commenter was also critical of Figures 10-20 which were felt to show "serious" differences between the model and observations. Differences listed were the omission of a series of "events" (Fig. 12) and frequent approximate doubling of velocities, "wrong" directions (Fig. 13), and "serious phase shift" errors (e.g., Fig. 14 and 15). The author, therefore, disagreed with the FEIS which indicated, despite these "continued, significant errors," that figures showed reasonable agreement between overall current magnitudes and directions. The commenter questioned how great the differences would have to be before the FEIS would conclude that the figures did not show good agreement. It was also pointed out that quantitative comparisons were not made.

The Florida State University letter also presented five other specific concerns (excerpted):

1. Coastal trapped waves propagate generally to the west along the Gulf coast. It is essential, therefore, that any adequate model of nearshore currents include not only the local winds at Pensacola but also the forcing by distant winds to the east. The winds as far away as Tampa and Key West probably contribute significantly. Was this investigated?

2. No quantitative comparison is shown between the results of the model and the observed currents. The comparison, in fact, now seems biased in favor of the model; during March the water is unlikely to be stratified. What would a comparison in August show?

3. If velocities were calculated in the model at ten levels (in the vertical) why were comparisons made at only two levels? Figure 4, page B-54, suggests that 6 levels might be the minimum necessary. However, veering in a boundary layer is not unique to Pensacola.

4. I have been unable to tell from the report, the offshore extent of the bottom topography in the model. If they do not continue the model out into deep water, this will guarantee that the free waves ***11192** will not travel at the correct speed—and perhaps explain some of the strange phase problems in their results.

5. In the first part of the analysis section, pages B-25 through B-31, a great deal of description is given to quantities that could be computed from the data, including normal spectral analysis. It appears, however—at least in my copy of the report—that none of these derived or computed quantities are presented. Is the report incomplete?

In the letter's final paragraph, the commenter again disagreed with the FEIS conclusion that the comparisons (between observed data and modeled results) were in "relatively good agreement." The FEIS conclusion was

questioned, given the considerable accuracy required to assess the problem. The commenter indicated that “[t]he whole purpose of doing current meter work and numerical modeling is to allow accurate, reliable predictions of where suspended sediment will be carried.”The commenter did not believe that such a predictive capability could “* * * possibly come from the model results presented * * *” in the FEIS.

In response to these comments, it should be stated that the goal of this work was not to advance the state of modeling or to conduct a detailed oceanographic investigation of the region of Pensacola, Florida, but rather to extrapolate a current climatology from specific current meter samples. Also, the concern was not with typical currents, but rather with those capable of moving local sandy bottom materials. This led to a simple model that was tuned to strong currents in a well-mixed water column. This information was then utilized to project, under conservative circumstances, the response of materials discharged into the proposed ODMDS. The results of these efforts are presented in the body of the FEIS and Appendix H.

With regard to stratification, the statement on page B-52 of the FEIS may have been misconstrued. Stratification was not neglected because of modeling difficulties, but rather because the interest was in flows sufficient to move material in 20 meters of water. Such flows are virtually always well mixed. Moreover, it was not evident that incorporating stratification would provide better accuracy owing to uncertainties in specifying its parameters (heating, cooling, freshwater runoff, etc.). During the application of the DIFID Model to project movement of material (see FEIS Appendix H), the impact of a stratified water column was investigated. Comparison of these results to a scenario utilizing a well-mixed water column did not show any change. This is likely due to the depths within the proposed ODMDS, the draft of the loaded dump scow proposed for use, and the nature of the material to be disposed.

Relative to comparisons between the model results and observed data, comparisons relate to high speeds to emphasize intervals in which bottom material moves. These comparisons (both velocity and direction) are much better than for lower speeds, which were of little interest. It is unlikely that details of low-speed current structure could have ever been resolved since many of these are due to randomness and sub-scale phenomena.

Pertaining to the five specific concerns excerpted above from the comment letter, the following responses are offered:

- Concern 1: Little evidence was found either in the data or a literature review to suggest that currents resulting from non-local mechanisms (free waves, trapped waves, edge waves, etc.) are strong enough to move significant quantities of local bottom material. Also, the strong, open Gulf, Loop Current is unlikely to come this close to shore. To account for the possible occurrence of this phenomenon, however, a scenario was investigated utilizing the DIFID Model described above. In this scenario, current velocities of 2.54 feet per second, constant with depth, towards the northeast (shoreward) were input to determine the extent of movement of fine-grained materials discharged into the ODMDS. Although some movement of material from the site is expected to occur during these conditions, impacts to significant resources are not predicted due to the location of the ODMDS.

- Concern 2: How well the model predictions might have been for August was not investigated because the interest was in velocities strong enough to move materials deposited on the bottom. At these times, summer and fall, the water column will not remain stratified.

- Concern 3: Comparisons were only made at water column levels at which current meter data had been collected; therefore, not all ten modeled levels were compared.

- Concern 4: Regarding “the offshore extent of the bottom topography of the model,” the model bottom topography grid extended offshore to 28.5° N latitude.

- Concern 5: Relative to the lack of analyses actually in the FEIS analysis section, all analysis details were not included in the report because of their bulk. However, a separate analysis appendix can be made available.

In response to the commenter questioning the predictive capability of the model, it may be stated that the results of this data collection, analysis, and modeling effort were only a portion of the total effort undertaken during the designation process for the proposed ODMDS. As indicated earlier, the goal of this work was not to advance the state of modeling or to conduct a detailed oceanographic investigation. As such, the information presented in Appendix B must be utilized in combination with the other efforts presented in the FEIS to determine the suitability of the proposed location as an ODMDS and to describe the possible impacts associated with its use.

The letter from the U.S. Department of the Interior, Minerals Management Service, also provided substantive comments. The Department's review presented eight concerns. Specifically, the Department indicated that: (1) No follow-up textual discussions were presented for the three adverse environmental impacts (water quality, bathymetric alteration, and benthos smothering) listed in the FEIS cover sheet (it was noted, however, that the text did not indicate adverse impacts); (2) inclusion of the dimensions of the navigation channel in Section 2-1 would be beneficial; (3) it was unclear where previous ocean disposal of fine-grained material had occurred since the existing disposal site near Pensacola was rejected for the U.S. Navy's homeporting project, as it was restricted to coarse sediments; (4) the text was “unnecessarily confusing” relative to referencing alternative Sites B and C versus rejected alternative sites; (5) the discussion in Section 4.03 on barrier island evolution was felt inaccurate since the islands were apparently formed by headland erosion and spit elongation rather than dune ridge submergence; (6) the description of the bottom topography in Section 5.02 as “relatively flat” but also as “highly irregular” were felt to describe different terrains; (7) fisheries statements in Section 5.03 were believed to be too general since the commenter indicated that a great deal was known about certain commercial species in the northern Gulf of Mexico as opposed to the general life-cycle of fish and shellfish in the northern Gulf, and that Gulf species spawn in “nearshore waters near passes and estuaries” as opposed to “the waters of the Gulf,” and (8) Appendix A (pg. 3) did not present the results of discussed bathymetric ***11193** surveys conducted to identify potential live/hard bottom communities.

In response to these eight concerns, the following is offered:

- Concern 1: The three adverse impacts listed in the cover sheet are discussed in Sections 5.02, 5.07, 5.14, and 5.21. In these sections, it is indicated that although these impacts are adverse, they are not considered significant. These impacts, therefore, did not preclude designation of an ODMDS within Site C.

- Concern 2: Regarding the dimensions of the navigation channel, the U.S. Navy Homeport action was described in detail in the U.S. Navy Gulf Strategic Homeport Project FEIS filed with EPA in January 1987. The information presented in that document was incorporated by reference into this EIS. The actual size of the channel is not relevant to the designation process for the proposed ODMDS and therefore was not included.

- Concern 3: Fine-grained material has historically been disposed in land disposal sites or open estuarine waters. These alternatives were discussed in the U.S. Navy FEIS referenced above. This document concluded that the only option suitable for disposal of the quantity of fine-grained material associated with the Homeporting action was ocean disposal. Also, the Pensacola (nearshore) ODMDS was not restricted to sandy material until it was permanently designated by EPA with grain-size restrictions on May 9, 1988.

- Concern 4: Section 1.0 of the FEIS is a concise summary of the information presented in the body of the FEIS. As such, it describes the need for ocean disposal, alternatives which were eliminated prior to detailed investigation, and the sites at which detailed field investigations were undertaken. Alternative Sites B and C received detailed study, which was described in the body of the FEIS (Section 3.0).

- Concern 5: The discussion of barrier island evolution in the Pensacola area in Section 4.03 is from the published literature, particularly:

Hoyt, J.H. 1967. Barrier island information. Geol. Soc. Am. Bull. 78:1125-1136.

Shepard, F.P., F.B. Phleger, and T.H. van Andel (eds.). Recent Sediments, Northwest Gulf of Mexico. A Symposium 1951-1958. AAPG, Tulsa, OK. 394 pp.

If additional information exists that indicates that the results published in this literature are inaccurate, appropriate citations may be provided to EPA or the COE at the addresses provided above.

- Concern 6: The information on bottom topography presented in Section 5.02 may have been misconstrued. The first description is of the bottom topography of the sites investigated in detail, i.e., relatively flat. The next sentence describes the bottom topography of the Continental Shelf, offshore Pensacola, in general terms. Therefore, the description as presented in Section 5.02 is accurate.

- Concern 7: Thank you for your fisheries comments.

- Concern 8: Sections 4.10, 5.02, and 5.10 of the FEIS and paragraphs 5 and 8 of Appendix A indicate that no areas of live/hard bottom were identified from the literature searched or areas surveyed within either Site B or C.

The Sport Fishing Institute's comments were generally critical of the FEIS fisheries information. Two specific comments and two subcomments were presented: (1) The FEIS “* * * does not address the affected recreational fisheries;” the magnitude of the recreational fisheries (artificial reefs, etc.) relative to “* * * participation, economic impact, and catch should be quantified;” (2) “* * * the FEIS should be rejected * * *” since Section 5.09 (which was described as “incomplete and inaccurate”), addresses impacts on various activities including recreational fishing. Under this second point, the letter indicated that: (a) Loss of habitat at the disposal site would ultimately result in loss of fish “ * * * due to decreased spawning and predator-prey opportunities” even though fish are mobile and could avoid direct effects during discharges, and (b) although Site B would affect three artificial reefs and Site C four reef sites, no efforts for ecological and economic impact calculations or for mitigation were provided.

The commenter concluded that “* * * the FEIS is inadequate because it fails to address fisheries in any meaningful way” and that “[p]otential negative effects exist * * * ” which should be estimated. Also, adverse impacts to fisheries should be mitigated if the project is undertaken.

In response to these concerns, the following is offered:

- Concern 1: The importance of recreational fisheries to the economy of the northern Gulf Coast and the Pensacola area in particular is a well known fact, although poorly documented. Section 4.11 of the FEIS discusses the location of artificial reefs in the Pensacola area, the composition of the fishery utilizing these reefs, non-reef community composition, and the shrimp fishery of the area. Sections 5.03, 5.05, 5.07, 5.09, 5.13, 5.14, and 5.18 discuss the possible impacts to the fishery-related resources that would result from the utilization of an ODMDS

at the recommended site (Site C) for the disposal of suitable dredged material.

As depicted in Figure 4-2 in the FEIS (pg. 4-10), two existing artificial reefs (Escambia 15 site and the “Russian Freighter” or San Pablo site) and one permitted reef are located within Site B, while one existing reef (“bridge rubble” reef) and one proposed reef site are located in the vicinity (east) of Site B. Two proposed reef sites are located within Site C while one existing reef (Escambia 7 site), one permitted reef, and four proposed reef sites are located in the vicinity (east) of Site C. One proposed reef site is located northwest of Site C and west of Site B and one proposed reef is located northwest of Site B. Of these, impacts to the existing and permitted reefs are of concern to EPA. Because the proposed reefs are not constructed and can conceivably be moved to nearby sites as necessary (numerous proposed sites exist in the area), proposed reefs are of minimal concern.

Based on telephone discussions with and a letter dated January 16, 1989, from the Escambia County Florida Marine Recreation Committee (MRC), EPA understands that “thousands” of private artificial reefs have been constructed in the area; five are known to be located within Site B and four within Site C and others may also exist within the sites. These private reefs can be substantial structures (e.g., airplane body), but are generally constructed of non-permanent materials (wood and metal) and are uncharted. The MRC indicated that “little” original material remained at the four reefs within Site C. EPA believes that while private reefs would provide habitat and could or would be impacted if present at selected Site C, such private reefs constitute illegal ocean dumping (i.e., were not granted appropriate permits). Such reefs were not considered in the impact analysis of the EIS or in the Proposed or Final Rules.

Information regarding the one permitted reef located within Site B and the one located east of Site C is unclear. It is possible that these sites are the same as the existing Escambia 7 and 15 reefs since the permitted reefs are proximal to either Escambia 7 or 15. If not, EPA assumes that they are or will be constructed since they would have been granted permits and expects their level of use to be similar to that of the Escambia 7 and 15 reefs. The EIS and this Final Rule treat the existing and permitted sites as separate sites.

***11194** The quantification of the magnitude of the artificial reef fisheries in terms of participation, economic impact, and catch, as requested by the commenter, would be difficult to compile. It is probably also unlikely that such quantified information is documented, since records of sports catches are generally uncommon. However, EPA believes information on the use and economic value of local artificial reefs is helpful in impact assessment. Based primarily on telephone discussions with and a letter dated January 16, 1989, from Escambia County (MRC), the Escambia 7 and 15 reefs were recently constructed in 1987 and 1988 and contain a considerable amount of structure (car bodies, concrete material and/or a steel boat hull). Considerable additional material will also be deployed at these reefs and more is planned. The “bridge rubble” reef was constructed with bridge rubble in the 1970's and therefore is well established. The San Pablo reef, which consists of a Russian freighter (approx. 150 ft. long) that was sunk in 1943, has existed even longer and is the largest reef in the area. MRC reported 29 boats anchored at the San Pablo reef one summer Saturday on a holiday weekend in 1988. Also, MRC estimated that a minimum of 30% of the 19,000 registered pleasure motorboats in Escambia County utilize Escambia 7 and 15 and other artificial and natural structures. All four reefs are heavily fished, with grouper, snapper, triggerfish and other species being caught (also see Section 4.11 of FEIS). Principally hook-and-line but also spearfishing methods are used. Pleasure diving, particularly at the San Pablo reef, is also pursued. (For details on reef use, also see the subsequent summary of the MRC letter.)

Based on the above information, EPA believes that the four existing reefs in proximity to Sites B and C attract sports fish, are heavily fished and otherwise used for recreation, and are economically important. This is appar-

ently particularly true for the older San Pablo and “bridge rubble” reefs. If the two permitted reefs in the area are different from Escambia 7 and 15 and are constructed, it is assumed that they too are similarly used.

- Concern 2: With regard to the completeness and accuracy of Section 5.09, EPA believes that, relative to recreational fisheries, Section 5.09 clearly indicates the existence of artificial reefs in Site B and that “[u]se of the eastern side of alternative Site B as an ODMDS would impact the existing and permitted artificial reefs.”The presence of these reefs was a major factor in the rejection of Site B over Site C as the selected ODMDS area. The EIS provides a reasonable basis for this decision. The artificial reef use information supplied herein in response to the Sport Fishing Institute's letter supports the selection of Site C since the San Pablo reef is heavily used and would have been impacted if the eastern portion of Site B would have been used. Relative to Site C and impacts on artificial reefs, the one existing and one permitted reef located to the east of Site C both lie upcurrent of the predominant currents which flow toward the west and therefore will not be impacted significantly by the action. EPA does not agree that the FEIS should be rejected.

- Concern 2a: The paragraph in Section 5.09 is accurate and does not ignore the fact of possible impacts due to lost habitat. Fish, due to their motile nature, are not directly affected by the discharge, i.e., they are not smothered by the material being discharged. However, as indicated in Section 5.09, indirect impacts do accrue to the fishery of the area through the loss of benthic organisms which serve as a food source for many demersal species. These impacts, however, are not significant because they would be restricted to the actual disposal area and studies have shown that the benthos are able to recolonize dredged material disposal areas within 6 to 18 months following the disturbance (see Section 5.21). As discussed in Section 5.03, no impact to breeding, spawning, or migratory areas is expected to result from the proposed action due to the location of the proposed ODMDS in relation to these areas.

- Concern 2b: The commenter's concern that the use of Site B would affect three artificial reefs (presumably the two existing reefs and one permitted reef within Site B) is shared by EPA. As indicated above, this was one factor that led to the selection of Site C over Site B. However, despite the fisheries importance of the artificial reefs in proximity to Site C, EPA believes that the one existing and one permitted reef east of selected Site C should not be impacted significantly since they are not only located outside of Site C boundaries, they are also located upcurrent of Site C relative to the predominant current direction.

Oceanographic investigation of the proposed sites was conducted between February 1987 and January 1988. The results of these investigations indicated that the currents in this area of the Gulf of Mexico are wind driven, parallel to shore, and typically uniform throughout the water column. Although the predominant current direction is towards the west, there are instances when flows are towards the northeast and east. During the site designation process, the possible impact of dredged material being moved by the currents was investigated utilizing numerical models. As a result of these models, a management plan was devised for the site to provide additional buffer between significant resources and the ODMDS. Appendices H and I to the FEIS contain the numerical modeling effort and management plan, respectively, and should be consulted for details. The results of the numerical model indicate that although the fine-grained material stays in suspension after disposal, the concentration of the material decreases significantly with distance from the disposal site. The distance between the existing Escambia 7 reef and the ODMDS is approximately 2 miles (approximately 3 miles for the permitted reef) and it is unlikely that concentrations of suspended material of sufficient quantity to result in impacts to this reef would ever travel this distance. As added protection, the management of the site involves the proposed construction of a horseshoe-shaped berm into which the fine-grained dredged material would be disposed. This berm is closed on the eastern end; therefore, any suspended or eroded material would have to move up the berm, approximately 6 feet

in height, before moving toward the artificial reefs. Since impacts to these resources would not be significant, discussion on mitigation of impacts is not appropriate. Since Site B was not selected, discussion of mitigation of impacts to the artificial reefs within Site B is also not appropriate.

With respect to the commenter's conclusion that "* * * the FEIS is inadequate and fails to address fisheries in any meaningful way," EPA does not agree that the FEIS is "inadequate," pursuant to the EIS rating system criteria presented in the "Policy and Procedures For the Review of Federal Actions Impacting the Environment" currently used by EPA. Fisheries-related information presented in the FEIS supports the selection of Site C over Site B. The EIS provides a reasonable basis for this decision. The reef use information supplied herein, further supports this selection.

Also with regard to fisheries, EPA wishes to note that the Proposed Rule should have included a discussion on potential impacts to artificial reefs associated with Site C under criteria 8, concerned with fishing and recreation, in the discussion of the 11 specific site ***11195** selection criteria characterizing Site C. However, such discussion was presented earlier under criteria 3 concerned with amenities.

Related to the above Sport Fishing Institute's letter was a letter received from the Escambia County Florida, Marine Recreation Committee (MRC). As previously mentioned, EPA telephone requested information from MRC, primarily concerning the use of artificial reefs associated with Sites B and C. As a follow-up, MRC provided a letter dated January 16, 1989, discussing artificial reef use and other comments/concerns.

The MRC cover letter referenced the conversation with EPA on January 10, 1989, receipt and review of the provided FEIS, and indicated that comments were "* * * directed at the ODMDS potential impact on recreational fishing, sports diving and artificial fishing reefs in this area."The commenter also indicated that the MRC was an advisory body to the Escambia County Board of County Commissioners and that it was composed of recreational fishermen, charter boat captains, and sports divers. As such, it represented the opinions of the local recreational fishing and diving industry.

The MRC comments attached to the cover letter discussed three main topics: (1) Review of the FEIS, (2) existing and proposed artificial reefs, and (3) the effect of ODMDS Sites B and C on recreational fishing, sports diving and artificial reef sites of Escambia County.

Regarding the MRC review of the FEIS, the commenter indicated that this was the initial review opportunity provided to MRC for the DEIS or FEIS. An MRC letter dated March 26, 1987, to the Mobile COE expressing MRC views was referenced. The commenter indicated that MRC in principal opposes the establishment of ODMDSs or other ocean disposal "* * * due to negative effects which this activity has traditionally had upon marine life and recreational fishing."However, the commenter recognized the complex nature of the U.S. Navy Strategic Homeport Project and the effect of economics on the selection of disposal methods and site locations. It was indicated that it was understood that it was not a matter if an ODMDS would be approved, but rather where it would be located. The MRC indicated, based on the FEIS review, that Site C "* * * will have the least negative impact * * *" on the local artificial fishing reef program and on recreational fishing. The commenter also referenced that MRC comments were made per EPA request.

Relative to existing and artificial reefs, the commenter indicated that local charter boats "rely heavily" on artificial structure since the presence of natural structure in the area was limited within a feasible distance of Pensacola Pass (considered to be less than 35 miles and usually less than 20 miles). Very few large structures exist. Significant natural structures were listed as ledges and rock outcroppings generally more than 20 miles from the

Pensacola Pass. Fishes of recreational interest dwelling or visiting at structures were snapper, grouper, triggerfish, amberjack, mackerel and cobia.

The commenter also indicated that “thousands” of private, non-permitted reefs existed within the 35-mile arc of the Pass. Four such reefs were known to be located within Site C (3 east of the western edge of the safety fairway and 1 on the extreme western side of Site C). The commenter stated that “[l]ittle of the original material, automobile bodies, a wooden shrimp boat and an airplane, remains.”Site B was indicated as containing five known private reefs (3 in the southeastern portion and 2 in the southwestern end). Structures were comprised of two airplanes, two barges and automobile bodies. The commenter stated that private reef builders “* * * recognize the disadvantages of their efforts due to the effects of hurricanes and discovery by other fishermen” and that generally inexpensive and relatively short-lived materials were used. It was felt that other private reefs in addition to the nine mentioned may also be located within Sites B and C.

The commenter provided a history of Escambia County's artificial reef program which was established in 1985 and was preceded by a former county program (until 1979) and the State's deployment of liberty ships. The former County program concentrated on automobile tires and concrete rubble material while the present program centered on donated material and designed structure. Escambia Sites 7 and 15 were scheduled to receive about $100,000 worth of designed structure in 1989 and some $120,000 had been requested for the future. Escambia County was one of few communities with a program using designed structure. The present program identified 22 potential public reef sites of which eight were permitted. Existing permitted reefs in the vicinity of Sites B and C were known as Escambia County 7 and 15, which were two square mile plots each. These sites were located per COE and the Florida Department of Natural Resources (DNR) requirements and other factors. The COE and DNR requirements were described as “a sandy bottom with no natural growth or other significant habitat,” which are similar to criteria for siting ODMDSs. Only reef sites 7 and 15 of the eight permitted sites have received material; they were defined as the “cornerstones” of the Escambia County reef program for development of mid-depth sites (70-100 ft.). Deployment of material occurred in alternate 500 x 500-foot squares composing the sites.

The commenter indicated that Figure 4-2 of the FEIS depicted permitted and proposed Escambia County public artificial reefs relative to Sites B and C. It was stated that “[w]e commend the EPA in not recommending ODMDS site B due to its potentially negative effect on existing and proposed artificial fishing reef sites.”Escambia 7, east of Site C, is composed of 200 tons of concrete structure and 30 automobile bodies deployed in 1987 and 1988. Escambia 15, within the southeast end of Site B, contains 24 automobile bodies and a 40-foot steel hull boat deployed in 1988. Within the next 30 days, the commenter indicated that 100 large concrete culverts and 14 steel pipes would be deployed and 16 railroad box cars were scheduled for deployment in the next six months. Plans for additional deployment were in various stages; a majority of the $100,000 worth of designed materials for deployment at these sites was scheduled for 1989. The commenter felt that these two sites currently contained 30% of the volume of artificial reef material in the area, which would increase to 60% by the end of 1989.

Specific to reef use information, the commenter provided the following (excerpted):

“As with any publicly identified artificial reef structure, sites 7 and 15 are heavily used by recreational fishermen due to the lack of natural and artificial bottom structure. Their use will significantly increase as additional material is deployed and the public experiences successful fishing trips at these sites. During peak recreational fishing periods such as summer holiday weekends, we have frequently observed numerous recreational fishing and dive boats anchored over the same public reef structure. On one summer Saturday in 1988, 29 boats were

observed anchored at the same time on one structure, the San Pueblo [San Pablo]. The San Pueblo [San Pablo] or Russian Freighter, has been in place since 1943 and is located east of Escambia County site 15 on the eastern boundary of site B. The same day, every publicly known site to include sites 7 and 15, had 5 or more boats on them. We estimate that at a minimum 30 percent of Escambia County's 19,000 registered pleasure motor boats use sites 7 and 15, other public artificial reefs and well known natural structures. Private and charter fishing and dive boats from Pensacola, Destin, and Orange Beach, AL also use public reef ***11196** structures off Pensacola and have frequently been observed on sites 7 and 15. Approximately 20 percent of the charter fishing boats use public sites. Virtually 100 percent of the areas dive shops use public reef sites. Sites 7 and 15 are designed by the placement of material in alternate squares, to accommodate a large number of recreational boaters on a non competition basis, while at the same time increasing the probability of creating an artificial reef habitat that will encourage and support a total increase in fish biomass. These sites are unique in their size and design as a majority of the older public reef sites consist of smaller physical areas and significantly less reef material."

The commenter stated that MRC members "* * * must rely upon the EPA, DNR, and other agencies * * *" for the expertise to address the total effect of creating an ODMDS in the area.

Several concerns were raised regarding ODMDS impacts on the artificial reefs. These involved the effect of depositing dredged material containing heavy metals or other unsuitable constituents at the ODMDS and that 19 square miles of bottom area would be eliminated for potential habitat improvement (reefs). MRC was also concerned that materials might migrate from the ODMDS. MRC also did not believe that the FEIS monitoring and management plans fully provided methods to monitor such migration or "* * * actions which can or will be taken to correct or eliminate any discovered movement."It was recommended that the monitoring plan "* * * should at a minimum encompass detailed monitoring during the construction process, an annual evaluation during the first five years after construction and evaluations after any hurricane whose eye transits within 100 miles of this area."If the material was demonstrated to be stable, monitoring intervals could be significantly decreased. It was also felt that subsequent disposal by "private" dredging activities may not be properly monitored. It was felt that a commitment for long-term funding to correct any problems was not addressed and may not be possible for government budgets. The source of funding for possible capping of the disposed material, if it was determined to migrate, was also questioned.

The commenter noted that "[i]f, ODMDS site C is created with a horseshoe berm and material is placed and monitored as described above and in the EIS, we do not believe their [there] will be a significant adverse effect upon reef sites 7 and 15, beyond anticipated turbidity problems during the initial deployment."If material movement or placement was not as predicted, however, it was stated that "* * * there is the possibility for significant adverse effects on these two and other reef sites."

Alteration of Escambia County's artificial reef construction program was said to be dictated by creation of the ODMDS at Site C. Sites 3 and 4 would need to be abandoned (since they were downcurrent of the open portion of the horseshoe berm and could potentially be influenced by material movement). Plans for Site 2 may also be abandoned, depending on material movement. The potential use of Site 2 would be, at a minimum, delayed for three years until effects of the ODMDS were determined. Development of Site 1 was already reduced and would likely not occur due to turbidity from nearshore dredging projects existing north and west of the safety fairway intersection. Regarding Site B, the commenter indicated that proposed sites 1 through 4 were the only large reef sites west of the north-south safety fairway. It was felt that selection of Site B would have had a significant and adverse effect on recreational fishing since "* * * it would have caused our complete abandonment of reef site 15, a significant deterioration of the San Pueblo [San Pablo] site, and the probable abandonment of plans to de-

velop sites 1, 2 and 3."

In response to the MRC letter, the following is offered:

- Topic 1: Regarding the review of the FEIS, the commenter indicated that this was the "initial opportunity" to review the FEIS or DEIS. We wish to note, however, that page 7-3 of the DEIS and FEIS indicate that the Escambia County Commission was on the EIS coordination list.

EPA primarily requested use information on Escambia County artificial reefs associated with Sites B and C. As a follow-up to this telephone discussion, a copy of the FEIS (with a question as to the source of the two permitted reefs in Figure 4-2 on page 4-10) and the Proposed Rule were provided. Although a letter was not necessarily requested, MRC provided the letter dated January 16, 1989. EPA appreciates MRC's documentation of the artificial reef information.

- Topic 2: Thank you for providing information on the existing and proposed Escambia County artificial reefs associated with Sites B and C. EPA wishes to emphasize that the referenced private, non-permitted reefs constitute illegal ocean dumping.

- Topic 3: Several concerns were presented by the MRC:

—Pertaining to the presence of heavy metals and other unsuitable constituents in the disposal material, materials may not be approved for ocean disposal unless the criteria in the Ocean Dumping Regulations, 40 CFR Part 227, have been met. Bioassay toxicity tests of the material anticipated for initial disposal at the ODMDS (from the Navy's homeporting project at Pensacola) indicate no significant adverse effects to marine organisms (see FEIS Appendix D). Although slight heavy metal enrichment of chromium, mercury, and zinc exists, the levels are not high enough to initiate the capping of the disposed dredged material with clean sand or to prevent the proposed designation of this ODMDS (see FEIS Section 5.05). Any future disposal of dredged material at this site would require similar testing before disposal.

—EPA agrees that the ocean bottom area within the boundaries of the ODMDS would be lost for habitat improvement for the Escambia County artificial reef program. However, the proposed ODMDS horseshoe-shaped containment berm and clay clumps could attract reef-associated fishes.

—Regarding the monitoring and management plans proposed in the EIS, we believe them to be adequate proposals at this time. Modifications of these plans are possible as greater understanding of the site develops. In general, disposed material will be monitored via a sediment mapping technique. If evidence of significant adverse environmental effects outside the ODMDS boundaries is discovered, EPA will take appropriate measures to mitigate the impact or terminate disposal at the site. It should also be noted that the proposed horseshoe-shaped berm at the eastern end of the ODMDS should help contain the fine-grained disposal material within the ODMDS. This berm, in association with a natural upward slope at the western end of the ODMDS, will form a trough containment area.

—In regard to ODMDS monitoring frequency, this will depend upon need (determined dredged material migration outside the ODMDS) and funding. Funding sources include EPA, COE, and private operators with disposal needs. Funding is via an annual budget and is therefore undetermined for each following year. In general, the existence, magnitude, and implementation of the management and monitoring plans for this site are dependent upon funding, monitoring data results and coordination between EPA, the COE, U.S. Navy, State of Florida and/

or other potential users.

—***11197** In general, turbidity problems during disposal should not be significant to Escambia 7 and 15 reefs since the predominant current direction is to the west away from the reefs and toward the ODMDS.

—The abandonment of proposed reef sites by Escambia County should be dependent upon site locations in relation to the ODMDS, current directions, and monitoring data results. We assume that there are numerous new sites in the general area that could be used as necessary for artificial reef deployment.

—The FEIS (Appendices G and I) and the Proposed Rule should be consulted for additional information on the proposed management and monitoring plans and the Pensacola (offshore) ODMDS designation in general.

Comments from the Mote Marine Laboratory complimented the FEIS's “presentation and history of site selection” as being “quite excellent.” Three main concerns were provided: (1) Use of the words “temporary” and “localized” (pp. 1-2) was questioned relative to dredged material impacts; while “localized” could be interpreted to mean the “disposal site,” it was suggested that the word “temporary” be better defined; (2) it was unclear if the model used in the “Circulation and Mixing and Sediment Transport” section (FEIS: pp. 4-2 and 4-3) accounted for any wave surge, which can affect sheer forces and resuspension of fines; in situ measurement of resuspension was felt to be technologically possible although probably unprecedented at a disposal site; measurement would be useful to refine and verify models predicting sediment transport; (3) the commenter felt that fine particulates disposed on sites consisting of “* * * coarse and medium sand with varying amounts of shell fragments” (FEIS: pg. 4-4) will not remain there (i.e., will be re-exposed) due to hydrodynamic forces; the author did not totally agree with “[t]he hypothesis that coarser materials will armor the surface and prevent further winnowing of fine particulates * * *” due to bioturbation effects (sediment mixing of macroinfauna), which would expose fines to surge and currents; moving sediments (as evidenced by sand waves and indicating instability and sediment movement) would also re-expose fine particulates to currents.

The commenter also indicated that “* * * the EPA monitoring program should consider a long term strategy at these sites in order to accurately define sediment transport dynamics.”The magnitude and extent of sediment movement could thereby be resolved and its importance determined.

In response to the three main concerns from Mote Marine Laboratory, the following is offered:

- Concern 1: The terms “localized” and “temporary” are more clearly defined in Section 5 of the FEIS. “Localized” is used to mean the area of the ODMDS. The term “temporary” may denote varying time frames depending on whether one is discussing the impacts to the water column or benthos. The former may refer to a matter of minutes or hours while the latter may range from weeks to months.

- Concern 2: Relative to the DIFID Model accounting for wave surge affecting sediment resuspension and sheer forces, FEIS Appendix B contains a summary of the physical oceanographic data collected at Sites B and C as part of the field investigations on these sites. This information was then utilized as input to two models to project conditions under differing meteorological conditions as described in Section 3 of Appendix B. Appendix H presents a discussion of the DIFID Model utilized in the projection of the response of the material discharge from the disposal vessel. As indicated in this discussion, the major limitation of DIFID is the assumption that once solid particles are deposited on the bottom, they remain there. As indicated in Sections 4.08 and 5.07, resuspension of deposited material, especially fine sands and silts and clay, can be expected to occur under conditions measured at the site. The movement of these materials, however, is not expected to result in unacceptable

impacts due to the location of the proposed ODMDS in relation to significant resources.

It is agreed that information relative to transport and resuspension of materials deposited in the ODMDS is needed. A collection of relevant information has been included in the proposed Site Monitoring Plan discussed in Appendix G of the FEIS.

- Concern 3: Regarding bioturbation, EPA agrees that it is an important aspect in the sedimentary processes of an area. As indicated in Section 5.07, much of the silt and clay deposited in the area is expected to be winnowed from the site by ambient currents. The material initially to be discharged into the site consists of approximately 3 mcy of sandy or cohesive material. This cohesive material is expected to form clumps of “clay balls” which tend to consolidate over time. The remaining 1.1 mcy is approximately 40% sand and 60% silt/clay. Of this 60% silt/clay, approximately 50% is expected to form clumps. The proposed management plan for the use of the site (Appendix I) would utilize the three million cubic yards to form a three-sided underwater berm. The remaining material would then be discharged within this berm area. It is expected that much of the non-cohesive, fine-grained material will erode from the site over time. Based on COE experience, minimial erosion of the cohesive fine-grained material is expected.

Concerning the commenter's interest in “a long term strategy” at the site relative to sediment transport dynamics, the proposed site monitoring plan as described in Appendix G contains components associated with measuring sediment transport away from the ODMDS. The temporal extent of the monitoring program is dependent, however, on the level of impacts associated with the action and does not represent a scientific investigation into sediment transport processes.

The review letter from the Florida Department of State, Division of Historical Resources, provided comments and included a copy of the Division's previous letter dated March 16, 1988, to the U.S. Navy concerning the “[c]ultural resource assessment request for proposed dredge disposal from Pensacola Harbor Homeporting” (a copy of that letter was included in the FEIS (pg. 7-7 and 7-8) and is not completely summarized herein; however, see summary of the Division's present letter below and responses to the U.S. Department of the Interior's comment letter on the Proposed Rule at the end of this Section B). The commenter referenced Section 4.16, “Cultural Resources,” of the FEIS as indicating that a literature search determined no historic shipwrecks near the alternative ODMDS, and that Section 7.0 indicated that results were coordinated with the Florida State Historic Preservation Officer. The enclosed March 16 letter was described as addressing two issues: 1) Unless inbank disposal of clean sand is used, “* * * the remains of Ft. McRae and shipwrecks on the west bank of the entrance channel * * *” would be adversely impacted by the proposed dredging and 2) disposal of spoil on the “* * * several known potentially significant shipwrecks * * *” in the ODMDS area, “* * * would not affect the qualities which would make them eligible for listing in the National Register of Historic Places.”As stated in the letter, it was concluded in the March 16 letter that in the Division's opinion, there would be no effects to any “* * * properties listed, or eligible for listing, on the National Register of Historic Places,” if clean ocean sand ***11198** (dredged material) is used for beach nourishment at the Pensacola entrance channel (west bank). The main point of the Historical Resources comment letter was that the commenter felt that despite the enclosure of the Division's comments in the FEIS, “* * * there is no evidence that they have been taken into account * * *” in the FEIS. It was, therefore, unclear if clean sand would or would not be used for inbank disposal. Without such disposal, the commenter felt that the eligible National Register properties would be adversely affected.

After receiving the above comment letter, EPA received a follow-up letter from the Florida Division of Historical Resources dated December 20, 1988. This letter indicated that additional information had been provided by

the COE (Mobile District) which addressed the Division's concerns. Based on this additional information, the letter indicated that "* * * it is the opinion of this agency that the above referenced project will have no effect on any sites listed, or eligible for listing, in the National Register of Historic Places, or otherwise of national, state, or local significance" and that "[t]he project may proceed without further involvement with this agency."

EPA wishes to note that the letters from the Division commented primarily on the U.S. Navy homeporting project at Pensacola rather than the ODMDS designation process per se, although the designation FEIS is referenced in the two recent review letters to EPA. While it is anticipated that certain dredged material from this project is to be disposed at the Pensacola (offshore) ODMDS, this and other dredging projects proposing to use the ODMDS after site designation are related to but separate from the present site designation rulemaking process. EPA wishes to emphasize that site designation, by itself, does not authorize any dredging project or on-site disposal of dredged material. Also, the Pensacola (offshore) ODMDS is restricted to fine-grained material which is not suitable for beach nourishment.

The Board of County Commissioners (Escambia County, FL) also commented. Comments were both on site designation and the proposed Navy homeporting project and presented Board conclusions rather than a critique of the FEIS. In the cover letter, the commenter indicated that "[t]he Board strongly urges favorable consideration of Site C as the best suited for use as an Ocean Dredged Material Disposal site for disposal of the 4.1 million cubic yards of dredged material * * *" from the homeporting project. The comments attached to the cover letter summarized the anticipated Navy homeporting project at Pensacola where 5 mcy of dredged material are proposed for beach nourishment and 4.1 mcy are proposed for disposal at the ODMDS. Four main points were listed: (1) The designation of an ODMDS involved consideration of several alternatives, including the no-action and non-ocean alternatives which were not acceptable (presumably per the FEIS); the COE had determined "* * * that ocean disposal is the most feasible method at the present time" (COE references were cited), which was felt to be partly related to the general non-availability of land disposal sites and increased costs; it was stated that "[i]t is felt however, that given the availability of land based disposal site(s), disposal of dredged material should be evaluated in terms of EPA's criteria (40 CFR 227.15) for site suitability based on availability and environmental acceptability;"(2) dredged material compatible with beach nourishment should be deposited further landward (further than natural processes would provide along the shoreline) to stabilize the dune system; maintenance dredging material could be deposited along the shoreline to further stabilize dunes and promote vegetation; (3) alternative Site C was felt to apparently be the best suited for ODMDS designation in terms of compliance with Federal, State and local statutes and policies regarding ODMDS designation, water depth, distance from shore, relation to beaches, artificial reefs, fish havens, hard bottom areas, other criteria in 40 CFR 228.6, and the fact that it is within an economically transportable distance; and (4) construction of a submerged containment area for disposed non-cohesive material was recommended using 93% of the dredged material (sand or silt/clay clumps); the site's size and depth should be designed to minimize potential impacts to areas outside the site.

EPA is pleased that the Board approves of Site C as the location for the ODMDS. The following clarification is offered on the Board's four comments:

- Comment 1: Regarding alternatives, the FEIS prepared by the U.S. Navy for the Gulf Coast Strategic, Homeporting project investigated a number of alternatives, including land-based disposal. This FEIS filed with EPA in January 1987, and incorporated into this site designation EIS by reference, concluded that ocean disposal was the only acceptable alternative for the disposal of fine-grained material to be dredged as part of the homeporting activity at Pensacola. Alternatives in the site designation EIS were intended to be generally limited

to the evaluation of ocean action alternatives and the no-action alternative. EPA believes that the non-ocean alternatives should be addressed in project-specific documentation.

- Comment 2: It was suggested that maintenance material could be used for beach nourishment of the shoreline to stabilize the dune system. EPA wishes to emphasize that beach nourishment is another option alternative for dredged material disposal (i.e., is different from ocean disposal) and as such is separate from the site designation process, which by itself does not authorize dredging projects or ocean disposal at the ODMDS.

- Comment 3: EPA wishes to emphasize that Site C is not being designated in its entirety, but rather only approximately six square statute miles thereof will be designated as an ODMDS.

- Comment 4: Your comments on the proposed ODMDS submerged containment berm are appreciated.

The State of Florida, Office of the Governor, provided generally complimentary comments. Comment letters from the Florida Department of Natural Resources (FDNR) and the Florida Department of Environmental Regulation (FDER) were attached to a summary cover letter from the Office of the Governor. In the cover letter, the State indicated that their concerns on the site boundaries, nature of site disposal material, and a detailed site monitoring and management plan relative to the site designation process had been resolved through model studies, coordination with EPA, COE, and the Navy, and conveyed through FEIS revisions. The State, therefore, concurred with EPA's determination that the designation of the ODMDS is consistent to the maximum extent practicable with the Florida Coastal Management Program (FCMP). The State was “* * * particularly pleased with the application of the dispersion model in selecting final site boundaries and in determining the monitoring and site management protocol.”The State indicated that they expected the site management and monitoring plans to be incorporated specifically or by reference in the published rule. It was further indicated that monitoring results could evaluate the dispersion modeling and management plan. Mention of continued consultation with EPA and the COE regarding monitoring results and changes in the management plan was also made. Appreciation for early coordination and a recommendation to ***11199** use the coordination process for the Pensacola (offshore) ODMDS as a model for future Florida ODMDS designations was also included.

The attached letter from the FDNR noted that if modification of the proposed site should involve use of State waters for disposal of dredged material, designation would require State easements. It was also noted per the FEIS that the Pensacola (offshore) ODMDS was not for disposal of beach compatible dredged material or for material appropriate for the Pensacola (nearshore) ODMDS, and that coordination with the COE and the Navy regarding beach-quality dredged material was welcomed.

The attached FDER letter presented most of the comments conveyed in the cover letter summarized above. In addition, tracking the success of the underwater berm construction was mentioned.

In response to the State of Florida Office of the Governor letter and its attached FDNR and FDER letters, EPA appreciates the State's concurrence in the designation of the Pensacola (offshore) ODMDS within Site C to receive fine-grained dredged material not suitable for beach nourishment or for disposal at the Pensacola (nearshore) ODMDS from the greater Pensacola, Florida area. We also note the State's concurrence in EPA's consistency determination with the Florida Coastal Management Program. EPA and the COE appreciate the efforts of the State, especially the Office of the Governor, Office of Planning and Budgeting, and the Florida Departments of Environmental Regulation and Natural Resources. EPA and the COE will continue to coordinate efforts at the Pensacola (offshore) ODMDS, especially the management and monitoring activities, with these agencies.

The proposed monitoring and management plans are presented in Appendices G and I, respectively, in the FEIS. These two plans were referenced in Section G (“Site Management”) of the Proposed Rule (pg. 50981) and in this Final Rule.

The Pensacola (offshore) ODMDS boundaries are outside Florida State waters. Relative to the need for State easements (FDNR letter), EPA does not believe that the ODMDS designation process requires State easements when proposed ODMDSs are outside or inside Florida waters.

One comment letter on the Proposed Rule was received by EPA from the U.S. Department of the Interior (DOI; Office of Environmental Project Review: Washington, DC). This letter was dated January 13, 1989, and presented two concerns. Also, a follow-up letter to the DOI letter was requested by EPA and received from the Minerals Management Service (MMS; Gulf of Mexico OCS Region: New Orleans (Metairie), LA) within DOI shortly after the Proposed Rule comment period (letter dated January 31, 1989). EPA subsequently requested and received written comments dated February 3, 1989 from the COE (Mobile District) and provided a letter to DOI dated February 6, 1989, attaching the COE letter and requesting a DOI follow-up letter to EPA. The requested second DOI letter was dated February 24, 1989.

The first concern in the initial January 13 DOI letter discussed the presence of two lease blocks in the area of the ODMDS. DOI indicated that “[i]t is likely that the area proposed for ODMDS designation will be leased by Interior for oil and gas exploration and development.”It was indicated that two blocks (846 and 847) were offered in November 1988, that bids had been received for both, and that “* * * leases may be awarded in the very near future.”The portion of the site that includes block 847 “* * * should not affect exploration because it lies directly beneath an existing shipping fairway.”Regarding block 846, the commenter indicated that 90% of the site was located on block 846 and 50% lies on the fairway. It was stated that “[i]f the proposed site is designated, its use should be controlled in a manner that ensures ocean dumping activities will not interfere with oil and gas exploration or development activities conducted on these blocks.”

The second DOI concern involved potential archaeological resources. The commenter stated that “[t]he site selected for the ODMDS lies in an area that may contain undiscovered archaeological resources.”It was indicated that no surveys had been conducted to determine if such resources were present and that “* * * the vast majority of prehistoric archaeological sites found on the Gulf of Mexico outer continental shelf occur off the Florida coast.”The commenter also stated that “EPA should ensure that the site is surveyed prior to designation in order to determine whether archaeological resources may be affected by ocean dumping activities.”

With regard to the DOI-requested archaeological survey, the Mobile District COE conducted underwater cultural resources investigations for the U.S. Navy Gulf Coast Strategic Homeporting effort at Pensacola, Florida in 1986-1987. When the need to develop an ODMDS offshore Pensacola was identified, this activity was coordinated by the COE with the Florida State Historic Preservation Officer (SHPO). In a previously-referenced letter (see responses to FEIS comments) dated March 16, 1988 (see FEIS, pg. 7-7), from the Florida Department of State (Division of Historical Resources: Tallahassee, FL) to the U.S. Navy, it was stated with regard to open water coordinates inclusive of the ODMDS, that (excerpted):

With respect to the disposal of other dredge materials within the above cited open water coordinates, then even though we have identified potentially significant historic shipwrecks within that area (as well as several non-historic shipwrecks and artificial fish reefs important to the local fishing economy), we would have to conclude that its use as a dredge disposal site would not affect the qualities which make such shipwrecks eligible for list-

ing in the National Register. Thus, if the clean sand is used for beach nourishment, it is the opinion of this agency that the proposed offshore dredge disposal will have no effect on any properties listed, or eligible for listing, in The National Register of Historic Places.

It can also be stated that the present site designation process does not, by itself, authorize any dredging projects or disposal at the ODMDS. Furthermore, use of the ODMDS would involve disposal, as opposed to dredging, at the ODMDS so that submarine areas will not be excavated.

In response to DOI's lease block concern, EPA coordinated with MMS (Gulf of Mexico OCS Region: New Orleans (Metairie), LA office) within DOI. EPA/MMS telephone discussions were held on January 26, 27, 30, and 31, 1989. As part of this coordination, EPA requested a follow-up letter from MMS. By letter dated January 31, 1989, MMS stated that (excerpted):

Your Agency has requested the Department of the Interior provide some clarification of its comments concerning an ocean dredged materials dumping site in Pensacola Blocks 846 and 847. Further, you asked about when one might expect oil and gas activities to commence on the two tracts.

Oil and gas leases for Pensacola Blocks 846 and 847 will be issued effective February 1, 1989. We do not believe drilling operations can commence earlier than 8 to 10 months from this date given all the approved activities involved with tracts off the State of Florida. Our experience indicates a more practical date would be 2 to 3 years after the date of the lease.

Our concern with the dumping of dredged material interfering with oil and gas exploration and development activities was directed at on-site drilling and production structures. The proposed disposal site is relatively small in areal extent, and we do not foresee any adverse effects on oil and gas activities. Once a drilling rig or platform has been placed on the lease, disposal should ***11200** occur a safe distance away. This would require some coordination between the dredging company and the oil and gas operator.

Accordingly, we believe the dumping of dredged material at the proposed site and oil and gas activities can coexist on Pensacola Blocks 846 and 847. If you should have further questions, please let us know.

Based on this letter, any near-future ODMDS utilization, such as the anticipated initial disposal of 4.1 mcy of dredged material from the U.S. Navy's Homeport Project at Pensacola (disposal projected in Spring of 1989, pending site designation), should not conflict with oil and gas exploration/development since any drilling operations apparently are not imminent. However, because the ODMDS is designated on a permanent basis as opposed to an interim basis, EPA believes the potential for use conflicts associated with more distant future disposal operations exists at the ODMDS.

EPA requested written comments from the COE (Mobile District) regarding use conflicts at the ODMDS. The COE responded by letter dated February 3, 1989. Included in this letter was the COE's concern about future conflicts between dredged material and oil and gas exploration/development activities. The COE stated that “[t]he location of a drilling rig or platform within the ODMDS would preclude any meaningful monitoring of the ODMDS since it would be virtually impossible to separate impacts caused by the two activities.”The COE also indicated that due to the small size of the ODMDS and the fine-grained nature of the dredged material, “* * * the entire site is needed to contain fine grained dredged material.”

In general, EPA believes that although the proposed ODMDS horseshoe-shaped containment berm (which is

currently designed to receive disposal material) would principally be located within a safety fairway where no drilling platform or rig structures are allowed, the potential for use conflicts exists for the remaining portion of the ODMDS. If a find is made within the ODMDS, directional drilling from areas adjacent to the ODMDS may be an option to drilling structure placement within the ODMDS. EPA also believes it is important to monitor the ODMDS and surrounding area in order to determine if disposal material is migrating from the site and, if so, to determine any associated impacts (see FEIS Appendices G and I for proposed monitoring and management plans, respectively). While such monitoring would still physically be possible if drilling structures were located in the area, EPA and the COE are concerned that drilling mud and cutting effluent from such structures could, despite NPDES permitting, result in local environmental impacts. If so, such impacts could confound potential impacts outside the ODMDS boundaries attributable to the ODMDS. EPA monitoring results could therefore be inconclusive.

Subsequent to receipt of the COE's February 3 letter, EPA provided the COE's comments to DOI in a letter dated February 6, 1989. In that letter, EPA stated that “[t]he COE's letter indicates a preference to keep drilling activities at least one mile outside the ODMDS” and “[f]rom a site designation, monitoring and management perspective, EPA also prefers such a limitation.”The EPA letter also requested that DOI “* * * determine if drilling structures can be kept outside of the ODMDS boundaries.”EPA coordinated with DOI by telephone on February 8, 10, 16, 22, 23, and 24, 1989, prior to receipt of the requested second letter. By letter dated February 24, 1989, DOI stated the following (excerpted except for the referenced sketch):

The Department of the Interior has reviewed your letter of February 6, 1989, and the enclosures thereto. We have also reexamined the details concerning the Environmental Protection Agency's rulemaking appearing at 53 FR 50977 (December 19, 1988), that would designate a site offshore Pensacola, Florida, as an ocean dredged material disposal site (ODMDS).

Enclosed is a sketch showing the approximate locations of the shipping safety fairway (SSF), oil and gas leasing blocks—Pensacola Blocks 846 and 847, and the outer boundary of the ODMDS. The approximate location of the planned spoils piles within the ODMDS are indicated. The Corps of Engineers has indicated a preference that all drilling activities be kept at least 1 mile outside of the ODMDS for environmental monitoring purposes but that both activities could coexist if drilling rigs and platforms are at least kept outside the ODMDS.

Assuming that the sketch is reasonably accurate, it is apparent that a 1-mile buffer outside the ODMDS would totally preclude surface access to Pensacola Block 846. If drilling units were allowed in the portion of Pensacola Block 846 which is outside both the SSF and the ODMDS, limited exploration drilling would be permitted. If drilling units were allowed in the western half of Pensacola Block 846 with the requirement to remain clear of the spoils piles, nearly the entire block that was available at the time oil and gas lease bids were offered, i.e., excluding the SSF, would be available for exploratory drilling. The placement of production platforms and development wells is less sensitive to surface location than is the placement of exploratory wells.

The location and spacing of wells necessary for exploration and development is controlled by 30 CFR 250.32 (1988) which requires that consideration must be given to unreasonable interference with other uses of the Outer Continental Shelf (OCS). In addition, plans required under 30 CFR 250.33 and 250.34 (1988) prior to exploration and development must include a bathymetry map and an analysis of seafloor and subsurface geologic and manmade hazards. Therefore, it is not necessary to constrain oil and gas lease activity via a specific prohibition in the lease agreement pertaining to placement of drilling units and/or platforms. To further encumber a lease on Pensacola Block 846 now could result in the bidder rejecting the lease offer.

Our experience indicates that not all oil and gas leases are explored by drilling. Furthermore, the average time lapse between lease issuance and exploratory drilling is 2-3 years. The drilling of exploratory wells will rarely consume 6 months even for the deepest wells. When an oil or gas discovery has been made in a relatively remote area such as Pensacola Block 846, another average 3-5 years will pass before the lease can be developed and placed on production. In view of the time spans involved, it is very unlikely that a conflict would arise between oil and gas activities and dumping activities. If a plan of exploration is received identifying the surface location of a proposed well or wells, we are confident that accommodation can be reached between these competing uses in the event they occur in the same time period. We are also confident that if it is possible to control dumping discharges sufficiently to avoid moving ships in the SSF, it should be possible to control dumping discharges to avoid a stationary drilling unit or platform.

If you need further information in this regard, please contact the Minerals Management Service Regional Director, Gulf of Mexico OCS Region, Metairie, Louisiana."

Based on this letter, it appears that DOI believes that oil and gas/ODMDS use conflicts at the site are not likely. Specifically, due to provisions afforded by 30 CFR 250.32 requiring consideration of "unreasonable interference with other uses" and by 30 CFR 250.33 and 250.34 requiring a bathymetry map and ***11201** seafloor/subsurface hazards analysis, DOI believes that "* * * it is not necessary to constrain oil and gas lease activity via a specific prohibition in the lease agreement pertaining to placement of drilling units and/or platforms."Also, due to the timing of exploration and drilling events, use conflicts at the site were felt to be "very unlikely." DOI further indicated that if a plan of exploration was received that identified the surface locations of proposed wells, "* * * we are confident that accommodations can be reached between these competing uses."

EPA is encouraged by the DOI letter. However, we wish to note that if use conflicts should nevertheless arise, the letter does not identify a mechanism for accommodation. EPA therefore looks toward DOI/MMS to take the lead as mediator for conflict resolution of any such possible conflicts among the oil and gas leasee, disposal applicant, and permitting agency. EPA also requests that DOI/MMS at this time advise the leasee of Pensacola Blocks 846 and 847 that an ODMDS is being permanently designated in portions of these lease blocks. EPA further wishes to note that the letter does not specifically address (unless part of 30 CFR Part 250) use conflicts associated with ODMDS monitoring, i.e., separating possible environmental impacts attributable to potential drilling structures from ODMDS disposal material. EPA therefore requests that consideration be given to barge off-site removal of effluents produced by drilling structures (as opposed to on-site NPDES disposal) and/or that directional drilling be considered to maximize the distance between the drilling structure and the disposal area.

In addition to telephone coordination between EPA and MMS, DOI, and the Escambia County Florida Marine Recreation Committee (MRC) during the preparation period of this Final Rule, telephone coordination with the State of Florida (Tallahassee, FL), COE (Mobile District and Panama City, FL) and the U.S. Navy (Charleston, SC) also occurred. Topics included artificial reef permitting, oil and gas lease block/ODMDS use conflicts, FEIS comment letters, DOI's lease block comments on the Proposed Rule, Final Rule publication and designation schedule, Final Rule development and/or artificial reef use.

C. Coastal Zone Management Coordination

EPA has determined that the designation of the Pensacola (offshore) ODMDS is consistent to the maximum extent practicable with the Florida Coastal Management Program and has notified the State of Florida of this determination. In a letter dated October 26, 1988, the State of Florida has concurred in EPA's determination. EPA

has included its consistency determination as Appendix J in the FEIS.

D. Endangered Species Coordination

Pursuant to section 7 of the Endangered Species Act, coordination with the National Marine Fisheries. Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) was conducted regarding this site designation relative to adverse effects to any endangered species under NMFS and FWS jurisdiction. By letter to the U.S. Navy dated February 18, 1987 (see FEIS, pg. 7-6), the FWS concurred in the Navy's determination that the Navy's Pensacola Homeport Project would have no adverse effect on Federally-listed threatened or endangered species under FWS jurisdiction in the Pensacola area. Additional concurrence from FWS specifically relating to the designation of an ODMDS offshore Pensacola, Florida was requested by EPA in a letter dated September 13, 1988, and concurrence was received by letter dated October 4, 1988. Also, the NMFS reaffirmed concurrence in the COE's determination that this site designation would have no adverse effects on threatened or endangered species under their jurisdiction by letter dated December 14, 1987 (see FEIS, pg. 7-5). Verification that this concurrence is relevant to the designation and is still valid was obtained by EPA during a telephone conversation on September 1, 1988, with Dr. Terry Henwood, Fisheries Biologist, of the NMFS Southeast Regional Office in St. Petersburg, Florida.

E. Site Designation

The Pensacola (offshore) ODMDS is located approximately 11 statute miles south of Pensacola Pass and occupies an area of approximately six square statute miles (2 x 3 mile rectangle). Water depths range from approximately 65 to 80 feet. The Pensacola (offshore) ODMDS proposed for final designation is located entirely outside of Florida State waters and is defined by the following coordinates:

30°08'50" N.,

87°19'30" W.;

30°08'50" N.,

87°16'30" W.;

30°07'05" N.,

87°16'30" W.;

30°07'05" N.,

87°19'30" W.

F. Regulatory Requirements

Pursuant to the Ocean Dumping Regulations, 40 CFR Part 228, five general criteria are used in the selection and approval for continuing use of ocean disposal sites. Sites are selected to minimize interference with other marine activities, to keep any temporary perturbations by the disposal from causing significant impacts outside the disposal site, to permit effective monitoring to detect any perturbations from the disposal, and to detect any adverse impacts at an early stage. Where feasible, locations off the Continental Shelf and other sites that have been his-

torically used are to be chosen. If, at any time, disposal operations at a site cause unacceptable adverse impacts, EPA will take appropriate measures to mitigate the impact or terminate disposal at the site. The disposal site conforms to the five general criteria except for the preference for historically-used sites and sites located off the Continental Shelf. EPA has determined, based on the information presented in the EIS, that no environmental benefit would be obtained by selecting a site off the Continental Shelf instead of the site in this action. Also, in this case, the site that has been historically used in the area had already been permanently designated by EPA as the Pensacola (nearshore) ODMDS and is restricted to disposal of suitable sandy dredged material as defined earlier. A new ODMDS at Pensacola was therefore selected. This new Pensacola (offshore) ODMDS, which is being permanently designated in this action, will compliment the existing Pensacola (nearshore) ODMDS since it may be used for disposal of suitable fine-grained dredged material as defined earlier.

The general criteria are given in 40 CFR 228.5 of the EPA Ocean Dumping Regulations, and 40 CFR 228.6 lists 11 specific criteria used in evaluating a proposed disposal site to assure that the general criteria are met. EPA established these 11 criteria to constitute an environmental assessment of the impact of the site for disposal. The characteristics of the Pensacola (offshore) ODMDS were reviewed in the Proposed Rule. Also, in this Final Rule (Section B), some of the responses to the FEIS, Proposed Rule, and follow-up comment letters supplement or update some of these 11 criteria, particularly those concerning fisheries, recreation, currents, amenities and mineral extraction.

G. Site Management

Site management of the Pensacola (offshore) ODMDS is the responsibility of EPA and the COE. The COE issues permits to all applicants for transport of dredged material intended for ocean disposal after compliance with regulations is determined, and undergoes a public review process for ***11202** its own disposal actions; however, EPA assumes overall responsibility for site management.

Currently a Memorandum of Understanding (MOU) between the COE/South Atlantic Division and EPA/Region IV is being developed and is to establish a monitoring framework for ODMDSs in the Region IV area, which is to lead toward site-specific monitoring plans for individual ODMDSs. In the case of the Pensacola (offshore) ODMDS, a proposed site-specific monitoring plan and a proposed site management plan are already developed and presented in Appendices G and I, respectively, of the FEIS. Since specifics of these proposed plans are not presented herein, the FEIS should be consulted for such specifics. Plan concepts presented in the FEIS include an electronic verification system or visual surveillance that will report actual disposal information, sediment mapping to determine distribution of disposal material at the ODMDS, construction of a horseshoe-shaped berm within the ODMDS to help contain disposal material, bathymetric measurements to assess mounding of disposal material, water quality sampling and analysis of various parameters, and benthic sampling and analysis of sediments and benthos.

Some modifications of the proposed plans presented in the FEIS are possible as greater understanding of the site develops. Substantive modifications would be coordinated with appropriate Federal and State agencies. For example, revisions may be required based on monitoring data results and comparison of those data to the DIFID dispersion model. Techniques may also vary or be upgraded. These plans are furthermore dependent on funding, which is via an annual budget and is therefore undetermined for each year. In general, the existence, magnitude, and implementation of the management and monitoring plans for this site are dependent upon funding, monitoring data results, and coordination between EPA, the U.S. Navy, the COE, the State of Florida and/or other potential users of the ODMDS. Nevertheless, EPA believes that site plans are needed and that the plans in the FEIS

are reasonable proposals for the Pensacola (offshore) ODMDS.

If evidence of significant adverse environmental effects outside the Pensacola (offshore) ODMDS boundaries is discovered, EPA will take appropriate measures to mitigate the impact or terminate disposal at the site. Conversely, if monitoring results exhibit no significant impact outside the ODMDS boundaries, monitoring may be discontinued or less frequent.

Related to site monitoring, EPA plans to test for tributyltin (TBT) in sediment samples from dredged material from Pensacola Harbor that would be projected for disposal at the ODMDS.

H. Action

The designation of the Pensacola (offshore) ODMDS as an EPA-approved disposal site for suitable dredged material is being published as Final Rulemaking. Overall management of this site is the responsibility of the Regional Administrator of EPA/Region IV. The EIS provides information indicating that the ODMDS may appropriately be designated for use.

It should be emphasized that if an ocean disposal site is designated by EPA, such a site designation does not constitute EPA's approval of dredging projects or actual disposal of dredged material at the site. Before ocean disposal of dredged material at the site may commence, EPA and the COE must also evaluate the proposed dumping in accordance with the criteria in 40 CFR Part 227 of the Ocean Dumping Regulations. In any case, EPA has the right to disapprove the actual disposal, if it determines that environmental concerns under MPRSA have not been met.

The Pensacola (offshore) ODMDS is not restricted to disposal use by Federal projects; private applicants may also dispose of suitable dredged material at the ODMDS once relevant regulations have been satisfied. This site is restricted, however, to disposal of predominantly fine-grained dredged material from the greater Pensacola, Florida area that meets the Ocean Dumping Criteria, but is not suitable for beach nourishment or disposal in the existing, EPA-designated Pensacola (nearshore) ODMDS. The Pensacola (nearshore) ODMDS is restricted to suitable dredged material with a median grain size of >0.125 mm and a composition of <10% fines.

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 action does not necessitate preparation of a Regulatory Flexibility Analysis.

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

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

This Final Rulemaking Notice for site designation of the Pensacola (offshore) ODMDS fills the same role as the Record of Decision required under regulations promulgated by the Council on Environmental Quality for agencies subject to NEPA.

List of Subjects in 40 CFR Part 228

Water pollution control.

Dated: March 10, 1989.

Joseph R. Franzmathes,

Acting Regional Administrator.

In consideration of the foregoing, Part 228 of Subchapter H of Chapter I of Title 40 is amended as set forth below.

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

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

40 CFR § 228.12

2. Part 228 is amended by adding to § 228.12, paragraph (b)(72) to read as follows:

40 CFR § 228.12

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

* * * * *

(b) * * *

(72) Pensacola, Florida; Ocean Dredged Material Disposal Site—Region IV, i.e. the Pensacola (offshore) Ocean Dredged Material Disposal Site.

Location:

30°08'50" N.,

87°19'30" W.;

30°08'50" N.,

87°16'30" W.;

30°07'05" N.,

87°16'30" W.;

30°07'05" N.,

87°19'30" W.

Size: Approximately 6 square statute miles.

Depth: Ranges from approximately 65 to 80 feet.

Primary Use: Dredged Material.

Period of Use: Continuing Use.

Restriction: Disposal is restricted to predominantly fine-grained dredged material from the greater Pensacola, Florida area that meets the Ocean ***11203** Dumping Criteria, but is not suitable for beach nourishment or disposal in the existing, EPA-designated Pensacola (near shore) ODMDS. The Pensacola (nearshore) ODMDS (§ 228.12(b)(48)) is restricted to suitable dredged material with a median grain size >0.125 mm and a composition of <10% fines.

[FR Doc. 89-6303 Filed 3-16-89; 8:45 am]

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54 FR 11189-01, 1989 WL 277145 (F.R.)
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