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Tampa ODMDS

Site Management and Monitoring Plan

June 1, 1995

Introduction. It is the responsibility of EPA under the Marine Protection, Research, and Sanctuaries Act (MPRSA) of l972 to manage and monitor each of the Ocean Dredged Material Disposal Sites (ODMDSs) designated by the EPA pursuant to Section 102 of MPRSA. As part of this responsibility, this management and monitoring plan has been developed to specifically address the deposition of dredged material into the Tampa ODMDS.

SITE MANAGEMENT

Section 228.3 of the Ocean Dumping Regulations (40 CFR 220-229) states: "Management of a site consists of regulating times, rates, and methods of disposal and quantities and types of materials disposed of; developing and maintaining effective ambient monitoring programs for the site; conducting disposal site evaluation studies; and recommending modifications in site use and/or designation." The plan may be modified if it is determined that such changes are warranted as a result of information obtained during the monitoring process.

Management Objectives. There are three primary objectives in the management of each ODMDS. These are:

o Protection of the marine environment;

o Beneficial use of dredged material whenever practical; and

o Documentation of disposal activities at the ODMDS.

The following sections provide the framework for meeting these objectives to the extent possible.

Material volumes. The Tampa ODMDS was first used in May, 1984 for disposal of material for harbor deepening. The following table outlines expected disposal at the ODMDS as projected by the Jacksonville District.

US EPA ARCHIVE DOCUMENT

TABLE: Volumes of Dredged Material Disposed at Tampa Site and Estimated Average 1995-1999.

Completion Date	Type of Action	Volume (cubic yards)	Composition
1985	New work	3,141,272	unavailable
FY95	Maintenance	1,100,000	silty sand, fines
FY96	Maintenance	1,000,000	silty sand, fines
FY97	Maintenance	600,000	silty sand, fines
FY99	Maintenance	500,000	silty sand, fines

There are no proposed limitations on the quantity of material that may be placed at the site.

Material suitability. The only source of material expected to be placed at the site is maintenance material. These materials will consist of mixtures of silt, clay and sand in varying percentages.

The Tampa ODMDS is sectioned so that different types of materials will be placed at different locations to avoid potential adverse impacts to resources. Extensive colonization has occurred on the mound created by previous disposal of consolidated materials. Therefore, the area of the mound will be restricted to the disposal of material that consists of at least 90 % gravel or larger grain size. No disposal shall occur directly on any portion of the mound (as shown in Figure 1). Disposal of all other material is restricted to that area within the site identified in Figure 1 as "Disposal Zone" north of the mound. The size of this area will provide sufficient room for proposed volumes. Additionally, plume modeling results (Appendix H) show that disposal within this zone will ensure that no impacts occur to the mound or to those areas outside the northern boundary of the site.

The suitability of dredged material for ocean disposal must be verified by the COE and agreed to by EPA prior to each disposal event. Verification will be valid for three years from the time last verified. Approval may be given by EPA for an additional two years if conditions have not changed and no adverse impacts have occurred or are expected. Verification will involve: 1) a case-specific evaluation against the exclusion criteria (40 CFR 227.13(b)), 2) a determination of the necessity for bioassay(toxicity and bioaccumulation) testing for non-excluded material based on the potential for contamination of the sediment since last tested, and 3) carrying out the testing and determining that the non-excluded, tested material is suitable for ocean disposal.

Documentation of verification will be completed prior to use of the site. Documentation for material suitability for dredging events proposed for ocean disposal more than 5 years since last verified will be a new 103 evaluation and public notice. Documentation for material suitability for dredging events proposed for ocean disposal less than 5 years but more than 3 years since last verified will be an exchange of letters between the COE and EPA.

Should EPA conclude that a reasonable potential exists for the proposed dredged material to have been contaminated, acceptable testing will be completed prior to use of the site. Testing procedures to be used will be consistent with the EPA/COE testing manual ('green book') and any regional implementation guidance. Only material determined to be suitable through the MPRSA 103 verification process by the COE and EPA will be placed at the designated ocean disposal site.

US EPA ARCHIVE DOCUMENT

Time of disposal. At present no restrictions have been determined to be necessary for disposal related to seasonal variations in ocean current or biotic activity. As monitoring results are compiled, should any such restrictions appear necessary, disposal activities will be scheduled so as to avoid adverse impacts. Additionally, if new information indicates that endangered or threatened species are being adversely impacted, restrictions may be incurred.

Disposal Technique. No specific disposal technique is required for this site.

Utilization of any beach-compatible dredged material for beach nourishment is encouraged by EPA. Disposal of coarser material should be planned to allow placement within or accessible to the littoral zone, to the maximum extent practical and following the provisions of the Clean Water Act.

SITE MONITORING

Part 228 of the Ocean Dumping Regulations establishes the need for evaluating the impacts of disposal on the marine environment. Section 228.9 indicates that the primary purpose of this monitoring program is to evaluate the impact of disposal on the marine environment by referencing the monitoring results to a set of baseline conditions. Section 228.l0(b) states that in addition to other necessary or appropriate considerations, the following types of effects will be considered in determining to what extent the marine environment has been impacted by materials disposed at an ocean site (excerpted):

1. Movement of materials into estuaries or marine sanctuaries, or onto oceanfront beaches, or shorelines;

2. Movement of materials toward productive fishery and shellfishery areas;

3. Absence from the disposal site of pollution-sensitive biota characteristic of the general area;

4. Progressive, non-seasonal, changes in water quality or sediment composition at the disposal site, when these changes are attributable to materials disposed of at the site;

5. Progressive, non-seasonal, changes in composition or numbers of pelagic, demersal, or benthic biota at or near the disposal site, when these changes can be attributed to the effects of materials disposed at the site; and

6. Accumulation of material constituents (including without limitation, human pathogens) in marine biota at or near the site.

Part 228.l0(c) states: "The determination of the overall severity of disposal at the site on the marine environment, including without limitation, the disposal site and adjacent areas, will be

US EPA ARCHIVE DOCUMENT

based on the evaluation of the entire body of pertinent data using appropriate methods of data analysis for the quantity and type of data available.

Impacts will be classified according to the overall condition of the environment of the disposal site and adjacent areas based on the determination by the EPA management authority assessing the nature and extent of the effects identified in paragraph (b) of this section in addition to other necessary or appropriate considerations."

Frequency of monitoring will be based on frequency of disposal and previous monitoring results.

Baseline Monitoring. The results of investigations presented in this EIS will serve as the main body of baseline data for the monitoring of the impacts associated with the use of the Tampa ODMDS (see DEIS).

A bathymetric survey will be conducted by the COE or site user prior to dredging cycle or project disposal. The number of transects required will be dependent upon the length of the disposal operation and the quantity of material proposed for disposal. The surveys will be taken along lines spaced at 200-foot intervals or less and be of sufficient length to adequately cover the disposal area. Accuracy of the surveys will be $\pm$ 1.0 feet. These surveys will be referenced to the appropriate datum and corrected for tide conditions at the time of survey. No additional pre-disposal monitoring at this site is proposed.

Disposal Monitoring. For all disposal activities, the dredging contractor will be required to prepare and operate under an approved electronic verification plan for all disposal operations. As part of this plan, the contractor will provide an automated system that will continuously track the horizontal location and draft condition (vertical) of the disposal vessel from the point of dredging to the disposal area, and return to the point of dredging. Required digital data are as follows:

(a) Date;

(b) Time;

(c) Vessel Name;

(d) Dump Number;

(e) Map Number on which dump is plotted;

(f) Beginning and ending coordinates of the dredging area for each load, and the beginning and ending coordinates for each dump and the compass heading at the beginning of each dump;

US EPA ARCHIVE DOCUMENT

(g) Shoal Number from which dredged material came; and

(h) Volume and brief description of material disposed.

As a follow-up to the baseline bathymetric survey, the COE or other site user will conduct a post-disposal bathymetric survey. The number of transects required will be the same as in the baseline survey.

The user will be required to prepare and submit to the COE daily reports of operations and a monthly report of operations for each month or partial month's work.

Material Tracking and Disposal Effects Monitoring. Based on the type and volume of material disposed, various monitoring surveys can be used to determine if and where the disposed material is moving, and what environmental effect the material is having on the site and adjacent area. A tiered approach will be used to determine the level of monitoring effort required following each disposal event.

An interagency SMMP team, consisting of representatives of EPA, COE, State of Florida and the user(s), will be established at the time when use of the ODMDS is proposed. Other agencies, such as National Marine Fisheries Service (NMFS), will be asked to participate where appropriate. This SMMP team will evaluate existing monitoring data, the type of proposed disposal (i.e., O&M vs. construction), the type of material (i.e., sand vs. mud), location of placement within the ODMDS and quantity of proposed material. This team will then make recommendations to the responsible agency on appropriate monitoring techniques, level of monitoring, significance of results and potential management options.

The monitoring program for the area will address possible changes in bathymetric, sedimentological, chemical, and biological aspects of the ODMDS and surrounding area as a result of the disposal of dredged material at the site, as appropriate.

Initially, the level of monitoring proposed will focus on tracking the material to determine if it moves, in sufficient quantities, toward known resources. Sediment mapping will be done approximately 12 to 24 months after the initial disposal under the final designation is complete. The results of this mapping will be reviewed by the SMMP team, which will recommend the appropriate monitoring to study potential impacts, if necessary.

Close coordination between EPA, COE, the State of Florida, and the user(s) will be maintained during development of the detailed survey plans and evaluation of results. Should the initial disposal at the permanently-designated ODMDS result in unacceptable adverse impacts, further studies may be required to determine the persistence of these impacts, the extent of the impacts within the marine system, and/or possible means of mitigation. In addition, the management plan presented may require revision based on the outcome of the monitoring program.

Reporting and Data Formatting. Any data collected will be provided to federal and state agencies as appropriate. Data will be provided to other interested parties requesting such data to the extent

US EPA ARCHIVE DOCUMENT

possible. EPA requires data to be in the National Ocean Data Center (NODC) format, where appropriate. Data will be provided to members of the SMMP team for all surveys (including bathymetric) in a report generated by the action agency. The report should indicate how the survey relates to the SMMP and list previous surveys at the Tampa ODMDS. Reports should be provided within 90 days (bathymetric surveys within 45 days) after completion. Exception to the time limit will be possible if outside contracts stipulate a longer period of time. The report should provide data interpretations, conclusions, and recommendations, and should project the next phase of the SMMP.

Modification of ODMDS SMMP. A need for modification of the use of the Tampa ODMDS because of unacceptable impacts is not anticipated. However, should the results of the monitoring surveys indicate that continuing use of the ODMDS would lead to unacceptable impacts, then either the ODMDS Management Plan will be modified to alleviate the impacts, or the location of the ODMDS would be modified. Regardless, this plan will be reviewed annually by the SMMP team for necessary revisions.

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