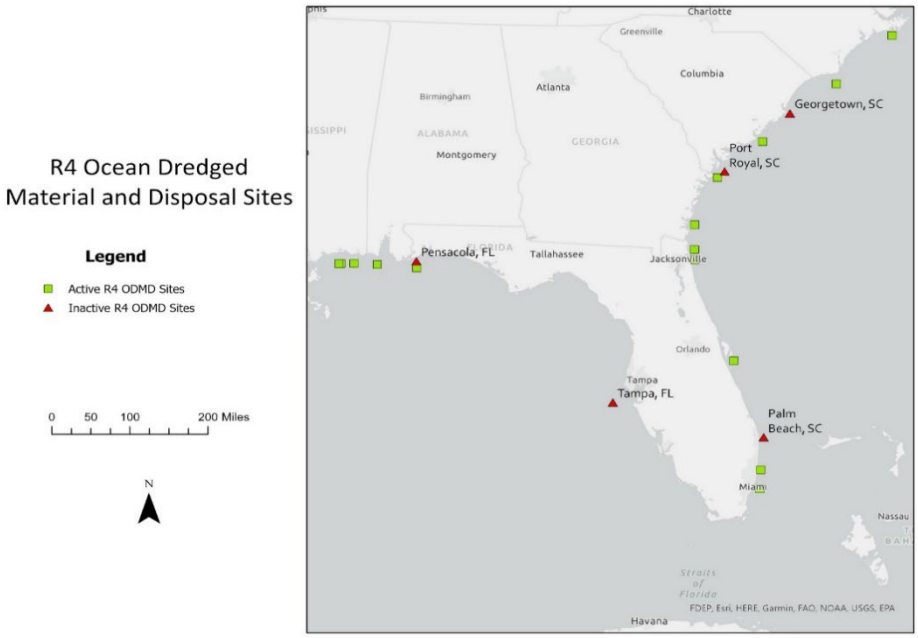
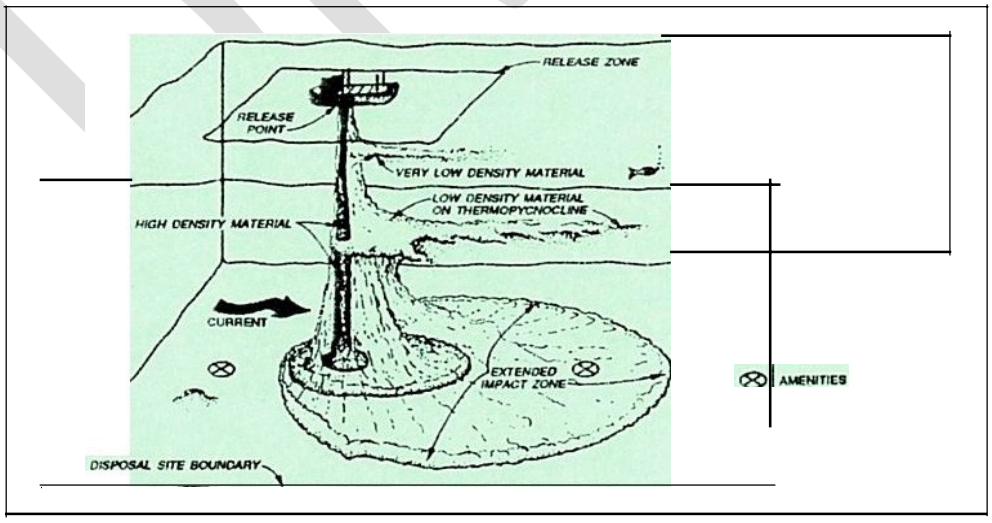
SOUTHEASTERN UNITED STATES INACTIVE OCEAN DREDGED MATERIAL DISPOSAL SITES

SITE MANAGEMENT AND MONITORING PLAN





The following Site Management and Monitoring Plan for Inactive ODMDSs within the U.S. Environmental Protection Agency Region 4 and the U.S. Army Corps of Engineers South Atlantic Division has been developed and agreed to pursuant to the Water Resources Development Act Amendments of 1992 (WRDA 92) to the Marine Protection, Research, and Sanctuaries Act of 1972 for the management and monitoring of ocean disposal activities, by the

U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers.

Regional Administrator U.S. Environmental Protection Agency, Region 4 Atlanta, Georgia	Division Commander U.S. Army Corps of Engineers South Atlantic Division Atlanta, Georgia

This plan is effective from the date of signature for a period not to exceed 10 years. If a site covered by this SMMP becomes "Active" a site specific SMMP will be developed within one year of site use.

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Inactive Disposal Sites

Site Management and Monitoring Plan

1 INTRODUCTION

It is the responsibility of the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) under the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 to manage and monitor each of the Ocean Dredged Material Disposal Sites (ODMDSs) designated by the EPA pursuant to Section 102 of MPRSA. Section l02(c)(3) of the MPRSA requires development of a Site Management and Monitoring Plan (SMMP) for each ODMDS and review and revision of the SMMP not less frequently than every 10 years. The 1996 document, *Guidance Document for Development of Site Management Plans for Ocean Dredged Material Disposal Sites* (EPA/USACE, l996) and the EPA Region 4 and USACE South Atlantic Division (SAD) Memorandum of Understanding (EPA/USACE, 2017) have been used as guidance in developing this SMMP.

Specific responsibilities of EPA and the USACE are:

> EPA: EPA is responsible for designating/de-designating MPRSA Section I02 ODMDSs, regulating site use and developing and implementing disposal monitoring programs, evaluating environmental effects of disposal dredged material at these sites and for reviewing and concurring on dredged material suitability determinations.
>
> USACE: The USACE is responsible for evaluating dredged material suitability, issuing MPRSA Section I03 permits, and cooperating with EPA in regulating site use and developing and implementing disposal monitoring programs.

EPA Region 4 and USACE SAD have decided to classify ODMDSs that have not been used within 5 years and are not expected to be used within the next 5 years as "Inactive." In order to conserve agency resources, EPA Region 4 and USACE SAD have decided rather than develop site specific SMMPs for each inactive ODMDS, to develop a general SMMP for all inactive ODMDSs. These sites can only be used in an emergency situation without the prior development of a site specific SMMP. EPA Region 4 must concur on any emergency use of an inactive ODMDS. The definition of emergency situation provided in 33 CFR 325.2(e)(4) will be used for this SMMP:

> *An "emergency situation" is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures [33 CFR 325.2(e)(4)}.*

If an inactive site is used, a site specific SMMP will be developed for that site within one year of the initiation of its use. The following SMMP components will also be addressed in the site specific SMMP.

2 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."

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2.1 Disposal Sites

The ODMDS covered by this SMMP arc listed in Table I and shown in Figure I. ODMDSs can be added to this list through a letter from the EPA Region 4 Administrator to the USACE SAD Commander or applicable District Commander. ODMDSs will automatically be removed from this list upon development of a site specific ODMDS.

Table 1 Inactive Sites

ODMDS	**District**	**State**	**Citation**
Georgetown	Charleston	South Carolina	40 CFR §228.15(h)(3)
Palm Beach	Jacksonville	Florida	40 CFR §228.15(h)(21)
Pensacola Nearshore	Mobile	Florida	40 CFR §228.15(h)(12)
Port Royal	Charleston	South Carolina	40 CFR §228.15(h)(23)
Tampa	Jacksonville	Florida	40 CFR §228.15(h)(18)

2.2 Management Objectives

Appropriate management of an ODMDS is aimed at assuring that disposal activities will not unreasonably degrade or endanger human health, welfare, the marine environment or economic potentialities (MPRSA §I03(a)). The primary objectives in the management of these ODMDSs are:

- Protection of the marine environment.
- Documentation of disposal activities and compliance; and
- Maintenance of a long-term disposal alternative for dredged material.

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

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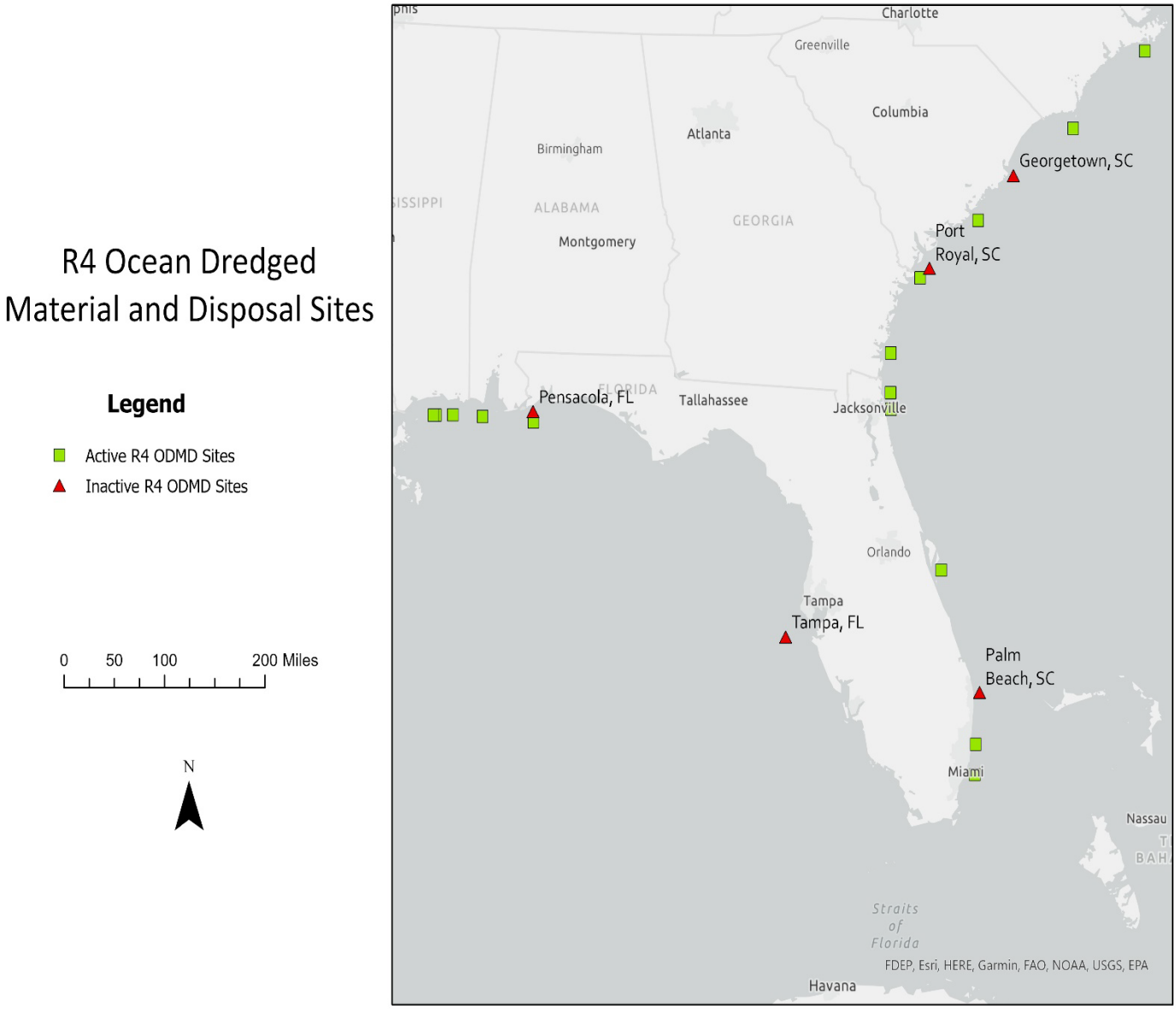

Figure 1: Map of Region 4 ODMDSs (Inactive sites marked as red triangles)

2.3 Disposal History and Dredged Material Volumes.

Disposal history at the above ODMDSs can be found at the Ocean Disposal Database maintained by the USACE. Future use, from both Federal and non-federal applicants, is not currently expected. None of these sites currently has any volume restrictions in place. Restrictions on site use can be found at 40 CFR 228. I 5(a)(3)(h).

2.4 Dredged Material Characteristics.

2.4.1 Associated Beach Quality Materials.

USACE Beneficial Use of Dredged Material EM 1110-2-5026 requires dredged material be maximized within the coastal system. Dredged materials that qualify for beach or near-shore placement per the applicable State standards shall be beneficially placed in such location, to the maximum extent practicable. It is expected that the applicable State will exercise its authority and responsibility, regarding beach nourishment, to the full extent during any future permitting activities. Beneficial use of beach compatible dredged material for beach nourishment is strongly encouraged and supported by EPA.

2.4.2 Dredged Material Quality Verification.

The suitability of dredged material for ocean disposal must be verified by the USACE and agreed to via written concurrence from EPA prior to disposal. Verification will be valid for three years from the most current verification.

Verification process:

1) Case-specific evaluation against the exclusion criteria (40 CFR 227.13(b))

2) Determination of testing requirements for non-excluded material based on the potential of sediment contamination since last verification.

3) When applicable, execute testing and determination of suitability of non-excluded material for ocean disposal.

Verification documentation for suitability will be completed prior to use of the ODMDS. Documentation will be in the form of a MPRSA Section I03 Evaluation. Potential testing and the Evaluation will follow the procedures outlined in the 1991 EPA/USACE Dredged Material Testing Manual and 2008 Southeast Regional Implementation Manual (SERIM) or the appropriate updated versions. This includes how dredging projects will be subdivided into project segments for sampling and analysis. The MPRSA Section 103 Evaluation will be in the form outlined in Appendix C of the SERIM. Water Quality Compliance determinations will be made using the STFATE (ADDAMS) model. Only material determined to be suitable and in compliance with the Ocean Dumping Criteria (40 CFR Part 227) through the verification process by the USACE and EPA, Region 4 can be disposed in these ODMDSs.

2.5 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 at any of these ODMDSs. Restrictions on time of disposal may be established by EPA and/or the USACE at the time of site use for operational reasons or to ensure compliance with the Ocean Dumping Criteria (40 CFR Part 227). Precautions necessary to protect whales, as described in Section 2.6, are required.

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2.6 Disposal Technique.

No specific disposal technique is required for these sites. However, in order to protect North Atlantic right whales, all vessels over 33 feet in length (either hopper dredge or tug and scow) speed and operation will be restricted in accordance with the most recent USACE South Atlantic Division Endangered Species Act Section 7 Consultation Regional Biological Opinion for Dredging of Channels and Borrow Areas in the Southeastern United States for those sites located in the Atlantic Ocean. In addition. the disposal vessel's captain should be aware of the vessel approach restrictions in 50 CFR §224.l03 which at the time of this SMMP prohibits approach within 500 yards of a right whale by vessel, aircraft, or any other means. Restrictions on disposal technique (e.g. volume restrictions, release rates, etc.) may be established by EPA and/or the USACE at the time of site use for operational reasons or to ensure compliance with the Ocean Dumping Criteria (40 CFR Part 227).

2.7 Disposal Location.

40 CFR §227.28 requires all disposals to occur at least 330 feet (100 meters) inside any site boundaries. Release zones may be established by EPA and/or the USACE at the time of site use for operational reasons or to ensure compliance with the Ocean Dumping Criteria (40 CFR Part 227). Disposal shall be initiated within the applicable release zone boundary and completed (i.e., doors closed) prior to leaving the ODMDS boundaries.

Tampa has zones established for different grain sizes. and includes a prohibition to disposal on the berm. Placement methods, which prevent mounding of dredged materials from becoming an unacceptable navigation hazard, will be used. Dredged material shall be disposed so that at no point will depths less than -25 feet Mean Lower Low Water (MLLW) occur (i.e., a clearance of 25 feet above the bottom will be maintained).

2.8 Permit and Contract Conditions.

The disposal monitoring and post-disposal monitoring requirements described under Site Monitoring will be included as permit conditions on all MPRSA Section 103 permits and will be incorporated in the contract language for all federal projects. A summary of the management and monitoring requirements to be included are listed in Table 2.

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Table 2 Summary of Permit and Contract Conditions

Condition	Reference
Dredged Material Suitability and Term of Verification	**Inactive ODMDS SMMP page 3. Southeast Regional Implementation Manual**
Disposal within Appropriate Zones	**Inactive ODMDS SMMP page 4**
Northern Right Whale Avoidance	**Inactive ODMDS SMMP page 4**
Pre and Post Bathymetric Surveys	**Inactive ODMDS SMMP pages 6-7**
Disposal Monitoring and Recording of Disposal Locations	**Inactive ODMDS SMMP pages 6-7**
Reporting Requirements: Disposal Summary Reports within 90 Days of Project Completion	**Inactive ODMDS SMMP page 9**

2.9 Permit Process.

All disposal of dredged material in the ocean, with the exception of Federal Civil Works projects, requires an ocean dumping permit issued by the USACE pursuant to Section 103 of the MPRSA.

2.10 Information Management of Dredged Material Placement Activities.

EPA Region 4 and USACE SAD have agreed on an eXtensible Markup Language (XML) standard for sharing of disposal monitoring data (see also Section 3.5).

3 SITE MONITORING

The MPRSA establishes the need for including a monitoring program as part of the Site Management Plan. Site monitoring is conducted to ensure the environmental integrity of a disposal site and the areas surrounding the site and to verify compliance with the site designation criteria, any special management conditions, and with permit requirements. Monitoring programs should be flexible, cost effective, and based on scientifically sound procedures and methods to meet site-specific monitoring needs. The intent of the program is to provide the following:

(1) Information indicating whether the disposal activities are occurring in compliance with the permit and site restrictions.

(2) Information indicating the short-term and long-term fate of materials disposed of in the marine environment.

(3) Information concerning the short-term and long-term environmental impacts of the disposal.

The main purpose of a disposal site monitoring program is to determine whether dredged material site management practices, including disposal operations, at the site need to be changed to avoid significant

adverse impacts.

3.1 Baseline Monitoring.

Each of the inactive ODMDSs has a site designation Environmental Impact Statement which provides baseline information. A bathymetric survey will be conducted by the USACE or site user within three (3) months prior to project disposal for projects expected to exceed 50,000 cubic yards. Bathymetric surveys will be used to monitor the disposal mound to ensure a navigation hazard is not produced, to assist in verification of material placement, to monitor bathymetry changes and trends and to ensure that the site capacity is not exceeded, ie., the mound does not exceed the site boundaries. Surveys will conform to the minimum performance standards for Corps of Engineers Hydrographic Surveys for ··Other General Surveys & Studies" as described in the USACE Engineering Manual, EM1110-2-1003, *Hydrographic Surveying* dated November 30, 2013. The number and length of transects required will be sufficient to encompass the ODMDS and a 500-foot wide area around the site. The surveys will be taken along lines spaced at 500-foot intervals or less. The minimum performance standards from table D-5 *Hydrographic Surveying* shall be followed. Horizontal location of the survey lines and depth sounding points will be determined by an automated positioning system utilizing a differential global positioning system. The vertical datum will be referenced to prescribed NOAA Mean Lower Low Water (MLLW) datum. The horizontal datum should be referenced to the local State Plane Coordinate System (SPCS) for that area or in Geographical Coordinates (latitude-longitude). The horizontal reference datum should be the North American Datum of 1983 (NAO 83). No additional pre-disposal monitoring is required.

3.2 Disposal Monitoring.

For all disposal activities, an electronic tracking system (ETS) must be utilized. The ETS will provide surveillance of the transportation and disposal of dredged material. The ETS will be maintained and operated to continuously track the horizontal location and draft condition (accuracy± 0.1 foot) of the disposal vessel (i.e. hopper dredge or disposal scow) from the point of dredging to the disposal site and return to the point of dredging. Data shall be collected at least every 500 feet during travel to and from the ODMDS and every minute or every 200 feet of travel, whichever is smaller, while approaching within 1,000 feet and within the ODMDS. In addition to the continuous tracking data, the following trip information shall be electronically recorded for each disposal cycle:

a) Load Number
b) Disposal Vessel or Scow Name
c) Tow-Vessel Name (if scow used)
d) Captain of Disposal or Tow Vessel
e) Estimated Volume of Load
f) Description of Material Disposed
g) Source of Dredged Material
h) Date, Time, and Location at State of Initiation of Disposal and Completion of Disposal Event

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It is expected that disposal monitoring will be conducted utilizing the Dredge Quality Management (DQM) system for Civil Works projects, although other systems are acceptable. Disposal monitoring and ETS data will be reported to EPA Region 4 on a weekly basis (within one week of disposal) utilizing the eXtensible Markup Language (XML) specification and protocol per Section 3.5. EPA Region 4 and the USACE District shall be notified within 24 hours if disposal occurs outside of the ODMDS or specified disposal zone or if excessive leakage occurs.

3.3 Post Discharge Monitoring.

The USACE or other site user will conduct a bathymetric survey consistent with the pre-disposal survey requirements within 30 days after disposal project completion. Surveys will not be required for projects less than 50,000 cubic yards. If a release zone is utilized and adhered to, the number and length of the transects required will be sufficient to encompass the release zone and a 500-foot wide area around it. Bathymetric surveys will be used to monitor the disposal mound to ensure a navigation hazard is not produced, to assist in verification of material placement, to monitor bathymetry changes and trends and to ensure that the site capacity is not exceeded, i.e., the mound does not exceed the site boundaries.

3.4 Disposal Effects Monitoring.

Based on the type and volume of material disposed and impacts of concern, various monitoring surveys can be used to examine if and the direction the disposed dredged material is moving, and what environmental effect the material is having on the site and adjacent areas. Within one year following disposal activities, a site specific SMMP for the site used will be developed. That site specific SMMP will include a monitoring program. At a minimum, a Trend Assessment Survey (40 CFR 228.13) will be conducted within 2 years of initiation of site use if none has been conducted within the last ten years.

3.5 Reporting and Data Formatting.

3.5.1 Project Initiation and Violation Reporting.

The USACE or other site user shall notify EPA 15 days prior to the beginning of a dredging cycle or project disposal. The user is also required to notify the USACE and the EPA within 24 hours if a violation of the permit and/or contract conditions related to MPRSA Section I03 or SMMP requirements occur during disposal operations.

3.5.2 Disposal Monitoring Data.

It is expected that disposal monitoring will be conducted utilizing the Dredge Quality Management (DQM) system for Civil Works projects, although other systems are acceptable. Disposal monitoring data shall be provided to EPA Region 4 electronically on a weekly basis (within one week of disposal event). Data shall be provided per the EPA Region 4 XML format and delivered as an attachment to an email to R4_DisposalData@epa.gov. The XML format is available from EPA Region 4.

3.5.3 Post Disposal Summary Reports.

A Post Disposal Summary Report shall be provided to EPA within 90 clays after project completion. These reports should include: dredging project title; permit number and expiration date (if applicable); contract number; name of contractor(s) conducting the work, name and type of vessel(s) disposing material in the ODMDS; disposal timeframes for each vessel; volume disposed at the ODMDS (total paid and unpaid *in situ* volume, and gross volume reported by dredging contractor in the disposal logs), number of loads to ODMDS, type of material disposed at the ODMDS; identification by load number of any misplaced material; dates of pre and post disposal bathymetric surveys of the ODMDS and a narrative discussing any violation(s) of the I03 concurrency and/or

permit (if applicable). The narrative should include a description of the violation, indicate the time it occurred and when it was reported to the EPA and USACE, discuss the circumstances surrounding the violation, and identify specific measures taken to prevent reoccurrence. The Post Disposal Summary Report should be accompanied by the bathymetry survey results (plot and X,Y,Z ASCII data file), a summary scatter plot of all disposal start locations, and a summary table of the trip information required by Section 3.2 with the exception of the disposal completion data. If all data is provided in the required XML format, scatter plots and summary tables will not be necessary.

3.5.4 Environmental Monitoring.

Disposal effects monitoring shall be coordinated with and be provided to appropriate federal and state agencies as specified in the site specific SMMP to be developed. Reports will be posted to EPAs website at: http://www.epa.gov/region4/water/oceans/sites.html .

4 MODIFICATION OF THE INACTIVE DISPOSAL SITES SMMP

This SMMP will be reviewed and revised at a minimum of every ten years. ODMDSs can be added to this SMMP through a letter from the EPA Region 4 Administrator to the USACE SAD

Commander or applicable District Commander. ODMDSs will automatically be removed from this list upon development of a site specific ODMDS or upon site de-designation through rulemaking in the Federal Register.

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Table 3 Inactive Disposal Sites Monitoring Strategies and Thresholds for Action

Goal	Technique	Sponsor	Rationale	Frequency	Threshold for Action	Management Options	
						Threshold Not Exceeded	Threshold Exceeded
Trend Assessment	Water and Sediment Quality, Benthic Community Analysis (40CFR228.13)	U.S. EPA	Periodically evaluate the impact of disposal on the marine environment (40CFR 228.9)	If site has become active, approximately every 10 years or within 2 years of site use. whichever is later.	Absence from the site of pollution sensitive biota Progressive non-seasonal changes in water or sediment quality	Continue Monitoring per site-specific SMMP	Conduct Environmental Effects Monitoring or Advanced Environmental Effects Monitoring per site specific SMMP. Review dredged material evaluation procedures
Ensure Safe Navigation Depth & Monitor Bathymetric Trends	Bathymetry	Site User	Determine height of mound and any excessive mounding	Pre & Post disposal for projects greater than 50,000 cy	Mound height> -30 feet mean lower low water (MLLW)	Continue Monitoring	Modify future disposal method/placement Restrict disposal volumes
					Mound height > -25 feet MLLW	Continue Monitoring	Physically level material
Compliance	Disposal Site Use Records in EPA Region 4's XML format	Site User	-Ensure management requirements are being met	Report weekly during the project	Disposal records required by SMMP are not submitted or are incomplete	Continue Monitoring	Restrict site use until requirements are met

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5 REFERENCES

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