



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 22 2009

Colonel Paul L. Grosskruger
District Commander
Jacksonville District
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232-0019

Dear Colonel Grosskruger:

Please find enclosed revisions to the Port Everglades Harbor Ocean Dredged Material Disposal Site (ODMDS) and the Palm Beach Harbor ODMDS Site Management and Monitoring Plans (SMMPs). Section 102 of the Marine Protection, Research, and Sanctuaries Act (MPRSA) requires that SMMPs be developed by the Environmental Protection Agency (EPA) in conjunction with the USACE for each ODMDS designated by EPA. These SMMPs were originally developed in 2004 as part of the site designation process. However, as a result of post disposal monitoring conducted by the Environmental Protection Agency (EPA) and a proposed change in use at the Port Everglades Harbor ODMDS, EPA determined that the SMMPs warranted revision. The enclosed revisions supersede the original SMMPs.

In revising these SMMPs, EPA and the U.S. Army Corps of Engineers (USACE) followed the procedures outlined in the 2007 Memorandum of Understanding (MOU) between USACE South Atlantic Division and EPA Region 4 on Ocean Dredged Material Disposal. EPA coordinated the proposed revisions with the National Marine Fisheries Service and the State of Florida. In addition, in accordance with the MPRSA and the MOU, this document underwent a 30-day public review through publication of a Public Notice and Notice of Availability of the proposed changes on January 23, 2009.

The management and monitoring requirements of the SMMPs should be included as permit conditions for all MPRSA Section 103 permits and should be incorporated in the contract language for all federal projects for ocean disposal in the ODMDSs. Templates for permit special conditions and contract specifications implementing these requirements are included with the SMMPs as appendices. If you have any questions, please contact Mr. Chris McArthur at (404) 562-9391.

Sincerely,

A handwritten signature in black ink, appearing to read "Stan Meiburg".

Stan Meiburg
Acting Regional Administrator

Enclosures

**REVISIONS TO THE PORT EVERGLADES HARBOR
OCEAN DREDGED MATERIAL DISPOSAL SITE
(ODMDS)
SITE MANAGEMENT AND MONITORING PLAN**

May, 2009

Disposal Technique. No specific disposal technique is required for this site. Disposal shall be initiated within the specified disposal release zone and shall be completed (doors closed) prior to departing the ODMDS. While in route to the ODMDS, the disposal vessel must remain within the navigation channel while west of the buoy G “3.” Standard surveillance and evasive measures to protect sea turtles and marine mammals shall be employed during all disposal operations at the ODMDS.

Disposal Location. Based on post disposal monitoring efforts, the disposal release zone has been modified. The new release zone is a rectangle approximately 900 meters (3,000 feet) by 300 meters (1,000 feet), located 300 meters (1,000 feet) from the western and southern ODMDS boundaries. It is defined by the following coordinates:

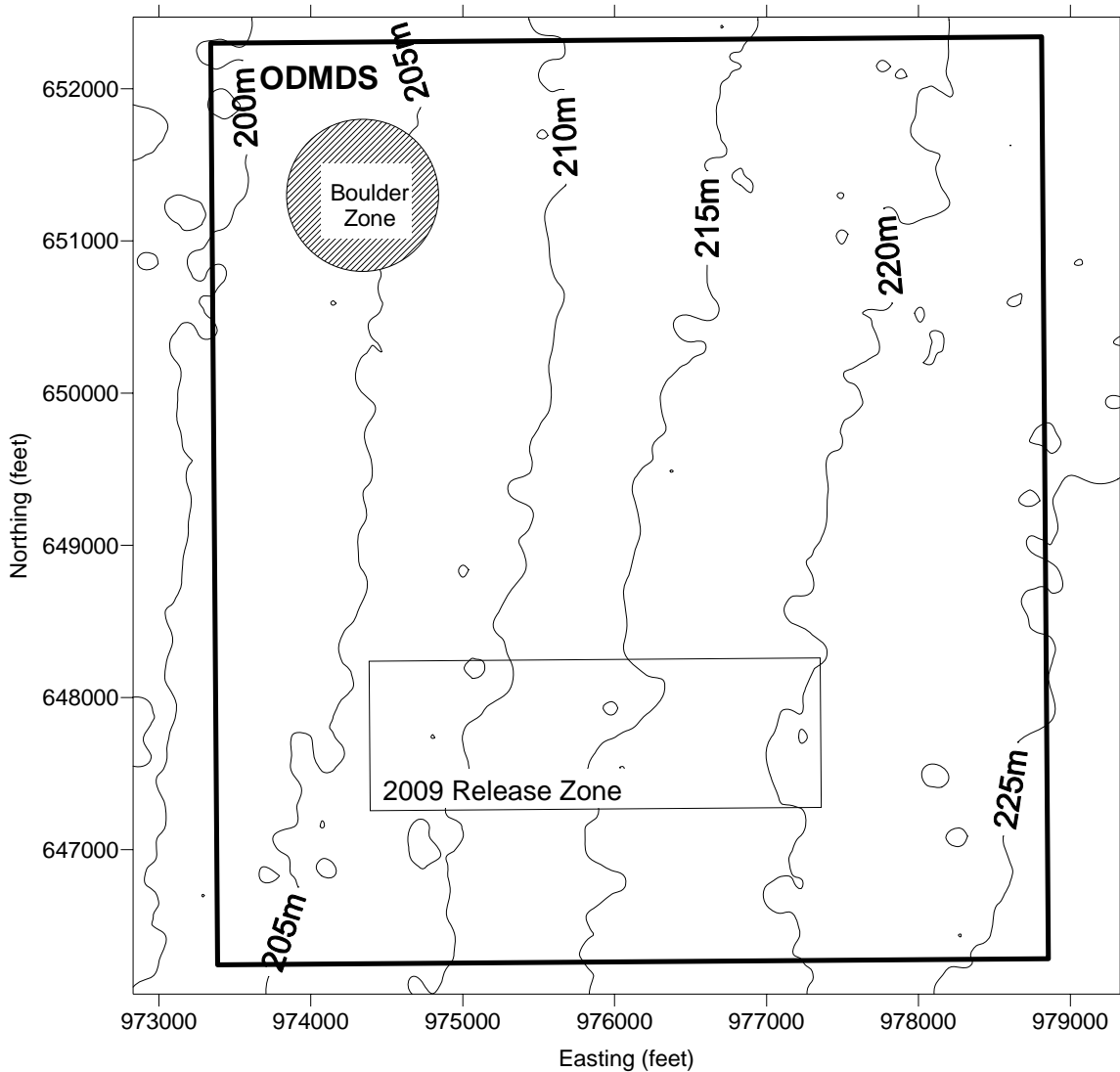
Geographic (NAD83)		State Plane (Florida East 0901 U.S. Feet NAD83)	
26°06.828'N	80°01.815'W	648238 N	974383 E
26°06.828'N	80°01.272'W	648260 N	977353 E
26°06.666'N	80°01.815'W	647256 N	974390 E
26°06.666'N	80°01.272'W	647278 N	977360 E

In addition, a release zone for boulders (diameter great than 12 inches) has been delineated as a 150 meter (500 foot) radius zone centered at 26° 08.984'N latitude and 80°01.805'W longitude (NAD83) or Florida State Plane coordinates 974341W and 651301N (NAD83).

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 (nearest 0.5 foot) of the disposal vessel (ie. 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 Name and Type (e.g. scow)
- c. Tow Vessel Name (if applicable)
- 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 Start at Initiation and Completion of Disposal Event

It is expected that disposal monitoring will be conducted utilizing the Silent Inspector (SI) system for Civil Works projects [see <http://si.usace.army.mil>]. Disposal monitoring and ETS data will be reported to EPA Region 4 utilizing the eXtensible Markup Language (XML) specification and protocol. Due to concerns regarding potential significant impacts to critical nearshore resources should short-dumping or leakage occur, disposal monitoring data shall be provided to EPA Region 4 electronically on a daily basis and delivered as an attachment to an email to DisposalData.R4@epa.gov. The XML format is available from EPA Region 4. 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.



**PORT EVERGLADES HARBOR ODMDS SMMP
APPENDIX A**

**WATER COLUMN EVALUATIONS
NUMERICAL MODEL (STFATE) INPUT PARAMETERS
(Revised 2009)**

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Water Column Evaluations
 Numerical Model (STFATE) Input Parameters
 Port Everglades Harbor ODMDS
 (Revised 2009)

SITE DESCRIPTION

Parameter	Value	Units
Number of Grid Points (left to right)	40	
Number of Grid Points (top to bottom)	40	
Spacing Between Grid Points (left to right)	500	ft
Spacing Between Grid Points (top to bottom)	500	ft
Constant Water Depth	645	ft
Roughness Height at Bottom of Disposal Site	.005 ¹	ft
Slope of Bottom in X-Direction	0.0	Deg.
Slope of Bottom in Z-Direction	1.0	Deg.
Number of Points in Ambient Density Profile ² Point	5	
Ambient Density at Depth = 0 ft	1.0246	g/cc
Ambient Density at Depth = 65 ft	1.0248	g/cc
Ambient Density at Depth = 328 ft	1.0272	g/cc
Ambient Density at Depth = 492 ft	1.0280	g/cc
Ambient Density at Depth = 645 ft	1.0282	g/cc

AMBIENT VELOCITY DATA³

Parameter	Value	Units
Profile	2-Point	
X-Direction Velocity at Depth of 33 feet	- 2.7	ft/sec
Z-Direction Velocity at Depth of 33 feet	+1.1	ft/sec
X-Direction Velocity at Depth of 197 feet	- 2.2	ft/sec
Z-Direction Velocity at Depth of 197 feet	+0.9	ft/sec

DISPOSAL OPERATION DATA

Parameter	Value	Units
Location of Disposal Point from Top of Grid	16,000	ft
Location of Disposal Point from Left Edge of Grid	10,000	ft
Dumping Over Depression	0	

INPUT, EXECUTION AND OUTPUT

Parameter	Value	Units
Location of the Upper Left Corner of the Disposal Site - Distance from Top Edge	11,000	ft
Location of the Upper Left Corner of the Disposal Site - Distance from Left Edge	7,000	ft
Location of the Lower Right Corner of the Disposal Site - Distance from Top Edge	17,000	ft
Location of the Lower Right Corner of the Disposal Site - Distance from Left Edge	13,000	ft
Duration of Simulation	14,400	sec
Long Term Time Step	600	sec

COEFFICIENTS

Parameter	Keyword	Value
Settling Coefficient	BETA	0.000 ¹
Apparant Mass Coefficient	CM	1.000 ¹
Drag Coefficient	CD	0.500 ¹
Form Drag for Collapsing Cloud	CDRAG	1.000 ¹
Skin Friction for Collapsing Cloud	CFRIC	0.010 ¹
Drag for an Ellipsoidal Wedge	CD3	0.100 ¹
Drag for a Plate	CD4	1.000 ¹
Friction Between Cloud and Bottom	FRICTN	0.010 ¹
4/3 Law Horizontal Diffusion Dissipation Factor	ALAMDA	0.001 ¹
Unstratified Water Vertical Diffusion Coefficient	AKYO	Pritchard Expression
Cloud/Ambient Density Gradient Ratio	GAMA	0.250 ¹
Turbulent Thermal Entrainment	ALPHAO	0.39 ⁴

Parameter	Keyword	Value
Entrainment in Collapse	ALPHAC	0.100 ¹
Stripping Factor	CSTRIP	0.003 ¹

¹Model Default Value

²Profiles from EPA 1998 measurements

³Velocity data represents average conditions. Determined from WES 1998 analysis of ADCP data offshore Ft. Lauderdale, FL.

⁴Calculated from NOAA Field Work at Miami (1991)

Dilution Rates for Generic Material:

Minimum dilution outside disposal site: 12,700 to 1

Minimum dilution after 4 hours: 15,100 to 1

**Port Everglades HARBOR ODMDS SMMP
APPENDIX B**

**TEMPLATE FOR MPRSA 103 STANDARD PERMIT
CONDITIONS
(revised 2009)**

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TEMPLATE
GENERIC SPECIAL CONDITIONS
FOR MPRSA SECTION 103 PERMITS
Port Everglades HARBOR, FL ODMDS
(revised 2009)

I. DISPOSAL OPERATIONS

A. For this permit, the term disposal operations shall mean: navigation of any vessel used in disposal of operations, transportation of dredged material from the dredging site to the Port Everglades Harbor, FL ODMDS, proper disposal of dredged material at the disposal area within the Port Everglades Harbor, FL ODMDS, and transportation of the hopper dredge or disposal barge or scow back to the dredging site.

B. The Port Everglades Harbor, FL ODMDS is defined as the rectangle with center coordinates of 26° 07.00'N latitude and 80° 01.50'W longitude (NAD83) or state plane coordinates 649292.4 N and 976098.2 E (NAD83). The corner coordinates are as follows:

Geographic (NAD83)		State Plane (Florida East 0901 U.S. Feet NAD83)	
26°07.50'N	80°02.00'W	652301.1 N	973341.1 E
26°07.50'N	80°01.00'W	652342.1 N	978810.0 E
26°06.50'N	80°02.00'W	646242.9 N	973386.1 E
26°06.50'N	80°01.00'W	646283.9 N	978855.7 E

C. No more than [NUMBER] cubic yards of dredged material excavated at the location defined in [REFERENCE LOCATION IN PERMIT] are authorized for disposal at the Port Everglades Harbor, FL ODMDS.

D. The permittee shall use an electronic positioning system to navigate to and from the Port Everglades Harbor, FL ODMDS. For this section of the permit, the electronic positioning system is defined as: a differential global positioning system or a microwave line of site system. Use of LORAN-C alone is not an acceptable electronic positioning system for disposal operations at the Port Everglades Harbor, FL ODMDS. If the electronic positioning system fails or navigation problems are detected, all disposal operations shall cease until the failure or navigation problems are corrected.

E. The permittee shall certify the accuracy of the electronic positioning system proposed for use during disposal operations at the Port Everglades Harbor, FL ODMDS. The certification shall be accomplished by direct comparison of the electronic positioning system's accuracy with a known fixed point.

F. The permittee shall not allow any water or dredged material placed in a hopper dredge or disposal barge or scow to flow over the sides or leak from such vessels during transportation to the Port Everglades Harbor, FL ODMDS.

G. A disposal operations inspector and/or captain of any tug boat, hopper dredge or other vessel used to transport dredged material to the Port Everglades Harbor, FL ODMDS shall insure compliance with disposal operation conditions defined in this permit.

1. If the disposal operations inspector or the captain detects a violation, he shall report the violation to the permittee immediately.

2. The permittee shall contact the U.S. Army Corps of Engineers, Jacksonville District's Regulatory Branch [TELEPHONE NUMBER] and EPA Region 4 at (404) 562-9391 to report the violation within twenty-four (24) hours after the violation occurs. A complete written explanation of any permit violation shall be included in the post-dredging report.

H. When dredged material is disposed, no portion of the hopper dredge or disposal barge or scow shall be outside of the boundaries of the Port Everglades ODMDS as defined in Special Condition B. Additionally, disposal shall be initiated within the disposal release zone defined by the following coordinates:

Geographic (NAD83)		State Plane (Florida East 0901 U.S. Feet NAD83)	
26°06.828'N	80°01.815'W	648238 N	974383 E
26°06.828'N	80°01.272'W	648260 N	977353 E
26°06.666'N	80°01.815'W	647256 N	974390 E
26°06.666'N	80°01.272'W	647278 N	977360 E

All efforts shall be made to dispose of boulders (diameter great than 12 inches) in a zone delineated as a 150 meter (500 foot) radius zone centered at 26° 08.984'N latitude and 80°01.805'W longitude (NAD83) or Florida State Plane coordinates 974341W and 651301N (NAD83). Loads with mixtures of materials that include incidental boulders should not be disposed in the boulder zone.

I. During transit to the Port Everglades Harbor ODMDS, the hopper dredge or disposal barge or scow shall remain within the navigation channel until east of the buoy G"3."

J. The permittee shall use an electronic tracking system (ETS) that will continuously track the horizontal location and draft condition of the disposal vessel (hopper dredge or disposal barge or scow) to and from the Port Everglades Harbor ODMDS. 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. The permittee shall use Florida State Plane or latitude and longitude coordinates (North American Datum 1983). State Plane coordinates shall be reported to the nearest foot and latitude and

longitude coordinates shall be reported as decimal degrees out to 6 decimals. Westerly longitudes are to be reported as negative. Draft readings shall be recorded in feet out to 2 decimals.

K. The permittee shall record electronically for each load the following information:

- 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 Start at Initiation and Completion of Disposal Event
- i. The ETS data required by Special Condition J.

L. The permittee shall conduct a bathymetric survey of the Port Everglades Harbor ODMDS within 30 days following project completion.

1. The number and length of the survey transects shall be sufficient to encompass the Port Everglades ODMDS and a 500 foot wide area around the site. The transects shall be spaced at 500-foot intervals or less with a depth recording density of 20 to 70 feet..

2. Vertical accuracy of the survey shall be ∇ 0.1 feet. Horizontal location of the survey lines and depth sounding points will be determined by an automated positioning system utilizing either microwave line of site system or differential global positioning system. The vertical datum will be referenced to prescribed NOAA Mean Lower Low Water (MLLW) datum. MLLW is 1.8 feet below NGVD 1929. The horizontal datum will be Florida State Plane (zone 0901 FL East) or Geographic (NAD 1983). State Plane coordinates shall be reported to the nearest 0.10 foot and latitude and longitude coordinates shall be reported as degrees and decimal minutes to the nearest 0.01 minutes.

K. The permittee has read and agrees to assure that they are in compliance with the requirements of the Port Everglades ODMDS Site Management and Monitoring Plan.

II. REPORTING REQUIREMENTS

A. All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following addresses: U.S. Army Corps of Engineers (Corps), Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, Florida 32232-0019 and U. S. Environmental Protection Agency (EPA) Region 4's Wetlands, Coastal and Watersheds Branch, 61 Forsyth Street, Atlanta, GA 30303. The Permittee shall reference this permit number, [INSERT PERMIT NUMBER], on all submittals.

B. At least 15 days before initiating any dredging operations authorized by this permit, the Permittee shall provide to the Corps and EPA a written notification of the date of commencement of work authorized by this permit.

C. Electronic data required by Special Conditions I.J and I.K shall be provided to EPA Region 4 on a weekly basis. Data shall be submitted as an eXtensible Markup Language (XML) document via Internet e-mail to DisposalData.R4@epa.gov. XML data file format specifications are available from EPA Region 4.

D. The permittee shall send one (1) copy of the disposal summary report to the Jacksonville District's Regulatory Branch and one (1) copy of the disposal summary report to EPA Region 4 documenting compliance with all general and special conditions defined in this permit. The disposal summary report shall be sent within 90 days after completion of the disposal operations authorized by this permit. The disposal summary report shall include the following information:

1. The report shall indicate whether all general and special permit conditions were met. Any violations of the permit shall be explained in detail.

2. The disposal summary report shall include the following information: dredging project title; dates of disposal; permit number and expiration date; 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 (as paid *in situ* volume, total paid and un paid *in situ* volume, and gross volume reported by dredging contractor), number of loads to ODMDS, type of material disposed at the ODMDS; identification of any misplaced material (outside disposal zone or the ODMDS boundaries); dates of pre and post disposal bathymetric surveys of the ODMDS and a narrative discussing any violation(s) of the 103 permit. The disposal summary report should be accompanied by the bathymetry survey results (plot and X,Y,Z ASCII data file).

III. PERMIT LIABILITY

A. The permittee shall be responsible for ensuring compliance with all conditions of this permit.

B. The permittee and all contractors or other third parties who perform an activity authorized by this permit on behalf of the permittee shall be separately liable for a civil penalty of up to \$50,000 for each violation of any term of this permit they commit alone or in concert with the permittee or other parties. This liability shall be individual, rather than joint and several, and shall not be reduced in any fashion to reflect the liability assigned to and civil penalty assessed against the permittee or any other third party as defined in 33 U.S.C. Section 1415(a).

C. If the permittee or any contractor or other third party knowingly violates any term of this permit (either alone or in concert), the permittee, contractor or other party shall be individually liable for the criminal penalties set forth in 33 U.S.C. Section 1415(b).

APPENDIX C

TYPICAL CONTRACT LANGUAGE FOR IMPLEMENTING THE PORT EVERGLADES HARBOR ODMDS SMMP REQUIREMENTS (revised 2009)

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TYPICAL CONTRACT LANGUAGE FOR IMPEMENTING SMMP
REQUIREMENTS

3.3 DISPOSAL OF DREDGED MATERIAL

3.3.1 General

All material dredged shall be transported to and deposited in the disposal area(s) designated on the drawings. The approximate maximum and average distance to which the material will have to be transported are as follows:

Disposal Area	Maximum Distance Statute Miles	Average Distance Statute Miles
---------------	-----------------------------------	-----------------------------------

Port Everglades Harbor ODMDS

[INSERT DISPOSAL AREA 2]	[XX miles]	[XX miles]
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[IF MATERIAL FROM DIFFERENT PROJECT AREAS GO TO DIFFERENT
DISOSAL AREAS, IT COULD BE SPECIFIED HERE]

3.3.2 Ocean Disposal Notification

- a. The contractor shall notify EPA Region 4 's Wetlands, Coastal and NonPoint Source Branch (61 Forsyth Street, Atlanta, GA 30303) at least 15 calendar days and the local Coast Guard Captain of the Port at least 5 calendar days prior to the first ocean disposal. The notification will be by certified mail with a copy to the Contracting Officer. The following information shall be included in the notification:
 - (1) Project designation; Corps of Engineers' Contracting Officer's name and contract number; and, the Contractor's name, address, and telephone number.
 - (2) Port of departure.
 - (3) Location of ocean disposal area (and disposal zone if required).
 - (4) Schedule for ocean disposal, giving date and time proposed for first ocean disposal.

3.3.3 Ocean Dredged Material Disposal Sites (ODMDS)

The material excavated shall be transported to and deposited in the Port Everglades Harbor ODMDS shown on the drawings. When dredged material is disposed, no portion of the hopper dredge or disposal barge or scow shall be outside of the boundaries of the Port Everglades Harbor ODMDS as shown on the drawings. Additionally, disposal shall be initiated within the disposal release zone defined by the following coordinates:

Geographic (NAD83)		State Plane (Florida East 0901 U.S. Feet NAD83)	
26°06.828'N	80°01.815'W	648238 N	974383 E
26°06.828'N	80°01.272'W	648260 N	977353 E
26°06.666'N	80°01.815'W	647256 N	974390 E
26°06.666'N	80°01.272'W	647278 N	977360 E

All efforts shall be made to dispose of boulders (diameter great than 12 inches) in a zone delineated as a 150 meter (500 foot) radius zone centered at 26° 08.984'N latitude and 80°01.805'W longitude (NAD83) or Florida State Plane coordinates 974341W and 651301N (NAD83). Loads with mixtures of materials that include incidental boulders should not be disposed in the boulder zone.

During transit to and from the Port Everglades Harbor ODMDS, the hopper dredge or disposal barge or scow shall remain within the navigation channel until east of the buoy G"3".

3.3.4 Logs

The Contractor shall keep a log for each load placed in the Port Everglades Harbor ODMDS. The log entry for each load shall include:

- 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 (coordinates) at Start of Initiation and Completion of Disposal Event

At the completion of dredging and at any time upon request, the log(s) shall be submitted in paper and electronic formats to the Contracting Officer for forwarding to the appropriate agencies.

3.3.5 Overflow, Spills and Leaks

Water and dredged materials shall not be permitted to overflow or spill out of barges, hopper dredges, or dump scows during transport to the disposal site(s). Failure to repair leaks or change the method of operation which is resulting in overflow of spillage will result in suspension of dredging operations and require prompt repair or change of operation to prevent overflow or spillage as a prerequisite to the resumption of dredging.

3.3.6 Electronic Tracking System (ETS) for Ocean Disposal Vessels

The Contractor shall furnish an ETS for surveillance of the movement and disposition of dredged material during dredging and ocean disposal. This ETS shall be established, operated and maintained by the Contractor to continuously track in real-time the horizontal location and draft condition of the disposal vessel (hopper dredge or disposal barge or scow) for the entire dredging cycle, including dredging area and disposal area. The ETS shall be capable of displaying and recording in real-time the disposal vessel's draft and location.

[USE LANGUAGE BELOW FOR NON SI PROJECTS]

3.3.6.1 ETS Standards

The Contractor shall provide automated (computer) system and components to perform in accordance with COE EM 1110-1-2909. A copy of the EM can be downloaded from the following web site: <http://www.usace.army.mil/inet/usace-docs/eng-manuals/em.htm>. Horizontal location shall have an accuracy equal to or better than a standard DGPS system, equal to or better than plus/minus 10 feet (horizontal repeatability). Vertical (draft) data shall have an accuracy of plus/minus 0.5 foot. Horizontal location and vertical data shall be collected in sets and each data set shall be referenced in real-time to date and local time (to nearest minute), and shall be referenced to the same state plane coordinate system used for the survey(s) shown in the contract plans. The ETS shall be calibrated, as required, in the presence of the Contracting Officer at the work location before disposal operations have started, and at 30-day intervals while work is in progress. The Contracting Officer shall have access to the ETS in order to observe its operation. Disposal operations will not commence until the ETS to be used by the Contractor is certified by the Contracting Officer to be operational and within acceptable accuracy. It is the Contractor's responsibility to select a system that will operate properly at the work location. The complete system shall be subject to the Contracting Officer's approval.

3.3.6.2 ETS Data Requirements and Submissions

- a. The ETS for each disposal vessel shall be in operation for all dredging and disposal activities and shall record the full round trip for each loading and disposal cycle. (NOTE: A dredging and disposal cycle constitutes the time from commencement of dredging to complete discharge of the material.) The Contracting Officer shall be notified immediately in the event of ETS failure and all dredging operations for the vessel shall cease until the ETS is fully operational. Any delays resulting from ETS failure shall be at the Contractor's expense.
- b. Data shall be collected, during the dredging and disposal cycle, every 500 feet (at least) during travel to the disposal area, and every minute or every 200 feet,

whichever is smaller, while approaching within 1,000 feet and within the disposal area.

b. Plot Reporting (2 types):

- (1) Tracking Plot - For each disposal event, data collected while the disposal vessel is in the vicinity of the disposal area shall be plotted in chart form, in 200-foot intervals, to show the track and draft of the disposal vessel approaching and traversing the disposal area. The plot shall identify the exact position at which the dump commenced. A sample Track and Draft Plot Diagram is on the web site indicated in paragraph CONSTRUCTION FORMS AND DETAILS below.
- (2) Scatter Plot - Following completion of all disposal events, a single and separate plot will be prepared to show the exact disposal locations of all dumps. Every plotted location shall coincide with the beginning of the respective dump. Each dump shall be labeled with the corresponding Trip Number and shall be at a small but readable scale. A sample Scatter Plot Diagram is on the web site indicated in paragraph CONSTRUCTION FORMS AND DETAILS below.
- (3) Summary Table – A spreadsheet which contains all of the information in the log(s) [Section 3.3.4] above shall be prepared and shall correspond to the exact dump locations represented on the Scatter Plot. A sample Summary Table spreadsheet is on the web site indicated in paragraph CONSTRUCTION FORMS AND DETAILS below.

- c. ETS data and log data required by Section 3.3.4 shall be provided to EPA Region 4 on a weekly or more frequent basis. Data shall be submitted to EPA Region 4 as an eXtensible Markup Language (XML) document via Internet e-mail to DisposalData.R4@epa.gov. XML data file format specifications are available from EPA Region 4. All digital ETS data shall be furnished to the Contracting Officer within 24 hours of collection. The digital plot files should be in an easily readable format such as Adobe Acrobat PDF file, Microstation DGN file, JPEG, BMP, TIFF, or similar. The hard copy of the ETS data and tracking plots shall be both maintained onboard the vessel and submitted to the Contracting Officer on a weekly basis.

[USE LANGUAGE BELOW FOR SI PROJECTS]

3.3.6.3 Silent Inspector – Special Standard of Responsibility

3.3.6.3.1 General

The Silent Inspector (SI) is an automated dredge contract monitoring system comprised of both hardware and software developed by the Army Corps of Engineers (the Corps). The Corps developed the SI as a low cost, repeatable, impartial system for automated

dredge monitoring. The SI systems integrate various automated systems to record digital dredging and disposal activities in real-time on a 24 hour/7 days a week basis. Information is recorded to the on-board computer where it is available to the Corps Quality Assurance Representative (QAR) for examination and for periodic download and transmittal via an automated email service for inclusion in the SI database. The dredging contractor supplies and owns the on-board system and all associated sensors. Additional information about SI and SI specifications can be found at <http://si.usace.army.mil>.

3.3.6.3.2 Requirement

As authorized by FAR 9.104-2, Contracting Officers may establish special standards of responsibility when necessary. The Contracting Officer has determined that use of the SI is necessary for work performed by hopper dredge and disposal scows. Therefore, in order to be considered responsible for performing this contract, the Offeror must establish prior to contract award that any hopper dredge or disposal scows to be used in performance of this contract has been outfitted with the SI system and the system has been certified by the Engineer Research and Development Center (ERDC) within the last year. Disposal scows shall utilize the monitoring or TDS profile. Questions regarding certification should be addressed to the SI support team at 601-634-2923.

3.3.6.3.3 Data Submissions

Scow data shall be transferred by the contractor automatically to the SI database on intervals not to exceed 24 hours. Hopper dredged data shall be transferred in accordance with the Hopper Dredge Specifications found at <http://si.usace.army.mil>.

3.3.6.4 Misplaced Materials

Materials deposited outside of the disposal zone specified in 3.3.3 will be classified as misplaced material and will result in a suspension of dredging operations. Redredging of such materials will be required as a prerequisite to the resumption of dredging unless the Contracting Officer, at his discretion, determines that redredging of such material is not practical. If redredging of such material is not required then the quantity of such misplaced material shall be deducted from the Contractor's pay quantity. If the quantity for each misplaced load to be deducted cannot initially be agreed to by both the Contractor and Contracting Officer, then an average hopper/scow load quantity for the entire contract will be used in the determination. Misplaced loads may also be subject to penalty under the Marine, Protection, Research and Sanctuaries Act. Materials deposited above the maximum indicated elevation or outside of the disposal area template shown will require the redredging or removal of such materials at the Contractor's expense. In addition, the Contractor must notify the Contracting Officer and the Environmental Protection Agency Region 4 's Wetlands, Coastal and NonPoint Source Branch (61 Forsyth Street, Atlanta, GA 30303) within 24 hours of a misplaced dump or any other violation of the Site Management and Monitoring Plan for the Port Everglades Harbor

ODMDS. Corrective actions must be implemented by the next dump and the Contracting Officer must be informed of actions taken.