



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SEP 26 2011

Colonel Alfred A. Pantano
District Commander
Jacksonville District
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, Florida 32232-0019

Dear Colonel Pantano:

Please find enclosed revisions to the Miami Ocean Dredged Material Disposal Site (ODMDS) Site Management and Monitoring Plan (SMMP). 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 U.S. Army Corps of Engineers (USACE) for each ODMDS designated by EPA. This SMMP was originally developed in 1995 and reviewed and revised in 2008 pursuant to the requirements of the MPRSA. The 2008 SMMP recommended that the capacity and behavior of disposed dredged material, with reference to the disposal release zone and ODMDS boundaries, be evaluated prior to approval of disposal of dredged material from the Miami Harbor Phase III deepening project. Based on the modeling results funded by the USACE and completed in March, 2010, EPA has determined that the SMMP warrants revision. It has been determined that the disposal release zone for future projects requires adjustment to contain the spatial distribution of the disposed dredged material on the seafloor within the ODMDS boundaries. The disposal release zone has been moved north 804 feet. The coordinates of the revised release zone are provided in the attached documents. The enclosed revisions supersede the 2008 SMMP.

In revising the SMMPs, EPA and the 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 on May 4, 2011 of a Joint Public Notice of the proposed changes.

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 SMMP revisions 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 "GK Fleming".

Gwendolyn Keyes Fleming
Regional Administrator

Enclosures

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

September, 2011

This page intentionally left blank

2.8 Disposal Location. Based on the results of monitoring surveys (see section 3.4) and computer modeling simulations (Taylor, 2010), the disposal release zone has been modified from that specified in the 1995 and 2008 SMMPs. This disposal release zone is approximately 2.4 times larger and 481 feet south of the 1995 disposal release zone. The disposal release zone measures 985 feet by 3,895 feet. The disposal release zone coordinates are as follows:

Table 2. Disposal Release Zone

| | Geographic (NAD83) | | State Plane (FL East 0901 Ft NAD83) | |
|-----------|--------------------|-------------|--|-----------|
| | Center | 25°44.943'N | 80°03.354'W | 515,593 N |
| NW Corner | 25°45.023'N | 80°03.709'W | 516,064 N | 964,969 E |
| NE Corner | 25°45.023'N | 80°02.999'W | 516,092 N | 968,865 E |
| SW Corner | 25°44.863'N | 80°03.709'W | 515,095 N | 964,976 E |
| SE Corner | 25°44.863'N | 80°02.999'W | 515,123 N | 968,872 E |

Disposal shall be initiated within the disposal release zone and shall be completed (doors closed) prior to departing the ODMDS.

5.0 REFERENCES

Taylor Engineering Inc. 2010. *Evaluation of Dredged Material Behavior at the Port of Miami Ocean Dredged Material Disposal Site*, for ANAMAR Environmental Consulting, Inc. March, 2010. Jacksonville, FL.

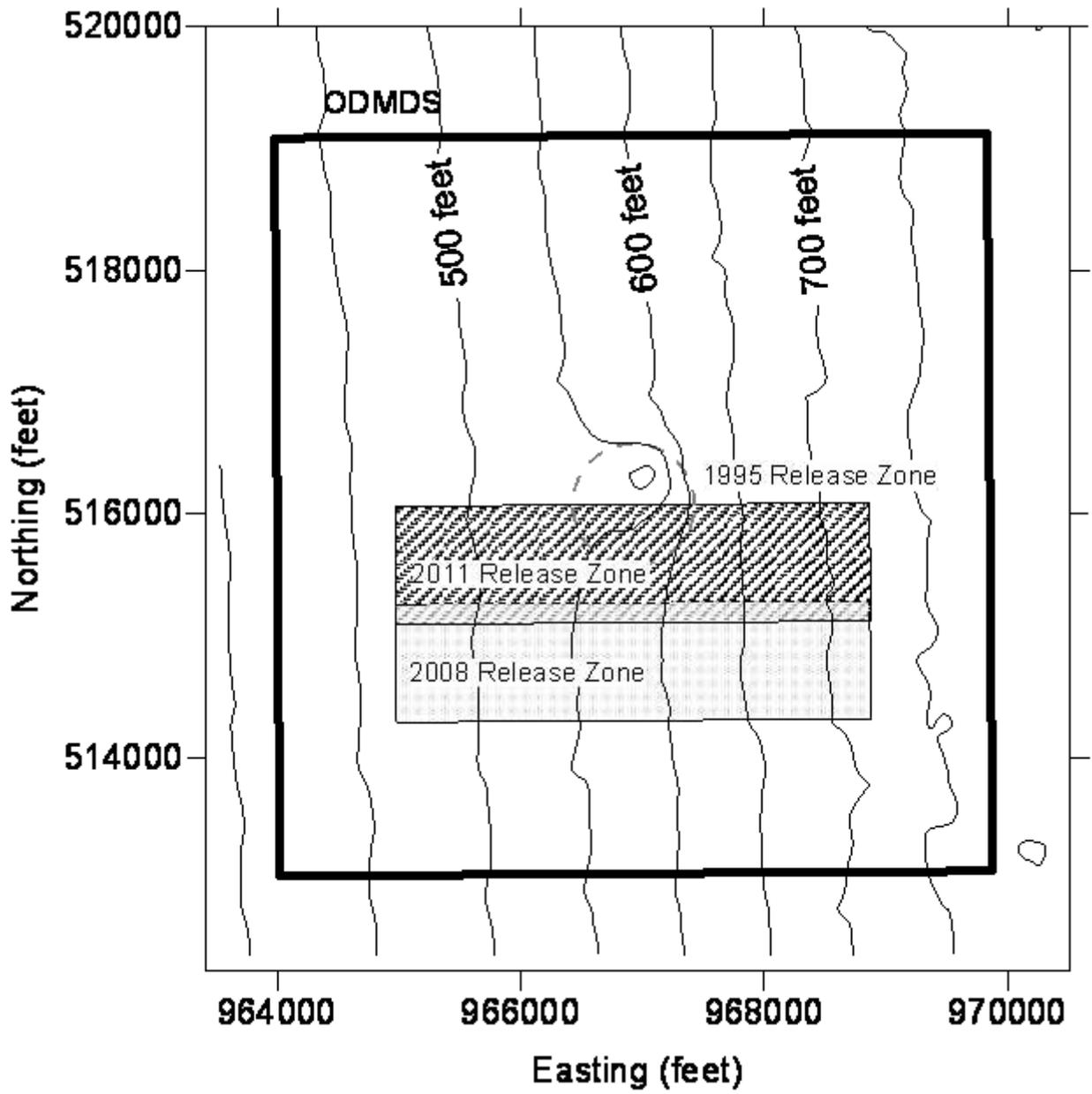


Figure 1: Miami ODMDS Disposal Release Zones (coordinates are in Florida State Plan NAD83 feet)

APPENDIX B

TEMPLATE GENERIC SPECIAL CONDITIONS FOR MPRSA SECTION 103 PERMITS

This page intentionally left blank

**GENERIC SPECIAL CONDITIONS
FOR MPRSA SECTION 103 PERMITS**

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 Miami ODMDS, proper disposal of dredged material at the disposal area within the Miami ODMDS, and transportation of the hopper dredge or disposal barge or scow back to the dredging site.

B. The Miami ODMDS is defined as the rectangle with center coordinates of 25°45.00'N latitude and 80°03.37'W longitude (NAD 27) or state plane coordinates 516,078 N and 966,926 E (NAD83). The site coordinates are as follows:

| | Geographic (NAD27) | | Geographic (NAD83) | | State Plane (FL East 0901 Ft NAD83) | |
|-----------|--------------------|------------|--------------------|------------|---|-----------|
| Center | 25°45.00'N | 80°03.37'W | 25°45.02'N | 80°03.35'W | 516,078 N | 966,926 E |
| NW Corner | 25°45.50'N | 80°03.90'W | 25°45.52'N | 80°03.89'W | 519,086 N | 963,978 E |
| NE Corner | 25°45.50'N | 80°02.83'W | 25°45.52'N | 80°02.82'W | 519,128 N | 969,829 E |
| SW Corner | 25°44.50'N | 80°03.90'W | 25°44.52'N | 80°03.89'W | 513,028 N | 964,021 E |
| SE Corner | 25°44.50'N | 80°02.83'W | 25°44.52'N | 80°02.82'W | 513,070 N | 969,874 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 Miami ODMDS.

D. The permittee shall use an electronic positioning system to navigate to and from the Miami 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 Miami 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 Miami 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 Miami 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 Miami 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 disposal summary 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 Miami 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 (FL East 0901 Ft NAD83) | |
|-----------|--------------------|-------------|--|-----------|
| Center | 25°44.943'N | 80°03.354'W | 515,593 N | 966,921 E |
| NW Corner | 25°45.023'N | 80°03.709'W | 516,064 N | 964,969 E |
| NE Corner | 25°45.023'N | 80°02.999'W | 516,092 N | 968,865 E |
| SW Corner | 25°44.863'N | 80°03.709'W | 515,095 N | 964,976 E |
| SE Corner | 25°44.863'N | 80°02.999'W | 515,123 N | 968,872 E |

I. During transit to and from the Miami ODMDS, the hopper dredge or disposal barge or scow shall remain within the navigation channel until east of the buoy G"1". The hopper dredge or disposal barge or scow shall not transit the Particularly Sensitive Sea Area during transit to or from the ODMDS.

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 Miami 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 I.

L. The permittee shall conduct a bathymetric survey of the Miami ODMDS within 3 months prior to project disposal and within 60 days following project completion.

1. The number and length of the survey transects shall be sufficient to encompass the Miami ODMDS and a 500 foot wide area around the site. The transects shall be spaced at 500-foot intervals or less.
2. Vertical accuracy of the survey shall be ± 0.5 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 shall be mean lower low water (m.l.l.w) and the horizontal datum shall use Florida State Plane or latitude and longitude coordinates (North American Datum 1983). State Plane coordinates shall be reported to the nearest 0.10 foot and latitude and longitude coordinates shall be reported as decimal degrees to 6 decimal points.

L. Enclosed is the Regional Biological Opinion (RBO) dated [INSERT DATE], for swimming sea turtles, whales, and sturgeon. The RBO contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with “incidental take” that is also specified in the RBO. Your authorization under the Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with the incidental take of the attached RBO, which terms and conditions are incorporated by reference in the permit. Failure to comply with the terms and conditions associated with the incidental take of the RBO, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. However, depending on the affected species NMFS is the appropriate authority to determine compliance with the terms and conditions of its RBO and with the Endangered Species Act (ESA). For further clarification on this point, you should contact the appropriate agency. Should they determine that the conditions of the RBO have been violated; normally they will enforce the violation of the ESA, or refer the matter to the Department of Justice.

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 Oceans 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 daily 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).

APPENDIX C

TYPICAL CONTRACT LANGUAGE FOR IMPEMENTING THE MIAMI ODMDS SMMP REQUIREMENTS

This page intentionally left blank

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 |
|-----------------------------|-----------------------------------|-----------------------------------|
| Miami ODMDS | | |
| [INSERT DISPOSAL AREA 2] | [XX miles] | [XX miles] |

[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 Miami 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 Miami 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 (FL East 0901 Ft NAD83) | |
|-----------|--------------------|-------------|--|-----------|
| | Center | 25°44.943'N | 80°03.354'W | 515,593 N |
| NW Corner | 25°45.023'N | 80°03.709'W | 516,064 N | 964,969 E |
| NE Corner | 25°45.023'N | 80°02.999'W | 516,092 N | 968,865 E |
| SW Corner | 25°44.863'N | 80°03.709'W | 515,095 N | 964,976 E |
| SE Corner | 25°44.863'N | 80°02.999'W | 515,123 N | 968,872 E |

During transit to and from the Miami ODMDS, the hopper dredge or disposal barge or scow shall remain within the navigation channel until east of the buoy G"1". The hopper dredge or disposal

barge or scow shall not transit the Particularly Sensitive Sea Area during transit to or from the ODMDS.

3.3.4 Logs

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

- j. Load Number
- k. Disposal Vessel or Scow Name
- l. Tow Vessel Name (if scow used)
- m. Captain of Disposal or Tow Vessel
- n. Estimated volume of Load
- o. Description of Material Disposed
- p. Source of Dredged Material
- q. 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 or 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 DQM 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.
- c. Plot Reporting (2 types):
 - a. 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.
 - b. 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.
 - c. 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.
- d. ETS data and log data required by Section 3.3.4 shall be provided to EPA Region 4 on a daily 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.

[FOR DQM PROJECTS]

See: <http://dqm.usace.army.mil/Specifications/Index.aspx>

For scows, the monitoring profile, TDS profile or Ullage profile shall be used.

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