

Permit Application Process for the Use of Lake Charles Harbor & Terminal District Dredged Material Areas

Parties wishing to use Lake Charles Harbor & Terminal District (“District”) property must submit an application with sufficient detail to allow the District to use proper judgment in evaluating the application. Permission to use District property for appropriate purposes is granted by permit.

District allows private use of its Dredged Material Areas (“DMA”) for the disposal of dredged material. An Application Form as provided herein can be used to apply for a DMA Agreement (“DMAA”) if accompanied by a United States Army Corps of Engineers (“USACE”) permit number and drawings. The applicant must provide and clearly identify:

- Permit Application
- USACE Permit
- Project description
- Estimated cubic yards of materials to be dredged
- Dredging schedule
- DMA requested
- Analyze the sediment using District environmental testing procedures and furnish analytical results in the prescribed format
- Proof of minimum general liability insurance of Five Million dollars (\$5,000,000).
- Application fee
- Disposal fees
- Easement of Servitude for the Purpose of Depositing Dredged Materials

Performing work on District property or submerged lands owned by the District without an executed permit is a serious offense. In the event of unauthorized work on District property, such unauthorized installations are subject to removal (at violator’s expense) and violators may be subject to penalties.

District will process your application concurrently with your USACE permit application if appropriate.

Form Instructions

- 1. This is an online fillable form.***
- 2. This form is not editable except for the shaded fields to type your information.***
- 3. To begin, click in a shaded area to type.***
- 4. You can tab to the next shaded field or click in the shaded field with your mouse.***
- 5. Please note, when printing, the shading will not be visible.***
- 6. Some fields are not shaded. These are for signing and dating after printing.***
- 7. If you are submitting more than ten (10) samples, please print additional pages and write in the information. Also, renumber the sample numbers in the header, beginning with Sample #11.***
- 8. Signed portions of the application may be scanned and submitted to the Port via email to chayden@portlc.com or mailed to the Director of Navigation, Port of Lake Charles, 1611 West Sallier Street, Lake Charles, LA 70601.***

District Use Only:

Date Filed: _____

Application No: _____

**Application to the
Lake Charles Harbor & Terminal District
to Deposit Dredged Material**

To: Lake Charles Harbor & Terminal District
P. O. Box 3753
Lake Charles, Louisiana 70602
Attn: Executive Director

We hereby apply to the Lake Charles Harbor & Terminal District ("District") to deposit dredged materials on the property of the District or within approved soil disposal areas under the control of the District. We certify that the information contained herein is true and correct and we accept all of the terms and conditions set forth herein and in the attached "Easement of Servitude for Purpose of Depositing Dredged Material".

I. APPLICANT INFORMATION:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Office Phone: _____ Mobile: _____

Contact Person-in-Charge of Dredging Project: _____

Type of Entity: _____

Principle Place of Business: _____

Place of Incorporation: _____

II. DREDGING INFORMATION:

- A. Describe area to be dredged and attach a plan view map with elevations/soundings designating the area to be dredged at a scale relative to the area. The maps and description shall include the following;
 - a. All coordinates must be in NAD 83 State Plane Louisiana South 1702 (feet)
 - b. Elevations must be referenced to Mean Low Gulf (MLG)
 - c. If GPS was used to obtain coordinates, include the accuracy level of the collection device and whether the data was differentially corrected.
 - d. Note the date and time of the survey.
 - e. Note the surveyors name and contact information.
 - f. Drawings should be 8 1/2" x 11", 8 1/2" x 14", or 11" x 17" folded to fit into an 8 1/2" x 11" file folder.
 - g. Electronic data formats (in order of preference)
 - i. ESRI shapefile format
 - ii. AutoCAD 2002 or later DWG
 - iii. AutoCAD 2002 or later DXF
 - iv. Hardcopy

- B. Estimated cubic yards to be dredged: _____
- B. Attach approved Corps of Engineers' Permit
- C. Attach certified copy of declarations page evidencing applicant has procured or has in effect a general liability insurance policy in the minimum combined single limit amount of Five Million dollars (\$5,000,000) for the death of or personal injury to one or more persons and for property damage for each occurrence in connection with the use of District property including coverage for the disposal of hazardous substances.
- D. Attach **before** dredging cross-sections of channel area to be dredged which are transverse to the dredging limits and not more than 100 feet apart with soundings of no greater than 10 feet apart along the transverse sections commencing at the landward edge of the area to be dredged.

III. DISPOSAL INFORMATION:

- A. Describe disposal area desired to be used and attach a vicinity map:

- B. Applicant agrees to furnish the District within 15 days of the completion of the dredging project cross-sections of the channel bottom after dredging at the same location and frequency as

outlined in Section II, Dredging Information, Item II. D (above) and the total amount of cubic yards dredged.

- C. Applicant agrees to furnish the District within 15 days of the completion of dredging all items required under the special conditions (if imposed) of the USACE permit as well as all daily water quality testing logs.
- D. Applicant agrees to furnish the District within 15 days of the completion of dredging the Contractors daily quality control reports that note the condition of the site prior to, during, and after completion of dredging; water quality testing; approximate locations of the dredge; estimated type and quantity of materials dredged; approximate locations of dredge pipe; weather; and disposal area activities.
- E. Applicant agrees to monitor the placement area a minimum of 60 days after dredging to allow for proper dewatering of the site. Positive drainage to the spillbox/s must be provided prior to completion of the project. Minor ditching may be required as coordinated with the District.

IV. PRELIMINARY TESTING:

Entities proposing to place dredged material into District designated Dredged Material Area (DMA) (including upland confined disposal facilities and open-water areas within or adjacent to District navigation channels) must perform chemical and physical tests as described below on sediments within the proposed dredging area, in addition to other Federal and state permitting requirements. Results of these tests must be submitted to the District for review and approval prior to use of District disposal area. These test results will be used by District to verify that permit conditions for continued operation of the disposal areas are being met.

District will review the results of chemical and physical tests to determine if the proposed discharges are protective of human health and the environment. Additional biological tests and environmental modeling may be required if contaminants are present in project sediments above certain thresholds. The results of sediment testing and environmental modeling (if deemed necessary) will be evaluated to determine if a non-District entity may place dredged material into a District designated DMA.

All sampling and sediment analyses must be conducted on dredging area samples in accordance with protocols described in *Evaluation of dredged material proposed for discharge in waters of the U.S. – Testing manual* (EPA/USACE, 1998), hereafter referred to as the “Inland Testing Manual” (ITM), and according to appropriate existing standard operating procedures, unless otherwise indicated. Any proposed variations from the ITM or ASTM methodologies must be approved by District prior to commencing tests. Target detection limits set for each of the contaminants of concern are identified in Attachment D.

One sediment core should be taken for approximately every 500 linear feet over the dredge prism and represent a maximum sediment volume of 5,000 cubic yards. Sampling Protocols and Reporting shall follow the guidance and requirements of Attachment B and C.

Upon the completion of sediment sampling activities and analysis, the interested party must submit a Sampling Analysis Report with location map (including GIS coordinates for sample locations) and analytical data to the District for approval/acceptance into a confined disposal facility. A Sampling Analysis Plan should adhere to the format shown in Attachment C and address each key point in full. The sampling, analysis, and reporting shall be conducted by a third party environmental professional. The sampling and analysis report shall be signed by the environmental professional. If the entity wishes to perform these requirements in-house, they may request to do so and provide the qualifications of the person/s performing the work for approval by the District.

V. FEES:

- A. Applicant shall attach an application fee of \$350.00 for each application submitted which fee shall not be refundable for any reason.
- B. Further, upon approval of the application, the applicant shall pay to the District a sum of money equal to the estimated number of cubic yards set forth in the application as multiplied times \$2.00 effective January 1, 1996 increasing by \$0.25 cumulatively on January 1st of each year thereafter.
- C. After completion of the dredging, applicant shall pay to the District within 30 days from being invoiced by the District at the above rates for any amount of material actually dredged and deposited over and above the amount estimated to be dredged.

VI. GENERAL PROVISIONS:

- A. Applicant acknowledges and agrees that the District retains the sole exclusive right to approve or deny this application in its sole discretion and may approve this application subject to any special conditions it deems appropriate.
- B. Applicant acknowledges it has read in full this completed application together with all attachments.
- C. Applicant shall execute the attached agreement fully completed upon submission of this application.

VII. SPECIAL CONDITIONS:

We hereby apply to the Lake Charles Harbor & Terminal District to deposit dredged materials on the property of the District or within approved soil disposal areas under the control of the District. We certify that the information contained herein is true and correct and we accept all of the terms and conditions set forth herein and in the attached "Easement of Servitude for Purpose of Depositing Dredged Material".

Applicant: _____

By: _____
(position/title)

Date: _____

Lake Charles Harbor & Terminal District

Approved by: _____ Date: _____
Executive Director

Attachment A

**Easement of Servitude for the
Purpose of Depositing Dredged Material**

**Easement of Servitude for the
Purpose of Depositing Dredged Material**

BE IT KNOWN that on the dates hereinafter set forth, before the undersigned Notaries Public, duly commissioned and qualified, in and for their respective state, parish and/or county as set forth, and in the presence of the subscribing lawful witnesses, personally came and appeared:

LAKE CHARLES HARBOR & TERMINAL District, a political subdivision of the State of Louisiana, herein represented by its duly authorized Executive Director (hereinafter sometimes referred to as "Vendor"); and

_____, a _____
corporation authorized to do and doing business in the State of Louisiana, herein represented by its duly authorized representative, (hereinafter sometimes referred to as "Vendee");

Vendor does declare and acknowledge, in the presence of the undersigned Notary and Witnesses, that it has bargained, sold, transferred, conveyed, set over and delivered, and by this act, does sell, convey, transfer, set over and deliver, with all legal warranties and with full subrogation in and to all the rights and actions of warranty which said Vendor has or may have against all preceding owners and vendors, unto Vendee, its successors, or assigns, including its officers, agents, servants and contractors, the full and complete right, power, privilege easement, or servitude in, on and to the lands described below, to enter upon and construct necessary diking for the retention of excavated materials and ditches for the removal of effluent, using material from within the evacuated material area and deposit evacuated material or earth and water carrying same within the dike area as a result of maintaining the docking areas belonging to, _____

(Vendee), which face the Calcasieu River, Calcasieu Parish, Louisiana, all as more specifically set forth in the attached Permit Request submitted to the U. S. Corps of Engineers, a copy of which is attached hereto and made a part hereof as Exhibit "A", with full right-of-ingress and egress, including the right-of-laying spoil disposal pipelines on or across said tract of land or any contiguous land of Vendor as may be needed for the improvements and work outlined in Exhibit "A"; the land in, or, and to which the rights, easements or servitudes previously described are hereby conveyed, being those areas or that property described as set forth on Exhibit "A", a copy of which is attached hereto and made a part thereof.

This conveyance of the rights, privileges, easements and servitudes previously described is for a period not to exceed 6 months from the date of this agreement and the amount of evacuated materials of earth which Vendee may deposit on the property described herein shall be limited to approximately _____ cubic yards.

This conveyance of the rights, privileges, easements and servitudes previously described is made subject to all existing easements for public roads and highways, canals, public utilities, railroads, and/or pipelines traversing said lands, or any other easements for any other purpose, and subject to any valid outstanding mineral rights of record. Further, Vendor makes no warranties as to title or as to the fitness of the easement area for receipt of the spoils and, further, Vendee waives any and all such warranties.

Vendee hereby releases and agrees to hold harmless the Lake Charles Harbor & Terminal District, Vendor, its successors, or assigns, including its officers, agents, servants and contractors from liability, for any and all damages, including the payment of necessary and reasonable attorney fees of the Vendor, done or caused to be done to the said premises or to any person or property of another arising out of or by reason of the construction, improvement or use by Vendee of the area set forth above.

Specifically, Vendee agrees to hold harmless the Lake Charles Harbor & Terminal District, Vendor, its successors, or assigns including its officers, agents, servants and contractors from any damages, costs or expenses of any nature, including attorney fees, which may result from the placing by _____, its agents, or contractor, onto the property of the Vendor, any materials containing amounts of materials considered hazardous by the United States Environmental Protection Agency, or the Louisiana Department of Environmental Quality and, further, immediately upon discovery of such materials placed by Vendee and notification by Vendor to Vendee, Vendee shall immediately remove such material from the property of the Lake Charles Harbor & Terminal District.

This conveyance is made and this agreement is entered into for and in consideration of the sum of approximately _____ cash, which is based upon the estimated number of cubic yards to be dredged and deposited, and other good and valuable consideration. Vendee agrees to pay in full the actual amount due (which may vary from the above stated amount) in ready and current money to the said Vendor, upon receipt of final earthwork calculations and within 15 days written notice of such amount by Vendor.

Further, Vendee agrees to cause its dredging contractor to improve the existing levees so that the differential between the height of the levees and the height of the existing spoil area after the above referred to spoils are deposited thereon remains approximately the same distance as existing before the depositing of said spoils. Further, during the dredging and for a period of 30 days subsequent to the completion of the dredging, Vendee shall maintain and repair all levees, including any weirs, within the spoil disposal area.

Vendee shall provide Vendor a certified elevation sounding survey of the area to be dredged before and after dredging so as to provide Vendor with the necessary information from which Vendor's engineers may perform earthwork calculations to determine the actual amount of material dredged and deposited on Vendor's property.

All such rights and privileges in and to all the previously described land, except those rights conveyed herein, are hereby retained and all such rights and privileges as may be used and enjoyed without interfering with or abridging the privileges, rights, easements or servitudes herein conveyed are expressly reserved to Vendor.

Any rights, privileges, easements and servitudes granted herein are subject to all directives, rules, regulations and laws of the State of Louisiana, or any political subdivision thereof or of the United States of America or any agency thereof, specifically, the Environmental Protection Agency and the United States Corps of Engineers, and it shall be the obligation of _____

to comply with all such directives, rules, regulations and laws; the terms of this agreement being specifically conditioned on said compliance.

Vendee shall be responsible for supplying all equipment, labor and materials to conduct its dredging and disposal operations.

THUS DONE AND SIGNED on behalf of the Lake Charles Harbor & Terminal District by and through its Executive Director at Lake Charles, Louisiana, on this _____ day of _____ before the undersigned competent witnesses and me, Notary, after due reading of the whole.

Witnesses:

Lake Charles Harbor & Terminal District

By: _____
Executive Director

Date: _____

Before Me: _____
Notary

THUS DONE AND SIGNED on behalf of _____ by and through its Executive Director at Lake Charles, Louisiana, on this _____ day of _____ before the undersigned competent witnesses and me, Notary, after due reading of the whole.

Witnesses:

Applicant:

By: _____

Date: _____

Before Me: _____
Notary

EXHIBIT “A”

(Attach map)

Attachment B

**Authorization for Field Study and Survey
Calcasieu Parish, Louisiana**

Date: _____

Authorization for Field Study and Survey
Calcasieu Parish, Louisiana
As shown on the attached Exhibit "B" map

The Lake Charles Harbor & Terminal District (hereinafter referred to as "Grantor") understands that _____ (hereinafter referred to as "COMPANY") is requesting consent to access the above- referenced property in order to conduct certain studies and surveys of said property for possible future use.

To complete the studies, COMPANY has requested the consent of the Lake Charles Harbor & Terminal District to enter upon the above-referenced property for the purposes of conducting various studies and surveys which may include, but are not limited to, soil analysis surveys, engineering design surveys, archaeological surveys, geotech samplings, legal surveys, and environmental assessment surveys, (hereinafter referred to as "studies and surveys"). At no cost to Grantor, COMPANY shall furnish copies of any and all reports or writings of any sort reflecting the results of the studies and surveys.

Based upon the terms and conditions of this letter agreement, Grantor hereby grants permission to COMPANY, through its contractors, agents, and employees, to enter upon the above-referenced property to conduct studies and surveys in accordance with this letter agreement.

The permission granted in this letter agreement shall terminate six (6) months after the date of signing by the Executive Director.

This permission is issued to and for the exclusive use of COMPANY and is otherwise not assignable or transferable in whole or in part.

This permission is limited to light vehicles and foot traffic, and includes the right to cut brush or only trees of no merchantable value for sight lines.

COMPANY shall fully compensate Grantor for any and all damages resulting from the studies and surveys. If the surface of the above-referenced property is disturbed, COMPANY shall restore the surface to its original contour and soil condition.

Except to the extent that damages are caused by the negligence, gross misconduct, or intentional acts of Grantor, COMPANY shall hold harmless, defend, and indemnify Grantor from any and all liability, losses and expenses incurred by Grantor arising from the studies and surveys (the "Indemnified Claims"). As to the Indemnified Claims, COMPANY shall pay and discharge any costs and expenses or damages that may be sustained by Grantor, and/or which may accrue by virtue of claims of third parties resulting during and after the studies and surveys, and, as to the Indemnified Claims, COMPANY shall protect and hold Grantor harmless from the same. COMPANY shall reimburse fully Grantor for all costs and expenses of every kind and character paid or incurred by Grantor in the defense of any and all suits and claims on account of all such losses or damages arising from the Indemnified Claims.

As to the Indemnified Claims, neither Grantor nor its respective managers, employees, or agents shall be liable to COMPANY, its employees, agents, or contractors for any loss, injury or damage whatsoever suffered or incurred by COMPANY or its employees, agents, or contractors while on the above-referenced property or any other of Grantor's property.

No representation is made by Grantor with respect to conditions existing on the above-referenced property. COMPANY accepts the above-referenced property in the condition it is now in. COMPANY hereby releases Grantor and its respective shareholders, employees, and agents from, for, and against any liability, injury, death, loss, or damage caused by or resulting from the condition of the above-referenced property.

Prior to commencing any operations under this letter agreement, COMPANY shall deliver a certificate of insurance naming Grantor as an additional named insured covering workmen's compensation, comprehensive general liability, including products, completed operation and contractual liability, and comprehensive automobile liability with not less than \$2,000,000 combined single limit or equivalent coverage. This coverage shall be maintained throughout the Term, and this coverage shall not be materially changed or canceled without at least 60 days' prior written notice to Grantor.

Grantor reserves the right to fully use and enjoy the above-referenced property. Grantor retains the right of the ingress and egress at all times before, during and after COMPANY's studies and surveys. Grantor shall not unreasonably interfere with others utilizing the above-referenced property, including tenants or grantees of Grantor.

COMPANY will not hold Grantor liable for work slowdowns or stoppages caused by Grantor. Neither COMPANY nor COMPANY's contractors, in exercise of rights herein granted, shall cut off or prevent normal ingress and egress by Grantor or others claiming under Grantor to otherwise use the above-

referenced property for its customary purposes.

Neither COMPANY nor its agents, employees, or contractor personnel shall bring any firearms or fishing equipment onto the above-referenced property or any other property of Grantor, nor will they do any fishing or hunting of ducks, geese, deer, or other game thereon.

COMPANY accepts responsibility for, and guarantees that, all involved contractors, subcontractors, managers, inspectors, and agents are aware of the details of this letter agreement and are bound to abide by all its terms.

COMPANY shall notify Grantor in writing at least three (3) business days prior to conducting the studies and surveys. Grantor will advise COMPANY of appropriate route or ingress and egress and of any special conditions relating thereto. If for any reason, other than expressly provided herein, studies and surveys should cease for more than three (3) working days, COMPANY shall send Grantor a written notice to resume the studies and surveys. Existing canals and waterways may be used at COMPANY's own risk. COMPANY shall provide Grantor a local telephone number and address during the studies and surveys whereby Grantor may contact COMPANY on any problems.

Grantor designates Channing Hayden (337-493-3620), as its representative to receive notice of COMPANY's intention to enter the above-referenced property. COMPANY shall cooperate with Grantor, in locating the appropriate route across the above-referenced property.

By: _____
William J. Rase, III
Executive Director
Lake Charles Harbor & Terminal District

Date: _____

Agreed to this _____ day of _____

Company: _____

By: _____

Name: _____

Title: _____

EXHIBIT “B”

(Attach map)

Attachment C

Sediment Sampling Requirements

Sediment Sampling Requirements

I. General

Entities proposing to place dredged material into District designated Dredged Material Area (DMA) – including upland confined disposal facilities and open-water areas within or adjacent to District navigation channels – must perform chemical and physical tests as described below on sediments within the proposed dredging area, in addition to other Federal and state permitting requirements. Results of these tests must be submitted to the District for review and approval prior to use of District disposal area. These test results will be used by District to verify that permit conditions for continued operation of the disposal areas are being met.

District will review the results of chemical and physical tests to determine if the proposed discharges are protective of human health and the environment. Additional biological tests and environmental modeling may be required if contaminants are present in project sediments above certain thresholds. The results of sediment testing and environmental modeling (if deemed necessary) will be evaluated to determine if a no-District entity may place dredged material into a District designated DMA.

All sampling and sediment analyses must be conducted on dredging area samples in accordance with protocols described in *Evaluation of dredged material proposed for discharge in waters of the U.S. – Testing manual* (EPA/USACE, 1998), hereafter referred to as the “Inland Testing Manual” (ITM), and according to appropriate existing standard operating procedures, unless otherwise indicated. Any proposed variations from the ITM or ASTM methodologies must be approved by District prior to commencing tests. Target detection limits set for each of the contaminants of concern are identified in Attachment D.

Upon the completion of sediment sampling activities and analysis, the interested party must submit a Sampling Analysis Plan Report with location map (including GIS coordinates for sample locations) and analytical data to the District for approval/acceptance into a confined disposal facility.

A Sampling Analysis Plan should adhere to the format shown in Attachment C of the Application to the Lake Charles Harbor and Terminal District to Deposit Dredged Materials and address each key point in full.

II. Sampling Approach

One sediment core should be taken for approximately every 500 linear feet over the dredge prism and represent a maximum sediment volume of 5,000 cubic yards.

Outfalls should have sediment samples obtained as representative of that area.

Core samples should be at least as great as the proposed dredge depth. Sediment samples can be homogenized, for example a four-foot core can result in one sediment sample and a nine-foot core would become two sediment samples.

III. Sediment Collection

a. Sampling Volume

Sample volumes should be sufficient to perform all necessary chemical and physical analyses. Consult Table 8-2 in the ITM for recommended sample volumes and preservatives.

A dated Chain of Custody document shall be furnished to record the samples as well as analyses required. Guidance on appropriate Chain of Custody protocols can be found in reference guidance documents (EPA, 1986; EPA/USACE, 1995; EPA/USACE, 1998; Plumb, 1981).

b. Samples Collected for Chemical Analysis

Each sediment sample should be collected with a Teflon coated or stainless steel surface grab sampler capable of penetrating to a depth of at least 1 foot. Prior to collection, the grab sampler should be rinsed with deionized water, then ambient water. Each sample collected should be deposited into a clean polyethylene-lined or stainless steel pan. Note that dredging projects that require deepening of an area beyond depths normally associated with the removal of shoal material may require collection devices capable of retrieving a sediment core representative of the entire dredging cut.

Using a clean Teflon-coated or stainless steel spoon, each sample identified for chemical analysis should be mixed thoroughly, then placed into pre-cleaned glass containers with Teflon-lined lids. The containers are to be filled completely to avoid head space. The lids should then be tightly secured, and the containers should be placed into an ice chest with sufficient cushioning material to prevent breakage during shipment. Containers should be labeled appropriately to identify the collection site and analysis required, and should be recorded on the Chain of Custody document.

Samples shall be iced immediately after collection and must be stored at 2°C to 4°C, never frozen, within 24 hours after collection.

c. Samples Collected for Physical Analysis

Physical analysis shall be conducted for each sample location. Consult Table 8-2 in the ITM for recommended sample volumes and preservation.

d. Field Documentation

A field log shall be kept that documents the sampling event and shall include the following information. Horizontal and vertical sample positions as noted above; weather conditions; date and time; all equipment used; personnel in attendance including the sampler and the processor; characterization of the materials sampled including odor, color and texture; photo documentation of each sample; and other pertinent information.

IV. Sediment Analysis

a. General

All sediment analyses must be conducted on dredging area samples in accordance with protocols described in the ITM. Any proposed variations from the ITM or ASTM methodologies must be noted in the response to this SOW and approved by POLC prior to commencing tests. All analyses should be performed within the time frames specified in Table 8-2 of the ITM. A dated Chain of Custody document shall be furnished to record the samples as well as analyses required. For guidance on appropriate Chain of Custody protocols, refer to the ITM.

b. Chemical Analysis of Sediments

Target Detection Limits (TDLs) set by the POLC for each contaminant of concern (COC) are provided in Attachment D. Analytical data should be reported to a level below these TDLs. Analytical chemistry Laboratory Reporting Limits (LRL) or equivalent limits of quantitation should fall below project TDLs. An LRL is defined as the minimum level at which a laboratory will report analytical chemistry data with confidence in the quantitative accuracy of that data. LRLs are threshold values below which the laboratory reports a given result as non-detected (i.e., U-flagged) and are presented as the "less than concentration value" (e.g., <0.01 mg/kg). LRLs should be no lower than the low calibration standard for a given method. The POLC should be notified if your laboratory cannot meet TDLs specified in Table 3, and a description of why the TDLs cannot be met or new LRLs proposed by the laboratory should be provided prior to continuing the analysis. The POLC will not accept a report with data that fails to meet TDLs without sufficient justification.

The POLC recommends storing portions of any remaining sediment samples until we have had the opportunity to review the sediment chemistry results – samples should be stored at 2°C to 4°C. Temporary storage may reduce the likelihood that additional sediment samples would need to be collected if additional analyses are deemed necessary to correct deficiencies in the dataset. Sediment chemistry results should be presented in BOTH dry and wet weight.

c. Physical Analysis of Sediments

Grain size analysis of composite sediment samples should be performed with standard procedures. At a minimum, sieve analysis should utilize U.S. Standard Sieve Numbers 4, 10, 20, 40, 50, 70, 100, 140, and 200.

V. Data Submittals

a. Sampling Analysis Report

Upon the completion of sediment sampling activities and analysis, the interested party must submit a Sampling Analysis Report with location map (including GIS coordinates for sample locations) and analytical data to the District for approval/acceptance into a confined disposal facility.

A Sampling Analysis Plan should adhere to the format shown in Attachment C and address each key point in full.

Attachment D
Sampling Analysis Plan and Report Outline

Sampling Analysis Plan and Report Outline

Upon the completion of sediment sampling activities and analysis, the contracted party must submit a Sampling Analysis Report (SAR) with the permit application to the POLC for approval/acceptance into a confined disposal facility. The SAR should adhere to the following format and address each key point in full.

A. Executive Summary

1. Site Description and Background
2. Results – Brief description of the results, example:
 - a) Quick summary of sample locations, example: 10 samples were collected every 500 feet within the dredge template from a depth of 12 feet to the template depth of 35 feet.
 - b) Quick summary of sample characteristics, example: Sediment consisted of primarily dark gray silty clay with a sulfur odor.
 - c) Summarize what metals were above laboratory detection limits
 - d) List any VOCs detected above laboratory detection limits
 - e) List any SVOCs detected above laboratory detection limits
 - f) List any pesticide constituents detected above laboratory detection limits
 - g) List any PCBs detected above laboratory detection limits
 - h) Mean grain size of all six samples ranged from X.XX to X.XX mm
 - i) Total organic carbon ranged from X.XX to X.XX mg/kg
 - j) Overall Summary

B. Introduction

1. Purpose of sediment sampling and analysis
2. Background
3. Scope of Services
4. Location – include site location map
5. Personnel
6. Disclaimers and Limitations
7. User Reliance

C. Field Investigation

1. Sample Locations – include sample location map
2. Methodology – Describe all equipment and sampling procedures
3. Field Data – Include a table with a summary of sampling observations. Refer to Table 1 for an example.
4. Sample Handling
5. Waste Disposal
6. Site conditions

Table 1: Sampling Field Observation Example Table

Sample	Type	Color	Other Observations
#	Silty clay	Dark Grey	No odor
#	Silty clay with some sand	Dark Grey/Tan Streaking	Sulfur odor
#	Silty clay	Dark Grey	No odor
#	Silty clay	Dark Grey	Sulfur odor

D. Analytical Results

1. Sample Methods – Description of what protocols were used for sediment analysis. Refer to Table 2 as an example.

Table 2: Summary of Laboratory Methods Example Table

Constituent/s	EPA Method
Pesticides	
PCBs	
TCLP Mercury	
TCLP Metals	
Total Mercury	
Total Metals	
Semi Volatile Organic Carbons (SVOCs)	
Volatile Organic Carbons (VOCs)	
Total Organic Carbon (TOC)	
Grain Size	
Volatile Suspended Solids	

2. Results – Display a Summary Table, as shown below, of all the analytical results. If any previous analytical data is available, review and include for a comparison. All COCs in Attachment D must be analyzed and shown.

Table 3: Summary Table and Required TDs

Chemical	Target Detection Limits (TDs) for Sediment	Target Detection Limits (TDs) for Water	Sample # 1	Sample # 2
Metals				
Aluminum				
Antimony				
Arsenic				
Barium				

E. Findings

1. Findings of the Sediment Analysis – Quick summary of results, similar to that displayed in the Executive Summary.
2. Findings of Historical Data Review – Summary of review and comparison of historical analytical data to determine if the sample results are comparable with previous events as well as to determine if there is a trend in sediment quality.

F. Signatures of Environmental Professionals – A statement to the effect of “We certify that the information contained herein is true and correct and the protocols and requirements outlined in the ITM have been followed shall conclude the report with a signature of the environmental professional. The environmental professional shall be a third party.

G. Appendices

1. Sediment Chemistry Results – Laboratory reports should be provided for each sample in the Appendix of the Sample Analysis Report. The laboratory report should include sample

identification, analytical method used for each analyte class, results for each contaminant, method detection limits for each contaminant, unit of measure, data qualifiers (such as “U” for non-detects or “J” for estimates below a given Method Detection Limit), and available quality control or calibration reports for the instrument. The laboratory should be identified on the report, with signature by the laboratory manager.

2. Sediment Grain Size Results – The results of the grain size analysis should be provided for each composite sample in the Appendix of the SAR.
3. Chain of Custody Document – The Chain of Custody document with sample identification, relevant dates, and initials/ signature of personnel acknowledging collection and receipt of the samples will be included in the Appendix of the SAR.
4. Photo Documentation – Photo documentation of the sampling event, equipment, and each individual sample with sample identification shall be included in this Appendix.
5. Field Notes – All field notes shall be included in this Appendix.

Attachment E
Contaminants of Concern and Target Detection Limits (TDLs)
for Analysis of Sediment, and Water

Contaminants of Concern and Target Detection Limits (TDLs) for Analysis of Sediment, and Water

Chemical	Target Detection Limits (TDLs) for Sediment	TDLs Marine Water/Elutriate	Sample # 1	Sample # 2	Sample # 3	Sample # 4	Sample # 5	Sample # 6	Sample # 7	Sample # 8	Sample # 9	Sample # 10
Phenols												
Phenol	100	10										
2-Methylphenol	50	10										
2,4-Dimethylphenol	20	10										
4-Methylphenol	100	10										
Pentachlorophenol	100	50										
Conventional/Ancillary Parameters	mg/kg	mg/l										
Ammonia	0.1	0.03										
Cyanides	2	5										
Total Organic Carbon	0.10%	0.10%										
Total petroleum hydrocarbons	5	0.1										
Total phenols	1	0.05										
Total Sulfides	0.1	0.1										
Grain Size (sand, silt, clay)	1%	---										
Total Solids/Dry Weight	0.10%	---										
Total Volatile Solids	0.1	---										
Specific gravity	0.01 mg/L	---										
pH	0.1 pH units	---										

NOTES

^aThe primary source of these TDLs was EPA 823-B-95-001, QA/QC Guidance for Sampling and Analysis of Sediments, Water and Tissues for Dredged material Evaluations.

^bThese values are based on recommendations from the EPA Region 6 laboratory in Houston/ these values were based on data or other technical basis.

^cThe values in parentheses are based on EPA "clean techniques", (EPA 1600 series methods) which are applicable in instances where other TDLs are inadequate to assess EPA water quality criteria.

^dTotal PCBs for Region 6 from "Update to Guidance for Conducting Ecological Risk Assessments at Remediation Sites in Texas RG-263 (revised) January 2006; Total PCBs for NOAA from Squirt Table for Organics in Sediment.

^eRegion 6 screening benchmarks come from TCEQ's ecological benchmarks for sediment; unless otherwise noted, benchmarks are Effects Range Low (ERL) from: Long, E.R., D.D. MacDonald, S.L. Smith, and F.D. Calder. 1995. Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Sediments. Environ. Manage. 19(1):81-97

^fRegion 6 screening benchmarks come from TCEQ's ecological benchmarks for water; these values are equivalent to TSWQS chronic values.