

A Commercial Borrow Pit is defined to include borrow areas, access routes, office buildings, loading and unloading facilities, staging areas, etc... For a borrow pit to be considered a Commercial Borrow Pit for the WSLP Project, it must

1. Have all appropriate federal, state, and local permits,
2. Have a current business license
3. Submit a complete package with numbers one and two, and all information presented in sections 1-14 below. All documentation presented shall be current and up-to-date.

CEMVN would determine whether potential commercial borrow pits meet these requirements.

## 1 Right of Entry

A Right of Entry form signed by the landowner(s) that covers the project duration shall be included in the package. If the proposed clay source Point-of-Contact (POC) is not the landowner, then the package should include a document signed by the landowner(s) stating that the POC is acting as an agent of the landowner(s) and has the right to represent the landowner(s).

## 2 Maps

The following maps shall be provided:

- (1) A map of the general area giving detailed instructions on how to get to the Commercial Borrow Pit from the nearest major highway.
- (2) A topographic map(s) (quadrangle) with a scale of 1:24,000 with the location of the Commercial Borrow Pit superimposed. The map should be zoomed out enough to show the nearest city or town.
- (3) A layout map of the Commercial Borrow Pit showing the dimensions of the proposed excavation, locations of soil borings, and latitude/longitude points to reference property boundaries. The map shall show the location and dimensions of any haul road that exists or is to be constructed for its hauling operation. The map shall also show the location and dimensions of any drainage features, such as dikes.

## 3 Wetlands Determination

Package must include U.S. Army Corps of Engineers (USACE) Jurisdictional Wetland Determination (JD) letter and map. The Commercial Borrow Pit shall avoid jurisdictional wetlands, with an adequate buffer. If the Commercial had impacts to jurisdictional wetlands, or there are plans for impacts to jurisdictional wetlands, a USACE Section 404 permit and/or Section 10 permit will be required. A Section 10/404 Permit does not constitute full environmental compliance for potential use as a Commercial Borrow Pit. A JD is valid, and considered current for five (5) years from the date of issuance.

## 4 Coastal Zone Management (CZM)

Package must include a Coastal Use Permit (CUP) Application, and a Letter of No Objection (LNO) or CUP from the Louisiana Department of Natural Resources in Louisiana, or the respective state agency for other states. A CUP Application, and CUP or LNO from the local

agency must be provided when the state decides that it is a matter of Local Concern. A CUP is valid, and is considered current usually for two (2) years from the date of issuance.

## 5 Threatened & Endangered Species (T&E)

Package must include a consultant's report and a concurrence letter of "No Effect on T&E Species" from the U.S. Fish & Wildlife Service. The consultant's report must include a map of the studied area with the study area boundary defined by x-y coordinate system. T&E concurrence is valid, and considered current for one (1) year from the date of issuance.

## 6 Cultural Resource Report

Package must include seven (7) bound copies of a Phase I Cultural Resource Survey prepared by a professional cultural resource management (CRM) company that has staff who meet the Secretary of the Interior's Professional Qualifications Standards ([http://www.nps.gov/history/local-law/arch\\_stnds\\_9.htm](http://www.nps.gov/history/local-law/arch_stnds_9.htm)). The report must include a map of the studied area with the study area boundary defined by x-y coordinate system.

## 7 Environmental Site Assessment

Package must include an Environmental Site Assessment (ESA) that shows a low risk of encountering Recognized Environmental Conditions (REC). The ESA must conform to ASTM E 1527 or ASTM E 2247 (if applicable) standards. The ESA must include a map of the studied area with the study area boundary defined by an x-y coordinate system. An ESA is valid, and considered current for six (6) months from the date of the report.

## 8 Soil Boring Analysis

Package must include a Geotechnical Report stamped and signed by a licensed civil engineer with a specialization in geotechnical engineering certifying that the proposed source contains suitable material meeting the specifications outlined below.

(1) The Geotechnical Report must consist of a summary and conclusion section in the main body of the report with any supporting data attached separately. The licensed engineer shall determine the sub-surface investigations required. These investigations should include continuous borrow borings (e.g. undisturbed, geoprobe).

(2) Borrow borings shall be spaced a maximum of 500 feet on-center, a maximum of 250 feet from the edge of the proposed borrow pit, and be representative of the entire proposed source. The licensed engineer's test plan must provide a comprehensive sampling to at least five (5) feet below the bottom of the proposed excavation.

(3) All soil samples must be classified in accordance with the Unified Soil Classification system. See below for required soil testing. The supporting data attached to the geotechnical report shall be comprehensive and include as a minimum all field logs, soil sampling and testing results, and a detailed investigation location map with the location of the potential borrow source and all investigation locations superimposed. The soil investigation locations must include latitudes and longitudes for plotting purposes.

## 9 Laboratory Tests

The following laboratory tests must be performed:

- (1) Soil classification shall be performed in accordance with the Unified Soil Classification System and ASTM D 2487.
- (2) Atterberg Limits Test shall be performed in accordance with ASTM D 4318.
- (3) Determination of moisture content shall be performed in accordance with ASTM D 2216 or ASTM D 4643.
- (4) Determination of organic content shall be performed in accordance with ASTM D 2974, Method C.
- (5) Sand Content shall be determined by -200 wash in accordance with ASTM D 1140.
- (6) Sodium content shall be determined by EPA 6010, CAS No. 7440-23-5.

Control compaction curves will be established in the future prior to embankment placement.

## 10 Test Procedures for Borings

The testing procedure for borings shall be as follows:

- (1) A moisture content determination shall be made and recorded on all samples at every foot of sample.
- (2) Soil classification shall be performed at every foot of sample.
- (3) For (CH), (CL), and (ML) soils, Atterberg Limits and Organic Content Testing (ASTM D 2974, Method C), is required every 5 feet (minimum) and at every change in material type.
- (4) Samples with moisture contents at 70% or higher or having a Liquid Limit of 70 or higher must be tested for organic content for that sample as well as for a sample 2 feet above and 2 feet below that sample.
- (5) Sand content tests will be required for samples that classify as CL (with a PI greater than 10) and for all clay samples (CH and CL) with greater than 10% coarse grain materials estimated by visual classification for 2 or more consecutive feet.
- (6) Sand content tests shall be limited to one test every 5 feet of sampling and shall conform to ASTM D 1140 (#200 sieve required).
- (7) Sand content tests will be required for samples that classify as a ML, but limited to one test every 5 feet of sampling.
- (8) One composite sodium content test will be required in each boring.

Laboratory testing be performed at a Corps of Engineers approved testing laboratory or at an approved testing laboratory at the project site.

If a borrow site within the Commercial Borrow Pit is within 1,500 feet of the Mississippi River Levee (MRL) or within 300 feet of a Hurricane Protection Levee (HPL), a permit from the local sponsor MUST be included. For additional information regarding this permit, please contact Amy Powell, Amy.E.Powell@usace.army.mil, (504) 862-2241 OR Karen Oberlies, Karen.L.Oberlies@usace.army.mil, (504) 862-2313.

## 11 Borrow Area Management Plan

The package will include a plan for clearing, stripping, and excavating materials from the Commercial Borrow Pit, if necessary. In its plan, work areas, stockpile areas, etc, all will be clearly shown. The Commercial Borrow Pit shall not work or move material outside the boundaries of the approved limits of its borrow area. The Management Plan shall indicate in writing and show on its layout plans details of the following:

- (1) A stockpile plan for cleared and stripped material and debris to include disposal areas.
- (2) The locations for disposal of wasted material. Location of any haul roads.
- (3) A plan for stockpiling embankment material before it is transported off site to include locations, stockpile heights, slopes, and limits.
- (4) The method and route for transporting the excavated material from the Commercial Borrow Pit to the project site.
- (5) The proposed methods for draining and keeping borrow material dry, including any protection dikes constructed to alleviate drainage problems.
- (6) A complete list of excavation and transportation equipment planned for use in its operations.
- (7) A list of permits required and the issuing office.

## 12 Mitigation Requirements

The package must include a written plan and map that describes and shows any areas subject to laws or regulations (Clean Water Act Section 404, Rivers and Harbors Act Section 10, National Historical Preservation Act, Section 906 of WRDA 1986, HTRW, etc.) that hold jurisdiction within the Commercial Borrow Pit. Plan and maps must clearly show areas/resources being avoided, areas where any impacts were minimized, and areas where it has been determined that impacts are unavoidable. Resources include but are not limited to areas of cultural interest, bottomland hardwood forest, wetlands subject Section 404 of the Clean Water Act, Threatened and Endangered species including any habitat deemed critical by the U.S. Fish and Wildlife Service, and areas found to be hazardous, toxic, or to contain radioactive waste. The U.S. Army Corps of Engineers New Orleans District (CEMVN) Environmental Team Coordinator will determine the consequences of a proposed action on any resources identified on the property in question. Plan and maps will be reviewed as outlined in paragraph "Government Performed Environmental Assessment" below, including any mitigation deemed necessary. For mitigation related to unavoidable impacts to wetlands

or forested area as written proof shall constitute a letter from a mitigation bank showing compensatory mitigation has been completed as "in-kind" in the hydraulic basin.

Commercial Borrow Pits shall provide written proof of the required mitigation necessary has been accomplished. Written proof shall constitute a letter from a mitigation bank showing compensatory mitigation has been completed as "in-kind" in the hydraulic basin.

### 13 Zoning Classification

Written evidence that the property intended for use as a Commercial Borrow Pit contains the proper zoning classification that will allow excavation and use it as a borrow area. This evidence shall consist of a letter from the local land zoning office stating the zoning classification of the Commercial Borrow Pit.

### 14 Environmental Protection Plan

In order to prevent, and to provide for abatement and control of any environmental pollution, the Commercial Borrow Pit shall comply with the Louisiana Pollution Discharge Elimination System (LPDES) General Permit requirements, all applicable Federal, State, and Local laws, and regulations as well as USACE regulations concerning environmental pollution control and abatement and any regulations referred to in the following paragraph. For hazardous wastes, materials, substances and chemicals applicable regulations shall include, but are not limited to, 29 CFR 1910.106, 29 CFR 1910.120, 40 CFR 260, 40 CFR 279, 40 CFR 355, 40 CFR 372-SUBPART D, 49 CFR 171 - 178 and EM 385-1-1, LAC 33:V, and LAC 33:VII.

The Commercial Borrow Pit must provide an established Environmental Pollution Control Plan/Environmental Protection Plan that includes:

- 1) Environmental Pollution Control Plan/Environmental Protection Plan for activities (such as painting, metal finishing, etc.) that involve hazardous chemicals, hazardous substances or hazardous materials, include in the plan a Hazard Communication Program and Safe Storage Plan. For activities that anticipate generation of hazardous wastes at the Commercial Borrow Pit, include in the plan a waste identification / determination and waste disposal plan. For activities that pose a risk of an oil or hazardous substance spill, include in the plan a Spill Reporting and Response Plan.
  - a. Non-regulated debris disposal plan with best management practices to reduce or minimize impacts to the human environment
  - b. Hazardous and regulated solid waste disposal plan in accordance with applicable laws and regulations. The Hazardous Waste Plan would include, but not necessarily be limited to the following:
    - i. Hazardous waste shall be place in closed containers and shall be shielded adequately to prevent dispersion of the waste by wind or water.
    - ii. Nonhazardous waste shall be stored in containers separate from hazardous waste storage areas.
    - iii. All hazardous waste shall be transported by a licensed transporter in accordance with LAC 33:V and 49 CFR 171, Subchapter C.
    - iv. All nonhazardous waste shall be transported in accordance with local regulations regarding waste transportation.

- v. The plan shall identify what types of hazardous and/or regulated solid wastes will be generated and shall list the hazards involved with each waste.
  - vi. All laboratory testing for waste determinations shall be performed by a laboratory which has received accreditation from the Louisiana Department of Environmental Quality.
- 2) Procure applicable Federal, State, and Local regulations on pollution control.
  - 3) Air Pollution Plan – plan for dust, smoke, and noise abatement
  - 4) Water Pollution Plan – disposal plan of materials (wastes, effluents, trash, garbage, oil, grease, chemicals, etc...), erosion control, etc...
  - 5) The Commercial Borrow Pit shall not pollute lakes, ditches, rivers, bayous, canals, groundwater, waterways, or reservoirs with materials harmful to water quality, fish, shellfish, or wildlife, or materials which may be a detriment to outdoor recreation.
  - 6) No water flows will be altered as a result of Commercial Borrow Pit operation.
  - 7) Land Pollution - disposal of debris, restoration of temporary construction sites, etc...
  - 8) Prevention of Landscape Defacement Plan
  - 9) Plan to record and preserve any historical and archeological finds
  - 10) All pollution control facilities shall be maintained by the Commercial Borrow Pit
  - 11) Assurance that all past and any future oil spill or chemical release that has occurred at the Commercial Borrow Pit have been and will be reported to the National Response Center.
  - 12) Training course(s) regarding the Environmental Protection Plan have been made available to all employees of the Commercial Borrow Pit.