## APPENDIX M HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE REPORT

## Volume IV APPENDIX M:

## Hazardous, Toxic, and Radioactive Waste Report

## 1.0 EXECUTIVE SUMMARY

The Coastal Protection and Restoration Authority (CPRA) retained the SJB Group, LLC (SJB) to perform a HTRW Phase I Environmental Site Assessment (ESA) on an approximately 35 square mile area in Terrebonne Parish, Louisiana. The area addressed in this investigation is the Study Area for the Terrebonne Basin Barrier Shoreline Restoration (TBBSR) project which is located within Terrebonne Basin in Terrebonne and Lafourche parishes. The TBBSR project is currently one of six projects with Chief of Engineers Reports due to Congress no later than December 31, 2010.

The purpose of this Phase I ESA is to identify historical or overt physical evidence of current or past activities or materials at the Site and its immediate vicinity which constitute "recognized environmental conditions,"(RECs) defined by the ASTM Standard to be "the presence or likely presence of any hazardous, toxic, and radioactive substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release . . . into structures on the property or into the ground, groundwater, or surface water of the property."

This Phase I ESA is consistent with the Scope of Work (SOW) provided by the Corps of Engineers and protocols established in the American Society for Testing and Materials publication "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property" (Designation E 2247-08, referred to as the ASTM Standard) to provide "due diligence" for rural transactions. However, this report will require a second site visit and interviews related to ASTM Standard to be conducted at a later date that is closer to expected time of construction for the year 2012.

On November 20, 2008, SJB's environmental specialists performed an aerial site reconnaissance of the Study Area and a field visit on July 27 through 30 of 2009 at selected locations throughout the Project Area. The Project Area is the Terrebonne Basin Barrier Shoreline and consists of seven major barrier islands that include: East Timbalier Island, Timbalier Island, Wine Island, East Island, Trinity Island, Whiskey Island, and Raccoon Island. Photographs were taken documenting field observations and are included in this report.

SJB obtained historical documentation of the Site's past uses and activities in order to identify possible recognized environmental conditions. Sources of historical documentation for this report included historical aerial photographs, topographic maps, and Environmental Database Report.

The historical aerial photographs and the topographic maps dating back to the late 1800's were obtained and reviewed to determine past land uses on and nearby the Site. The 1953 aerial photograph showed oil and gas infrastructure developing along East Timbalier Island. Every year after this date the oil and gas infrastructure has increased drastically expanding its limits to the surrounding bays and islands. Several oil pits were observed on the aerial photographs and topographic maps on or within the vicinity of East Timbalier Island (see photograph below). Reminisce of these oil pits are still present today on East Timbalier Island. These pits were used to dispose of liquids and sludge containing hazardous waste or petroleum products. The Sonris database operated by LADNR was used to properly identify the location of these pits and who was responsible for them.

SJB used an EDR Area Study that search all federal, state, local, and tribal records to help identify any areas of concern that can be deemed a recognized environmental condition as defined in ASTM standard E 2247-08. The database search revealed six reported sites. None of these pose an environmental concern and are not considered a REC; however, they may be considered a historical REC(s) due to the discharge of petroleum product to the affected environment. The responsible operators have addressed all 6 ERNS (Emergency Response Notification System) sites accordingly.

The site reconnaissance revealed two major oil and gas facilities located on Timbalier and East Timbalier Islands and 12 pipelines that intersect or fall within the project work area. The two major oil and gas facilities located on East Timbalier and Timbalier where not inspected and interviews are schedule to be conducted at a later date closer to construction. The 12 oil and gas pipelines that intersect or fall within the project work area currently have no visible environmental concerns; however, if any of these were to experience a problem, numerous issues could occur from a safety and environmental standpoint.

SJB has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Standard E 1527-05 on Isle Dernieres and Timbalier Island chain located within Terrebonne Basin in Terrebonne Parish, Louisiana, the Site. Any exceptions to or deletions from this practice are described in section 2.4 of this report. The ERNS entries on the Site thought to represent historical REC. After reviewing the monitoring reports, SJB found indications of release of petroleum products for all 6 incidents. However, these releases have been addressed in accordance of the EPA. Therefore, the ERNS entries are considered a historical REC(s). SJB Group was unable to inspect the production facilities at this time. However, do to the history of oil and gas development, oil pits, and spill incidents that have occurred on or near

East Timbalier Island, East Timbalier Island is currently a REC(s). SJB can not adequately identify any other current recognized environmental conditions as defined in ASTM standard E 2247-08 on the remaining islands without proper investigation to their oil and gas facilities located on or near them. A more in depth site visit and interviews with people knowledgeable of the Study Area history will be conducted closer to the expected construction time.



Photograph of oil pit located on East Timbalier Island.