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1.0 Executive Summary

Materials Management Group, Inc. (MMG) has completed a Phase I Environmental Site Assessment (PI-ESA) on behalf of the U.S. Army Corps of Engineers (USACE) New Orleans District (NOD) under IQRC (Indefinite Quantity Requirements Contract) contract number DACW29-03-D-0014, Task Order 24. MMG completed the PI-ESA in accordance with the American Society for Testing and Materials (ASTM) “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (E 1527-05).

The environmental site assessment was conducted at the confluence of the Inner Harbor Navigation Canal (IHNC) and Lake Pontchartrain (Property). The USACE is proposing to construct a navigable closure structure near the entrance of the IHNC at Lake Pontchartrain to protect against hurricane-induced storm surge from Lake Pontchartrain entering the IHNC that may add strain to the interior levees and floodwalls.

The investigative activities of this Phase I included data reviews of environmental data, site reconnaissance of the Property, and interviews of owners and other related parties. The main objective was to identify possible Recognized Environmental Conditions that may require a follow-up Phase II Environmental Site Assessment.

The environmental database review included commercially available EDR report and the EPA Enforcement and Compliance History Online. The review did not reveal any significant environmental concern to the Property. Site reconnaissance was conducted throughout the proposed floodgate area. There was no Recognized Environmental Condition (REC) observed. MMG also conducted interviews of owners and other related parties. The interviews also did not reveal any significant environmental concern.

This assessment has revealed no evidence of recognized environmental conditions in connection with the Property following the AAI and ASTM Phase I guidelines. The target property, as located at the confluence of Lake Pontchartrain and the IHNC, is a water body and sediments found at the bottom of this water body may be impacted via historical discharges to the Canal from industrial facilities along the east and west banks of the IHNC. However, the impact may be at a de minimis condition with confirmation sampling.

2.0 Introduction

The U.S. Army Corps of Engineers (USACE) New Orleans District (NOD) has contracted Materials Management Group, Inc. (MMG) under IQRC (Indefinite Quantity Requirements Contract) DACW29-03-D-0014, Task Order 24 to conduct a Phase I Environmental Site Assessment (PI-ESA) at the location of its proposed navigable closure structure (gate) located near the entrance of the Inner Harbor Navigation Canal at Lake Pontchartrain by the Seabrook Bridge. The property of interest (Property) is located north of the Seabrook Bridge, about 500 feet into Lake Pontchartrain. However, depending on the final design, the sector gate can be moved back into the IHNC canal up to at least the intersection of the first slip (on the west bank of the IHNC) south of the bridge. Please refer to Figure A1 in Appendix A.

2.1 Purpose

The purpose of this PI-ESA was to complete an assessment in a good commercial and customary fashion at the Property with respect to the range of hazardous substances, pollutants, or contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and for petroleum product contaminants. The PI-ESA has been completed to determine the potential for contamination by means of appropriate inquiries into previous ownership and into uses of the Property consistent with good commercial or customary practices. It is in compliance with the requirements for conducting "All Appropriate Inquiry" (AAI) under EPA rule.

2.2 Scope of Services

MMG was contracted to identify Recognized Environmental Conditions (RECs) per the ASTM E 1527-05 standard as well as the USACE ER 11165-2-131 Regulation. RECs for the purposes of this report are defined as the presence or likely presence of any hazardous substance or petroleum product on the Property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substance or petroleum product into structures on the Property or into the ground, groundwater, or surface water of the Property.

2.3 Significant Assumptions

As MMG was not provided with a survey map of the Property, MMG has made the assumption that the area of interest at the time of the site investigation (as delineated by the maps and drawings and geographical coordinates provided by the USACE) was in fact the limits of the Property.

2.4 Limitations and Exceptions

At the request of the USACE, MMG conducted records review within a 2-mile radius of the geographic coordinates of the gates. The site reconnaissance activities were limited to a 2-mile radius as well. The potential recognized

environmental concerns were determined based on the available database and results of site reconnaissance activities. No sampling and analysis of environmental media or environmental modeling were conducted under this PI-ESA.

2.5 Special Terms and Conditions

The findings of this report are confidential. MMG will not release information about the Property without the USACE's permission.

2.6 User Reliance

Materials Management Group, Inc. hereby releases to USACE use and reliance of this Phase I - Environmental Site Assessment Report, subject to any stipulated limitations in the report. Should there be a substantial lapse in time (> 12 months) or if physical changes are made to the Property, this PI-ESA will need to be updated.

3.0 Property Description

3.1 Location and Legal Description

3.1.1 Location

The Property is located about 500 feet north of the Seabrook Bridge in Lake Pontchartrain. The geographic coordinates of the Property are: longitude = 90°2.11' W and latitude = 30°2.02'N. Refer to Maps A1 A2, and A3 in Appendix A, for an illustration of the Property's approximate layout and location within Orleans Parish, Louisiana. As shown in Appendix A, the target property for the sector gate site construction is essentially a water body within Lake Pontchartrain (lake side) or within the Inner Harbor Navigation Canal (i.e. alternate canal side).

3.1.2 Legal Description

The Property has no municipal street address. It is located in Lake Pontchartrain. However, the Environmental Data Resources, Inc. (EDR), database used for this PI-ESA provided the physical address of Big Oak Island, New Orleans, LA 70126.

3.2 Subject Property and Vicinity General Characteristics

The Property is located in Lake Pontchartrain. To the south is the Seabrook Bridge, Southern Rail Bridge and the Inner Harbor Navigation Canal or IHNC. The surrounding area on both banks of the IHNC is mostly industrial use.

3.3 Current Use of the Property

At the time of the survey, there was no usage of the Property (see Photographs 1 and 2 in Appendix B). The Property is located at the confluence of Lake Pontchartrain and IHNC.

3.4 Description of Structures, Roads and Other Improvements on the Property

There are no structures, roads, or other improvements on the Property.

3.5 Current Uses of Adjoining Properties

3.5.1 Northern Property

To the north is Lake Pontchartrain. See Photographs 3 and 4 in Appendix B.

3.5.2 Southern Property

To the south is the Inner Harbor Navigation Canal. At the east bank of the Canal is Jourdan Road. Industrial facilities and wharf are constructed along Jourdan Road. At the west bank of the canal is France Road. Industrial facilities can be found along the east side of France Road. Some residential properties are located along the west side of France Road. See Photographs 5 and 6 in Appendix B. From the Seabrook Bridge and Southern Rail Bridge and into the intersection of IHNC with the first slip (on the west bank of the IHNC), the property on the west bank of the IHNC (contiguous to the Canal) is currently used for concrete crushing. The property on the east bank of the IHNC is currently occupied by Halliburton Energy Service.

3.5.3 Western Property

To the west is the boat launch area. Across Lakeshore Drive to the west is the U.S. Naval Reserve Center. The James H. Diamond Army Reserve Center is located further to the west. See Photographs 7 and 8 in Appendix B.

3.5.4 Eastern Property

To the east is the New Orleans Lakefront Airport that owns an active AST field of four tanks (containing aviation gas or AVGAS). The ASTs are immediately adjacent to the target property site for the sector gate construction in Lake Pontchartrain See Photographs 9 and 10 in Appendix B.

4.0 User Provided Information

4.1 Title Records

There was no title record provided.

4.2 Environmental Liens or Activity and Use Limitations

There were no environmental liens nor activity and use limitations provided.

4.3 Specialized Knowledge

The USACE provided three documents related to the Property. These documents are (1) Land Use History of Areas Adjacent to the Inner Harbor Navigation Canal Lock, New Orleans, November, 1992, by R. Christopher Goodwin & Associates, Inc., (2) New Florida Bridge Over the Inner Harbor Navigation Canal (IHNC) – Draft Environmental Assessment, June, 2004, by NY and Associates, Inc., and (3) Inner Harbor Navigation Canal Floodgates Conceptual Study, June, 2006, by Arcadis, Inc. Please refer to Section 7.5 for summary.

4.4 Owner, Property Manager, and Occupant Information

The Property is located in Lake Pontchartrain. No owner, property manager, or occupant information is available. The USACE did provide contact information for MMG to locate the possible owners of the Property (see Appendix F).

4.5 Reason for Performing PI-ESA

The USACE is investigating the most effective means to create a line of defense against hurricane-induced storm surge from Lake Borgne and Lake Pontchartrain entering the IHNC that may add strain to the interior levees and floodwalls that protect portions of Orleans and St. Bernard Parish. Possible design options are based on the central goal of closing off the IHNC during severe storm events to reduce high water and wave action in the canal.

The USACE is proposing to construct a navigable closure structure near the entrance of the IHNC at Lake Pontchartrain. The exact placement of such structures and their ultimate design depends on a number of factors, including construction and mitigation costs as well as environmental/species and cultural impacts. This PI-ESA investigation focused on possible Recognized Environmental Conditions that may require a follow-up Phase II ESA.

4.6 Other

No additional information was collected.

5.0 Records Review

The purpose of the records review is to obtain and review records that will help identify RECs in connection with the Property. MMG has accessed reasonably ascertainable sources as described within the ASTM standard, as well as within the time frame and cost allotted by the USACE. Accuracy and completeness of record information varies among information sources, including government sources. MMG has made every effort to compensate for obvious mistakes or insufficiencies in information reviewed based on other information of which the environmental professional has actual knowledge.

5.1 Standard Environmental Record Sources

The Federal and State record sources were reviewed based on a 2-mile search distance from the Property that was taken from the provided information from Environmental Data Resources, Inc. (EDR) (See Appendix C). The findings are summarized in the following table with detailed discussion in the following subsections:

Records Source	No. of Sites Found at Search Distance (Miles) from Property					
	Property	0-1/8	1/8-1/4	1/4- 1/2	1/2-1	1-2
National Priority List (NPL)	0	0	0	0	0	0
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)	0	0	0	0	0	0
Resource Conservation and Recovery Act (RCRA-LQG) – Large Quantity Generators	0	0	0	1	1	3
Resource Conservation and Recovery Act (RCRA-SQG) – Small Quantity Generators	0	1	6	16	19	53
RCRA Treatment, Storage, and Disposal Facilities (TSD)	0	0	0	0	0	0
Corrective Action (CORRACTS) Report	0	0	0	0	0	0
Emergency Response Notification System (ERNS)	0		1	1	4	21
Hazardous Materials Incident Reporting System (HMIRS)	0	0	0	0	48	0
Toxic Release Inventory System (TRIS)	0	0	0	0	1	0
FIFRA/TSCA Tracking System	0	0	0	0	1	0
Section 7 Tracking System (SSTS)	0	0	0	0	0	1
RCRA Administrative Action Tracking System (RAATS)	0	0	0	0	0	0
Integrated Compliance Information System (ICIS)	0	0	0	0	2	0
Mines Master Index File (MINES)	0	1	6	17	20	69
Facility Index System (FINDS)	0	0	0	0	0	0
Records of Decision (ROD)	0	0	0	0	0	0
State Hazardous Waste Facilities	0	0	0	0	0	0
Underground Storage Tank (USTs)	0	0	6	4	17	42
Leaking Underground Storage Tanks (LUSTs)	0	0	0	0	0	6
Historical Leaking Underground Storage Tanks (HIST-LUST)	0	0	0	1	8	5
Solid Waste Landfill	0	0	0	0	0	0
Institutional Site Listing (AUL)	0	0	1	0	0	0
Spills	0	0	0	0	1	1

Recyclers Directory	0	0	0	0	0	1
Voluntary Cleanup Program Sites (VCP)	0	0	0	0	0	0
Drycleaners	0	0	0	1	0	4

5.1.1 Property

Based on the information provided by EDR, the target property was not listed in any of the databases searched by EDR.

5.1.2 Surrounding Properties

Within the specified search distance, the sites found that show potential impact to the Property are summarized below.

1. There are five large quantity generators identified. No violation record for any was reported.
2. There are 94 RCRA small quantity generators identified. No violation record for any was reported.
3. There are 27 sites listed in the Emergency Response Notification System for releasing of oil and hazardous substances. One incident happened at 8000 Jordan Road (which is 1/8 – ¼ mile SE to the Property). The incident accounted for releasing < 5 gallons of oil from the dock. No environmental impact to the Property is anticipated.
4. There have been 48 hazardous material spill incidents reported to the Department of Transportation in the past. These incidents were limited to the geographical location of 5600 and 5700 Morrison Road. These sites are ½ - 1 mile to the Property. No environmental impact to the property is anticipated.
5. There have been five leaking underground storage tank incidents reported. All these incidents occurred at 1-2 miles from the Property. No environmental impact to the Property is anticipated.
6. There are 14 historical leaking UST sites listed. The closest one (1/4 – ½ mile) to the Property is located at 6201 France Road. The Port of New Orleans owns the site. The UST has been removed. The site has been placed under institutional controls and conveyance notice is required.
7. There are 69 UST sites within the search area. The EDR reports showed these sites are either properly closed or no violation has been reported. No environmental impact to the Property is anticipated.

5.1.3 6201 France Road – Former Radcliff Materials, Inc.

The property is located where the alternate section gate location will be at the west bank of IHNC. The property is owned by the Port of New Orleans. In September, 1998, LDEQ was informed of oil spill into IHNC due to trenching of subsurface electrical conduit resulting in the rupture of a used oil tank. The spill was cleaned up and a contractor was hired to remove three USTs from the site. In June 1999, LDEQ approved the limited site assessment work. Since the area of contamination was close to the waterway, it was not possible to have complete remediation of contamination. Subsequently, this site is placed under conveyance notice and restrictive usage required. The sediment near this property should be investigated if the final design puts the gate structure near this site.

5.1.4 Halliburton Energy Service – 8000 Jourdan Road

This property is located where the alternate section gate location will be at the east bank of IHNC. This property could be the location of former National Lead Company. Halliburton Energy Service is a Conditionally Exempt Small Quantity Generator. In 1999, the facility received two violations. These violations were all associated with waste generation and transportation. In 2000, EPA proposed monetary penalties of \$62,260. The most recent EPA Enforcement and Compliance History Online (www.usepa.gov/echo) did not reveal any violation by this facility in the past three years. Please refer to Appendix D. There should be no environmental impact to the Property due to the past violations as listed.

5.1.5 New Orleans Lakefront Airport – 5401 Lake Shore Drive

Further investigation was conducted into the New Orleans Lake Front Airport since it is adjacent to the proposed gate structure. There were multiple companies located inside the airport. Based on the data review, the following summarizes the findings:

1. There were two leaking UST incidents. One happened in March 1993 with the Lakefront Airport and the other happened in March 1990 with Eager Aviation Corporation. Both incidents were remediated.
2. There were eight facilities on the airport premise that held the EPA Small Quantity Generator permit for hazardous waste. No violation was reported to any of these eight facilities.
3. There were six facilities on the airport premise that once operated UST for fuel. Most of these tanks were either closed or removed.

5.2 Additional Environmental Record Sources

MMG conducted further investigation into EPA Enforcement and Compliance History Online (www.usepa.gov/echo) for the industries and plants (which were classified as large quantity waste generators) along the Michoud Canal and along the Intracoastal Drive. This database also includes the enforcement and investigative activities conducted by LDEQ. The following summarizes the findings. The detailed search data as of November 26, 2006 is included in Appendix D.

5.2.1 Associated Hospital Services, Inc. – 7639 Townsend Place

LDEQ/EPA inspections in the past three years:

- Clean Air Act (CAA) Inspection: 0
- Clean Water Act (CWA) Inspection: 0
- Resource Conservation and Recovery Act (RCRA) Inspection: 0

LDEQ Notice of Violation or Informal Enforcement in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

LDEQ Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

EPA Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

Discharge of chemicals into stream or bodies of water

- None

5.2.2 Equitable Shipyard, L.L.C. – 4325 France Road.

LDEQ/EPA inspections in the past three years:

- Clean Air Act (CAA) Inspection: 0

-
- Clean Water Act (CWA) Inspection: 0
 - Resource Conservation and Recovery Act (RCRA) Inspection: 0

LDEQ Notice of Violation or Informal Enforcement in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

LDEQ Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

EPA Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

Discharge of chemicals into stream or bodies of water

- None

5.2.3 Stephen H Miller – 6120 Franklin Avenue

LDEQ/EPA inspections in the past three years:

- Clean Air Act (CAA) Inspection: 0
- Clean Water Act (CWA) Inspection: 0
- Resource Conservation and Recovery Act (RCRA) Inspection: 0

LDEQ Notice of Violation or Informal Enforcement in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

LDEQ Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

EPA Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

Discharge of chemicals into stream or bodies of water

- None

5.2.4 Red Fox New Orleans – 5601 France Road

LDEQ/EPA inspections in the past three years:

- Clean Air Act (CAA) Inspection: 0
- Clean Water Act (CWA) Inspection: 0
- Resource Conservation and Recovery Act (RCRA) Inspection: 0

LDEQ Notice of Violation or Informal Enforcement in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

LDEQ Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

EPA Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

Discharge of chemicals into stream or bodies of water

- None

5.2.5 Lee Dinett – 8020 Downman Road

LDEQ/EPA inspections in the past three years:

-
- Clean Air Act (CAA) Inspection: 0
 - Clean Water Act (CWA) Inspection: 0
 - Resource Conservation and Recovery Act (RCRA) Inspection: 0

LDEQ Notice of Violation or Informal Enforcement in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

LDEQ Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

EPA Formal Enforcement Action in the past three years:

- Clean Air Act (CAA) Violation: 0
- Clean Water Act (CWA) Violation: 0
- RCRA Violation: 0

Discharge of chemicals into stream or bodies of water

- None

The results showed no environmental impact to the proposed IHNC gate structure area by these facilities.

5.3 Physical Setting Source(s)

5.3.1 Physical Setting

The Property is located near Big Oak Island, New Orleans, LA 70126. Based on the EDR search, the Property's coordinates are:

Latitude (North): 30.03330 - 30°1'59.9"
Longitude (West); 90.0341 - 90°2'2.8"
Universal Tranverse Mercator: Zone 15
UTM X (Meters): 786028.6
UTM Y (Meters): 3326002.5
Elevation: 0 ft. above sea level

Please refer to Figure A2 and A3 included in Appendix A.

5.3.2 Hydrogeologic Information

The Property is located inside the FEMA flood zone. The groundwater flow directions at the site were not available. However, it was reported that at ½ to 1 mile southeast of the Property the groundwater flow directions were SSW, NE, and SE. The groundwater flow velocity should be very slow due to the silty-clayey types of soils in the general area.

5.3.3 Geologic Information

Based on the Soil Conservation Service STATSGO data, the soil component of the area is classified as water. No additional soil type or classification was reported.

5.3.4 Well Information

Based on the well search distance of one mile, the Federal USGS Well Information revealed one well located at ¼ - ½ mile WSW of the Property. The Louisiana State Database Well Information revealed one well located at 1/8 – ¼ mile ESE to the Property. No public water supply well was found in this area.

5.4 Historical Use Information on the Subject Properties

The objective of consulting historical sources is to develop a history of previous uses of the subject property. For the purposes of this report, MMG has reviewed historical USGS Topographic Maps and Aerial Photographs.

5.4.1 USGS Historical Topographic Maps

MMG conducted research of multiple databases and revealed the earliest historical topographic map was dated 1965. There was no map prior to that time. These maps are produced by the U.S. Geological Survey and are divided into various quadrangles. The historic topographic maps reviewed by MMG included the following (see USGS Topographic Maps located in Appendix E.):

Property		
Year	Quadrangle Map	Comments
1965	Spanish Fort, LA	The Property is located at the entrance of IHNC. No development was observed on the Property.
1972	Spanish Fort, LA	Same as 1965 map.
1979	Spanish Fort, LA	Same as 1972 map.
1992	Spanish Fort, LA	Same as 1979map.
1999	Spanish Fort, LA	Same as 1992 map.

5.4.2 Aerial Photograph

The EDR research could not find any historical aerial photo coverage for the Property or the surrounding area. A USGS aerial photograph (dated 01/24/1998) was reviewed. It confirmed the findings from the topographic maps (Section 5.4.1). Please refer to Appendix A (Figure A4) for this aerial photograph.

5.5 Historical Use Information on Adjoining Properties

The objective of consulting historical sources is to develop a history of the previous use of the adjoining properties. For the purposes of this report, MMG has reviewed USGS Topographic Maps and Aerial Photographs.

5.5.1 USGS Topographic Maps

MMG conducted research of multiple databases and revealed the earliest historical topographic map was dated 1965. There was no map prior to that time. Based on review of a number of historic topographic maps (Appendix E) the following tables summarize MMG's findings:

Northern Property		
Year	Quadrangle Map	Comments
1965	Spanish Fort, LA	Lake Pontchartrain is the northern property. No development in this area.
1972	Spanish Fort, LA	Same as 1965 map.
1979	Spanish Fort, LA	Same as 1972 map
1992	Spanish Fort, LA	Same as 1979 map.
1999	Spanish Fort, LA	Same as 1992 map.

Western Property		
Year	Quadrangle Map	Comments
1965	Spanish Fort, LA	Camp Leroy Johnson is located to the west of Lakeshore Drive.
1972	Spanish Fort, LA	Same as 1965 map.
1979	Spanish Fort, LA	Same as 1972 map.
1992	Spanish Fort, LA	A boat ramp was added to the west of the inlet to the IHNC. Camp Leroy Johnson is divided into the University of New Orleans East Campus to the west and the U.S. Army Reserve to the east. A U.S. Naval-Marine Corps Reserve facility is located next to Lakeshore Drive. Seawall was added
1999	Spanish Fort, LA	Similar to the 1992 map. A floodgate was added at Lakeshore Drive.

Southern Property		
Year	Quadrangle Map	Comments
1965	Spanish Fort, LA	The slips along IHNC south of the railroad crossing are shown in their present day locations. Some development can be identified along both the east and west banks of IHNC. However, further east from the IHNC between Downman Road and the levee, there is very low development in this area. Further west from the IHNC across France Road, it is basically a residential area.
1972	Spanish Fort, LA	The site is similar to the 1965 map. Infrastructure development was observed south of the railroad, between Downman Road and the levee.
1979	Spanish Fort, LA	The site is similar to the 1972 map. More development was observed in the area between the east bank of the IHNC and Downman Road.
1992	Spanish Fort, LA	The industrial settings along the IHNC are similar to the 1979 map. A floodgate was added to the south of the bridge on the west bank of the IHNC. Floodwall added parallel to France Road. Levee was added parallel to Jourdan Avenue.
1999	Spanish Fort, LA	Similar to the 1992 map. A floodgate was added to the south of the bridge on the east bank of the IHNC.

Eastern Property		
Year	Quadrangle Map	Comments
1965	Spanish Fort, LA	The New Orleans Lakefront Airport is located to the east of the Property. U.S. Naval Reserve Headquarter buildings are located to the southwest corner of the airport.
1972	Spanish Fort, LA	The site is similar to the 1965 map.
1979	Spanish Fort, LA	The site is similar to the 1972 map. The beginning stages of an airport widening project on the east side of the airport were identified on the map.
1992	Spanish Fort, LA	The airport expansion is completed. Three new runways and more buildings can be identified. A floodwall was added to the southwest corner at the airport. The U.S. Naval Reserve Headquarter buildings have been moved. Further east to the airport, there is South Shore Harbor.
1999	Spanish Fort, LA	Similar to the 1992 map.

5.5.2 Aerial Photograph

The EDR research could not find any historical aerial photo coverage for the Property or the surrounding area. A USGS aerial photograph (dated 01/24/1998) was reviewed. It confirmed the findings from the topographic map review (Section 5.5.1). Please refer to Appendix A (Figure A4) for this aerial photograph.

6.0 Subject Properties Reconnaissance

MMG's environmental professional, Dr. C. Paul Lo, conducted the PI-ESA site reconnaissance on October 3 and October 9, 2006.

6.1 Methodology and Limiting Conditions

Site reconnaissance at the Property was made on land from both banks of the IHNC beneath the Seabrook Bridge. The boat launch next to the Property was closed after Hurricane Katrina and was not available for use during site reconnaissance.

6.2 General Subject Properties Setting

The Property was inspected to determine if the following listed items were present.

Setting	Present?	Comments
Warehouse	No	
House/Apartment	No	
Office Building(s)	No	
Strip Shopping	No	
Maintenance Facility	No	
Shop/Garage	No	
Lay-down Yard	No	
Undeveloped Lot	No	
Maintained Lot	No	
Slab Only	No	
Other Improvement	Yes	Boat launch to the west of the Property (Photo 7)
Unoccupied	Yes	
Overgrown	No	
Stained Area(s)	No	
Roads	Yes	Paved road accessing to the boat launch south of the Property (Photo 11)
Rail Track(s)	Yes	South of the Property next to the Seabrook Bridge is the Southern Railway Bridge. (Photo 12)
Fence	No	
Lighted	No	
Parking	No	

6.3 Exterior Inspections

The Property was inspected to determine if the following listed items were present.

Observations	Present?	Comments
1. Geologic/Hydrologic		
Pit	No	
Pond/Lagoon	No	(Lake Pontchartrain)
Canal/Ditches	No	(Lake Pontchartrain)
River/Streams	Yes	IHNC and Lake Pontchartrain (Photo 13)
Oil/Water Separator	No	
Waste Water Treatment System	No	
Storm Drain	No	
Sumps	No	
Traps	No	
Wells	No	
Municipal Water	No	
Wetlands	No	
Stressed Vegetation	No	
Standing Water	No	(Lake Pontchartrain)
2. Storage Tanks		
USTs	No	
ASTs	Yes	East of the Property, there is an active AST site located on the airport property. (Photo 14)
3. Solid Wastes		
Containers	No	
Dumpster	No	
Roll-off Box	No	
Landfill	No	
Unauthorized Dump	No	
Mounds	No	
Trash	No	
Automotive	No	
Rail ties	No	
Creosote poles	Yes	To the south of the Property, there are five creosote treated electric poles. (Photos 15)
Construction Debris	No	
Biohazards	No	
White Wastes	No	
4. Suspected Hazardous Materials		
Pole Transformer	Yes	On an electrical pole next to the Seabrook Bridge. (Photo 16)
Ground Transformer	No	
Fluorescent Lights	No	
HVAC (Freon)	No	
Heavy Metals	No	
Lead-based Paint	No	

Observations	Present?	Comments
Asbestos	No	
Other	No	

6.4 Surrounding Area Inspections

Site reconnaissance activities were also expanded to the surrounding areas along both Jourdan Road and France Road. Please refer to Photographs 17-36 in Appendix B. No Recognized Environmental Conditions were identified.

However, at the west bank of IHNC near the first slip where the alternate sector gate location (former Radcliff Materials, Inc.) is proposed, it was noted that this property was occupied for concrete crushing operations. Please refer to Photographs 27 and 28 in Appendix B. The east bank of IHNC (where the alternate sector gate location is proposed) is occupied by Halliburton Energy Service. Please refer to Photographs 17 and 18 in Appendix B.

7.0 Interviews

7.1 Interview with Owner

A phone interview was conducted with Mr. Clayton Miller of the Port of New Orleans (504-528-3324). He was not aware of any environmental violations or environmental liens at the Property. He indicated that to the south of the Property at the west bank of the IHNC by the first water slip, there was a site with petroleum contamination. It was very close to the water and complete clean-up was not possible. Eventually, a deed restriction was placed on this property. (Note: according to EDR research, this site is located at 6201 France Road.) Please refer to Section 5.1.3 for discussion. Please refer to Appendix F for the interview record.

7.2 Interview with Properties Manager

There was no Property Manager available for this site.

7.3 Interview with Occupants

There was no occupant at the site.

7.4 Interview with Others

MMG had an interview with Mr. Steve Spencer of the Orleans Levee Board (504-782-8641). Mr. Spencer responded that he was not aware of any environmental concern or contamination at the Property. Please refer to the interview record in Appendix B.

MMG also tried several times to contact Mr. Dugan Sabins, LDEQ representative in charge of the water quality in this area (225-219-3553). He did not return the call.

7.5 Supplied Environmental Documents

The USACE provided three documents related to the Property. These documents are:

- 7.5.1 A Land Use History of Areas Adjacent to the Inner Harbor Navigation Canal Lock, New Orleans
November, 1992, by R. Christopher Goodwin & Associates, Inc.

The subject area of investigation was the southern section of the IHNC between Florida Avenue and the Mississippi River, approximately 3.5 miles south of the Property. The time period of the land use study was between 1940 to 1992. A Phase I ESA procedure was followed for this study, which included historical research and analysis of data from cultural resources studies, topographic maps, Sanborn fire insurance maps, city directories, and records housed at the Port of New Orleans. Based on the results, a land use database was created to track the business and industrial development of the study area.

The study concluded that many businesses operating in the study area, particularly within the Bywater/Holy Cross area, represent potential environmental threats. The study suggested further environmental evaluation of approximately 500 facilities in the area for abandoned underground storage tanks and the use, generation, and /or disposal of toxic and/or hazardous materials.

- 7.5.2 New Florida Bridge Over the Inner Harbor Navigation Canal (IHNC) – Draft Environmental Assessment
June, 2004, by NY and Associates, Inc.

This environmental assessment study was conducted for the proposed new Florida Avenue Bridge over the IHNC in Orleans and St. Bernard Parishes. The study followed the requirements of the National Environmental Policy Act (NEPA) addressing potential social, environmental, and economic impacts. The area of investigation was south of I-10 between Almonaster Avenue and Paris Road. The IHNC section covered in the study was two miles south of the Property.

A Phase I ESA was conducted as part of the study to investigate potential hazardous and solid waste sites that might impact the study area. Based on the data research and site reconnaissance results, there was no environmental concern at the time of the study.

7.5.3 Inner Harbor Navigation Canal Floodgates Conceptual Study
June, 2006, by Arcadis, Inc.

This conceptual study was to study the feasibility of building the floodgate structure at the south shore of Lake Pontchartrain at the confluence of the IHNC. The area of study was located at the Property.

In this study, a Phase I ESA was conducted and incorporated into the whole conceptual study report. The study indicated that there were eight sites registered as generators of hazardous waste. Of these eight sites, two of the sites had violations associated with their generation of hazardous waste. The report indicated that these sites posed no environmental impact to the study area. However, the report suggested that that the sediment may be a potential source of environmental contamination due to industrial activities in the IHNC. Since no sediment analytical data was available, it was recommended that investigation of the sediment be conducted.

8.0 Findings

Based on the EDR record search and the site reconnaissance activities, there are no Recognized Environmental Conditions (RECs) for the Property at the time of this investigation. .

9.0 Opinions

This Phase I ESA was conducted without investigating the chemical characteristics of sediment at the Property. It can be expected that any possible impact from historical spills or contamination by industries along the IHNC as well as from vessels passing through the IHNC would ultimately impact the sediment. Due to tidal action, the contaminated sediment in the IHNC could be carried out toward Lake Pontchartrain and potentially deposited at the Property.

If the final design involves choosing to locate the floodgates south of Seabrook Bridge near the first water slip at the west bank of IHNC, then the sediment near the property by the first water slip (former Radcliff Materials Inc. Site) would require investigation due to a deed restriction placed on the property

After Hurricane Katrina, EPA and LDEQ tested the sediment and/or soil within the area flooded, including the area along the IHNC. The results showed that diesel and oil-type petroleum hydrocarbons were found at the majority of the locations sampled. Polycyclic aromatic hydrocarbons (PAHs) were also found. The PAH levels in samples from 15 out of 51 locations sampled were above the level of concern. Please refer to Appendix G. It is possible that the IHNC sediment was suspended by storm surge and deposited in the nearby area.

Construction of the closure gate at the target or subject location (property) would likely include excavation of the bottom sediment. Excavation may involve either a dry or wet process and disposal of the excavated sediment material may include on-site re-use around the gates in a dry or wet condition or an off-site re-use or disposal. Any further investigation (e.g. sediment sampling and testing) resulting from this Phase I report are dependent upon engineering decisions on the excavation and disposal processes selected during construction of the closure gate. Excavation and disposal under wet conditions are regulated under the Clean Water Act while on-land disposal/re-use of the excavated sediments should be governed by various Federal and State solid waste guidelines.

10.0 Conclusions

This assessment has revealed no evidence of recognized environmental conditions in connection with the Property following the AAI and ASTM Phase I guidelines. The target property, as located at the confluence of Lake Pontchartrain and the IHNC, is a water body and sediments found at the bottom of this water body may be impacted via historical discharges to the Canal from industrial facilities along the east and west banks of the IHNC. However, the impacts may be at a de minimis condition with confirmation sampling.

11.0 Deviations

Not applicable.

12.0 Additional Services

No additional services were provided.

13.0 Signature(s) of Environmental Professional(s)

This Phase I - Environmental Site Assessment has been conducted by the following MMG environmental professional:

Dr. C. Paul Lo, Sc.D.
Senior Environmental Scientist

14.0 Qualifications of Environmental Professional

Dr. C. Paul Lo

Education

- Doctor of Science in Environmental Health Sciences, Tulane University, 1983.
- Master of Science in Environmental Health Sciences, Tulane University, 1978.
- Bachelor of Science in Public Health, National Taiwan University, 1976

License & Certification

- LDEQ UST Closure License (C-0593)
- Certified Environmental Inspector – Environmental Assessment Association

Experience

Dr. Lo has over twenty-five years of hands-on experience in the environmental field. He is an expert in dealing with abandoned waste sites, particularly site investigations and remediation. His project involvement includes CERCLA, RCRA, UST, RECAP and Brownfields projects.

Appendices

Appendix A Maps

Appendix B Photographs

Appendix C State and Federal Records

Appendix D USEPA and LDEQ Enforcement and Compliance History

Appendix E USGS Historic Topographic Maps

Appendix F Interview and Client Provided Records

Appendix G Overview or Post –Katrina Data for Zip Code 70126

Appendix H References

Appendix A: Maps

Appendix B: Subject Properties Photographs

Appendix C: State and Federal Records

Appendix D: USEPA and LDEQ Enforcement and Compliance History

Appendix E: USGS Historic Topographic Maps

Appendix F: Interview and Client Provided Records

Appendix G: Overview of Post-Katrina Data for Zip Code 70126

Appendix H: References

Environmental Data Resources, Inc. "The EDR Radius Map with GeoCheck", September 25, 2006

www.mapquest.com "Site Location Map": October 15, 2006

www.teraserver.microsoft.com "Aerial Photograph", October 15, 2006.

U.S. Geological Survey "Topographic Maps of "New Orleans West, LA"

www.epa.gov/echo "Enforcement and Compliance History Online ECHO", November, 26, 2006

R. Christopher Goodwin and Associates, Inc., "A Land Use History of Areas Adjacent to the Inner Harbor Navigation Canal Lock, New Orleans, November, 1992 "

NY and Associates, Inc. "New Florida Avenue Bridge Over The Inner Harbor Navigation Canal (IHNC) – Draft Environmental Assessment", June 2004

Arcadis, Inc., "Inner Harbor Navigation Canal Floodgates Conceptual Study", June 2006.

<http://www.deq.louisiana.gov/portal/portals/0/zipdata/data/70126.pdf> "Overview of Post-Katrina Data for Zip Code 70126", February, 2006,