

March 23, 2007

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U.S. Army Corps of Engineers, New Orleans District
Hurricane Protection Contracting Division
Attn: Ms. Lee Walker
P.O. Box 60267
New Orleans, LA

Subject: Contract No. DACA45-03-D-0032 (ERS Contract)
Submittal of Phase I Hazardous Toxic or Radioactive Waste Environmental Site Assessment
Report, Revision 2
Federal Project Number: LPV 106 Citrus Lakefront Levee, New Orleans, Louisiana

Dear Ms. Walker:

Enclosed is the second revision of the Phase I Hazardous Toxic or Radioactive Waste (HTRW) Environmental Site Assessment (ESA) Report for Federal Levee Reach LPV 106. We have included two hard copy reports and one electronic report.

This revision takes into account the comments provided by the USACE on the draft version of the report, provided to Earth Tech on February 26, 2007. These comments and our strategy for incorporating them into the updated document were discussed among Steve Johnson, Bill Bersson, and me on February 28, 2007 in New Orleans.

Please note that the Phase I HTRW ESA Report satisfies the SOW provided by USACE as follows.

USACE SOW TASK	PERTINENT SECTION IN REPORT
Task 1 Environmental Database Search	Section 5.0
Task 2 Site Inspection/Interviews	Sections 6.0 and 7.0
Task 3 Draft Report Preparation	Sections 6.0, 7.0, 8.0, 9.0, and 10.0
Task 4 Review Draft Phase I ESA Report	Not Applicable
Task 5 Final Report/Distribution and Formal Presentation	Not Applicable

Ms. Lee Walker
March 23, 2007
Page 2

Earth Tech, Inc. appreciates the opportunity to provide services to the U.S. Army Corps of Engineers. If you have any questions or require further information, please call me at (850) 862-5191.

Sincerely,



Alec Macbeth
Project Manager

Enclosure: Phase I HTRW ESA Report, Revision 2, LPV 106 LPV 106 Citrus Lakefront Levee

Phase I Hazardous Toxic or Radioactive Waste Environmental Site Assessment

Federal Levee Reach LPV 106 Citrus Lakefront Levee
New Orleans, Louisiana

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TABLE OF CONTENTS

Chapter	Page
1.0	SUMMARY..... 3
2.0	INTRODUCTION 6
2.1	Purpose 7
2.2	Detailed Scope of Services 8
2.3	Significant Assumptions..... 8
2.4	Limitations and Exceptions 8
2.5	Special Terms and Conditions 9
2.6	User Reliance..... 9
3.0	PROPERTY DESCRIPTION 10
3.1	Location and Legal Description..... 10
3.2	Property and Vicinity General Characteristics 10
3.3	Current Use of the Property 10
3.4	Detailed Property Description 10
3.5	Current Uses of Adjacent and Surrounding Parcels 11
4.0	USER PROVIDED INFORMATION 12
4.1	Title Records..... 12
4.2	Environmental Liens or Activity Use Limitations..... 12
4.3	Specialized Knowledge 12
4.4	Valuation Reduction for Environmental Issues..... 12
4.5	Owner, Property Manager, and Occupant Information 12
4.6	Reason for Performing the Phase I ESA..... 12
4.7	Other User Information..... 12
5.0	RECORDS REVIEW 13
5.1	Standard Environmental Record Sources 13
5.2	Additional Environmental Record Sources 17
5.3	Physical Setting Sources..... 17
5.4	Historical Use Information 17
5.4.1	Aerial Photographs 17
5.4.2	Historical Fire Insurance Maps..... 18
5.4.3	Historical Topographic Maps 18
5.4.4	Historical City Directories..... 18
5.4.5	Additional Historical Sources..... 18
5.5	Composite Historical Timeline..... 19
6.0	RECONNAISSANCE 20
6.1	Methodology and Limiting Conditions 20
6.2	General Property Setting 20
6.3	Exterior Observations 20
6.4	Interior Observations 24
7.0	INTERVIEWS..... 25
7.1	Interviews With Owners or Occupants..... 25
7.2	Interviews With Local Government Officials 25
7.3	Interviews With Others..... 26
8.0	FINDINGS..... 27

9.0	OPINIONS.....	29
10.0	CONCLUSIONS	30
11.0	DEVIATIONS/DATA GAPS.....	31
	11.1 Historical Data Gaps/Data Failure.....	31
	11.2 Other Deviations/Data Gaps	31
12.0	ADDITIONAL SERVICES.....	32
13.0	REFERENCES	33
14.0	SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONALS.....	34
15.0	QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS	34
16.0	APPENDICES	34

Appendix A	Scope of Services
Appendix B	Figures and Tables
Appendix C	Photographs
Appendix D	Historical Environmental Records
	Appendix D-1 Computer Database Search
	Appendix D-2 Historical Aerial Photographs
	Appendix D-3 Historical Fire Insurance Maps
	Appendix D-4 Historical Topographic Maps
Appendix E	Regulatory Records
Appendix F	Interview Documentation
Appendix G	Qualifications of Environmental Professionals

1.0 SUMMARY

This Phase I Hazardous Toxic or Radioactive Waste (HTRW) Environmental Site Assessment (ESA) report for the Federal Levee Reach LPV 106 Citrus Lakefront Levee in New Orleans, Louisiana (the “Property”) was prepared by Earth Tech, Inc. (the Contractor) for the U.S. Army Corps of Engineers (USACE)-New Orleans District Hurricane Protection Office (HPO). This first section is intended as a general overview of the report, including the findings and opinions.

The term Hazardous Toxic or Radioactive Waste (HTRW) has the meaning in USACE Engineering Report ER 1165-2.132, “Hazardous Toxic or Radioactive Waste (HTRW) Guidance for Civil Works Projects” (USACE, 1992).

Federal Levee Reach LPV 106 represents the formal Property, as defined in ASTM Standard E1527-05, for this Phase I HTRW ESA (ASTM, 2005). However, the USACE requested that the ESA include the entire area that falls within a 1,000-foot footprint extending from either side of the centerline of the levee. Therefore, the Contractor evaluated the residences, businesses, and open area within this footprint extending from the levee crown. The parcels located contiguous to the 1,000-foot footprint are considered adjoining parcels. The various environmental database search minimum distances, as required in the USACE Scope of Services ([Appendix A](#)) and ASTM Standard Practice E1527-05, extended from the edge of the 1,000-foot footprint. The search distances are discussed further in Section 5.1. Seventeen figures ([Figures B-1 through B-17](#)) that depict aspects of this report are included in [Appendix B](#).

The professional practices that the Contractor conducted to determine if any recognized environmental conditions (RECs) existed in connection with the Federal Levee Reach LPV 106 and its 1,000-foot footprint included visual inspections, interviews with selected individuals who might have knowledge of RECs, a review of readily available historical information such as aerial photographs and fire insurance maps and topographic maps, a drive-by inspection of accessible adjacent parcels, a review of selected environmental records that were made available to the Contractor, and review of a computer search of selected Federal and State environmental databases. These data were reviewed for indications of the presence of hazardous substances or petroleum products on the levee reach or nearby parcels from which those substances might migrate to the levee reach in other than vapor form.

In light of the objective of the environmental records review (to obtain and review records that would help identify RECs in connection with Federal Levee Reach LPV 106), in the professional opinion of the Contractor, no review of additional environmental record sources is required.

Federal Levee Reach LPV 106 Citrus Lakefront Levee is located along the northwest side of Hayne Boulevard in Orleans Parish, New Orleans, Louisiana. Lake Pontchartrain bounds the north side of the levee reach. The southern side of the reach consists mainly of single-family homes with some multi-family apartment buildings, schools, churches, and commercial operations.

The Contractor drove and observed from the roads all of the parcels (commercial and residential) within the 1,000-foot footprint of Federal Levee Reach LPV 106. No obvious signs of environmental contamination were observed, other than two transformers that are described below.

No obvious signs of major contamination were discerned during the inspection of Federal Levee Reach LPV 106. No known or suspected RECs were observed on the Federal Levee Reach LPV 106 itself.

For the land outside of LPV 106 but within the 1,000-foot footprint, the only definitive current recognized environmental conditions (RECs) are the two leaking or possibly leaking transformers described in Section 6.3 and shown on [Tables B-1 and B-2](#) and the Family Ranch Market ([Figure B-11](#)).

With regard to suspected RECs, the Contractor considers all of the sites that are registered as having current underground storage tanks (USTs) as representing some potential for an environmental impact. They are listed below as suspected RECs because, even though a hazardous substance or petroleum product is present, the Contractor has not identified a material threat of a release. Similarly, suspected RECs exist at several other facilities because of management of relatively high volume and movement of fuels or other hazardous materials (for example, Jahncke Pumping Station).

The Contractor has included the locations of the former registered USTs and historical leaking underground storage tanks (LUSTs) sites as historical suspected RECs, because of the potential that some residual soil or groundwater impacts may exist (even though the tank removal and closure was done correctly, and approved by the Louisiana Department of Environmental Quality [LDEQ]). Historical suspected RECs were also identified for sites where the former activities, by their nature, may have caused environmental degradation.

The effects of Hurricane Katrina throw a wild card in identifying RECs. Anecdotal discussions describe potentially hazardous material being dislodged and moved about during the storm. However, no unsecured containers of potentially hazardous material were observed. Information obtained during this Phase I HTRW ESA indicates that such unsecured containers were properly managed and transported off site.

As noted in Section 6.3, the Contractor did not identify information on the current quality of Lake Pontchartrain sediments adjacent to LPV 106. Although no obvious contamination was observed during the walkover, the sediment could have been impacted by Katrina storm activities and its aftermath.

The findings below are based upon the information obtained during this ESA, and discussed in the previous sections of this report. In accordance with ER 1165-2-132 Paragraph 7.c.(2) (USACE, 1992) the potential contaminants of concern (COCs) associated with each site are described or listed in parentheses.

Known or Suspect Recognized Environmental Conditions

Identified known RECs are identified at the following locations/facilities:

- The two leaking or possibly leaking transformers (PCBs or petroleum products) and
- Family Ranch Market (petroleum products). This site has a history of environmental concerns (soil and groundwater) and is currently being asked by LDEQ to perform additional assessment work.

These sites are shown on [Figure B-16](#). The leaking or possibly leaking transformers are also shown on [Figure B-17](#).

Suspected RECs are identified at the following facilities:

- Nazareth Inn I (petroleum products);
- Nazareth Inn II (petroleum products);
- Family Ranch Market (petroleum products); and
- Jahncke Pumping Station #10 (petroleum products).

The locations of these suspected RECs are shown on [Figure B-16](#).

Historical Known or Suspected Recognized Environmental Conditions

The only identified historical REC is at the current location of Family Ranch Market. This site is registered as a historical LUST, when the facility was operated as EZ Serve #2165 ([Appendices D-1 and E](#)).

The Contractor has included the following three sites as historical suspected RECs, because of the potential that some soil or groundwater impacts may exist from historical releases (if any):

- Exxon Station #50780 (petroleum products).
- The location of the lightning strike that caused a leak of transformer oil (PCBs or petroleum products).
- The Brownfields former Auto Repair/Vacant Lot (petroleum products).

The locations of these historical known and suspected RECs are shown on [Figure B-16](#).

Known or Suspect De Minimis Environmental Conditions

The two areas of 1-quart motor oil containers are considered to be de minimis environmental conditions at LPV 106.

Other Environmental Concerns

No other concern was identified.

Based upon all of the information obtained, the environmental professionals who conducted this ESA believe that the known or suspected RECs identified in Section 8.0 have not resulted in an impact to the soil or groundwater quality within the Federal Levee Reach LPV 106 itself. Therefore, the Contractor sees no need to collect soil or groundwater quality samples with regard the levee reconstruction efforts within the current levee footprint. The Contractor would suggest, however, vigilance during any invasive or ground breaking activities for physical signs of contamination. Also, if any of the soil will be moved offsite, the USACE is encouraged to follow appropriate characterization protocols.

If the USACE extends the footprint of the levee onto the location of a known REC, suspected REC, historical known REC, or historical suspected REC that is located within the extended footprint area, the Contractor recommends that the USACE consider collecting soil and/or groundwater quality samples at those locations. The locations where sampling should be considered are shown on [Figures B-16 and B-17](#).

At the request of USACE-HPO, the Contractor has performed a Phase I HTRW Environmental Site Assessment (ESA) in accordance with the Scope of Services attached in [Appendix A](#) and in general conformance with the scope and limitations of ASTM Standard Practice E1527-05 of the Federal Levee Reach LPV 106. Any exceptions to, or deletions from, the ASTM Standard Practice are described in Chapters 2.0 and 11.0 of this report. This assessment has revealed no evidence of “recognized environmental conditions” (as that term is defined in ASTM Standard Practice E1527-05) in connection with the levee reach itself, although RECs and suspected RECs (both current and historical) have been identified within the 1,000-foot footprint.

2.0 INTRODUCTION

The USACE is rehabilitating and improving the flood protection system of southeastern Louisiana. As part of this work, Federal Levee Reach LPV 106 Citrus Lakefront Levee would be enlarged with compacted fill to authorized grade. The footprint of this enlarged levee reportedly would not exceed the limits of the existing right-of-way at this time; however, if this levee is eventually brought to the 100-year flood elevation, the footprint would likely increase outside of the existing right-of-way, by no more than 1,000 feet on either side of the levee crown. The location and current extent of levee reach LPV 106 is shown in [Figures B-1 through B-3](#). (All figures referenced in this report are included in [Appendix B](#).)

This Phase I HTRW Environmental Site Assessment (ESA) report for the Federal Levee Reach LPV 106 Citrus Lakefront Levee in New Orleans, Louisiana (the “Property”) was prepared by the Contractor for USACE-New Orleans District Hurricane Protection Office (HPO), who is the “User” of this report, as that term is defined in ASTM Standard Practice E1527-05. In this report, the term User includes any legal counsel or other representative of the User.

As noted above, the Federal Levee Reach LPV 106 represents the formal Property, as defined in ASTM E1527-05 ([Photographs 1, 3, 4, 6, 7, 10, and 11](#) in [Appendix C](#)). However, the USACE requested that the ESA include the entire area that falls within a 1,000-foot footprint extending from either side of the centerline of the levee. The extent of this 1,000-foot footprint is shown on [Figures B-2 and B-3](#). Therefore, the Contractor evaluated the residences, businesses, and open area within this footprint extending from the levee crown. The parcels located contiguous to the 1,000-foot footprint are considered adjoining parcels. The various environmental database search radii, as required in the Scope of Services ([Appendix A](#)) and ASTM Standard Practice E1527-05, extended from the edge of the 1,000-foot footprint. The search radii are discussed further in Section 5.1.

The format of this report generally follows the recommendations in ASTM Standard Practice E1527-05. [Appendices A through G](#) include back up information and documentation for this report. The following definitions from that Standard are important for understanding this report. Terms in italics are defined in that Standard Practice.

- 1.1 *de minimis conditions* - conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.
- 3.2.39 *historical recognized environmental condition* - environmental condition which in the past would have been considered a *recognized environmental condition*, but which may or may not be considered a *recognized environmental condition* currently.
- 3.2.52 *material threat* - a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the *environmental professional*, is threatening and might result in impact to public health or the environment. An example might include an above ground storage tank system that contains a *hazardous substance* and which shows evidence of damage. The damage would represent a *material threat* if it is deemed serious enough that it may cause or contribute to tank integrity failure with a release of contents to the environment.
- 3.2.74 *recognized environmental conditions* - the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release,

a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not represent a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not *recognized environmental conditions*.

The term "recognized environmental condition" is not used in this Phase I HTRW ESA report in complete accordance with the ASTM standard, which notes that a recognized environmental condition is associated directly with the Property, itself. The Property in this case is the Federal Levee Reach LPV 106 and does not include the area encompassed by the 1,000-foot footprint. After discussions with the USACE and senior technical personnel employed with the Contractor, the term "recognized environmental condition" is applied, where warranted, to all sites within the 1,000-foot footprint even though they may not affect the Federal Levee Reach LPV 106 itself.

The category "suspected recognized environmental condition" is also used in this report. Suspected recognized environmental conditions are those sites or parcels where there is a realistic (but not *likely*) potential that the site has been (or will be) impacted. Suspected RECs show no definitive evidence (visual, documentation) that indicate an existing release, a past release, or a material threat of a release of hazardous substances or petroleum products into structures, the ground, groundwater, or surface water. Rather, commonly, more information (for example sampling and analytical data) is needed to determine whether the potential condition is a REC. In this report suspected RECs are those that manage a high volume of petroleum products or hazardous substances (for example, registered USTs) or that historically housed a business that is commonly associated with environmental contamination (for example automotive repair).

This report is intended for use only as a complete document. It is based upon the Scope of Services ([Appendix A](#)) and is subject to the Limitations and Exceptions and other restrictions, defined herein. It has been prepared for the exclusive use of the USACE. No other person or organization is entitled to rely upon any part of it without the prior written consent of the Contractor. The USACE may release or authorize the release of all or part(s) of this report to third parties. However, if any third party uses or relies on this report without the express written permission of the Contractor, such third party agrees that it shall have no legal recourse against the Contractor or its parent or subsidiaries, and shall indemnify and defend them from and against all claims arising out of or in conjunction with such use or reliance.

2.1 Purpose

The Phase I HTRW ESA was performed to investigate the potential presence of HTRW in the vicinity of the proposed construction of Federal Levee Reach LPV 106 Citrus Lakefront Levee, to ensure that suitable and safe fill materials would be utilized for levee construction. The extents of LPV 106 and the 1,000-foot footprint described above are shown on [Figures B-2](#) and [B-3](#). This Phase I HTRW ESA was conducted in general compliance with the following documents to the extent feasible given the nature of the project:

- ASTM Standard E1527-05, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM, 2005);

- USACE Engineering Report ER 1165-2-132, "Hazardous, Toxic and Radioactive Waste Guidance for Civil Works Projects" (USACE, 1992); and
- USACE Engineering Report ER 405-1-12, *The Real Estate Handbook* (USACE, 2000).

This report suggests general future investigative activities, but does not include costs and scopes of work for the investigative work, as noted in the USACE ER 1165-2-132 (USACE, 1992).

The focus of the ESA was to review existing and past historical information regarding the levee reach LPV 106, the 1,000-foot footprint, and the adjoining parcels. The ESA documents the current and historical uses of the assessment areas to determine the potential presence of any HTRW.

2.2 Detailed Scope of Services

The detailed Scope of Services provided by the USACE for this ESA, as well as the Contractor's proposal, are in [Appendix A](#). The standard professional practices that the Contractor conducted to determine if any RECs existed in connection with the Federal Levee Reach LPV 106 included, among other things, a visual inspection of the area, interviews with selected individuals who might have knowledge of its RECs, a review of readily available historical information such as aerial photographs and fire insurance maps that depict it, a drive-by inspection of accessible adjacent parcels, a review of selected environmental records that were made available to the Contractor, and a review of a computer search of selected Federal and State environmental databases for indications of the presence of hazardous substances or petroleum products on Federal Levee Reach LPV 106 or on nearby parcels from which those substances might migrate to the levee in other than vapor form.

In general, the Scope of Services has been completed in accordance with the scope and limitations of ASTM Standard Practice E1527-05, with the provision that any deviations from the ASTM Standard are discussed in Section 11.0.

2.3 Significant Assumptions

In preparing this report, the Contractor has relied upon certain verbal information and representations provided by government employees and others, information and documents provided by the owners and/or operators of nearby businesses, and a computer search of government databases by a firm whose business is to provide that service. Except as discussed, the Contractor relied upon that information and has not attempted to independently verify its accuracy or completeness. The Contractor has not recognized any inconsistencies or omissions that might call into question the validity of any of the information obtained. To the extent that the conclusions in this report are based in whole or in part on such information, they are contingent on its validity. The Contractor assumes no responsibility for any consequence arising from any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to the Contractor.

2.4 Limitation and Exceptions

This report is limited to representations of identified RECs on Federal Levee Reach LPV 106, the 1,000-foot footprint, and conditions of concern on adjoining parcels as they existed at the time of this Phase I HTRW ESA, and of the conclusions drawn based upon the information obtained and assumptions

made during the assessment process. This Phase I HTRW ESA was restricted to the Scope of Services as defined herein. No representations or warranties are made concerning the nature or quality of the air, soil, water, building materials, or any other substance on or adjacent to the Property (including the potential for any substance to migrate into a structure), other than the visual observations and the representations by others as stated in this report. By definition, a Phase I HTRW ESA is not intended to be a definitive investigation of existing or potential adverse environmental impacts, and thus it is possible that such an impact exists on Federal Levee Reach LPV 106 and the 1,000-foot footprint, but was not identified during the ESA. Conclusions in this report represent professional judgments based upon the information evaluated during the course of the assessment, not scientific certainties.

Within the limitations of the agreed-upon Scope of Services, this ESA has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using the degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, express or implied, is made.

2.5 Special Terms and Conditions

There were no special terms and conditions between the User and the Contractor, except as specified in the Scope of Services.

2.6 User Reliance

This report is intended for use only as the complete document. It is based upon the Scope of Services, and is subject to the Limitations and Exceptions and other restrictions, defined herein. It has been prepared for the exclusive use of USACE. No other person or organization is entitled to rely upon any part of it without the prior written consent of the Contractor. The USACE may release or authorize the release of all or part(s) of this report to third parties. However, if any third party uses or relies on this report without the express written permission of the Contractor, such third party agrees that it shall have no legal recourse against the Contractor or its parent or subsidiaries, and shall indemnify and defend them from and against all claims arising out of or in conjunction with such use or reliance.

3.0 PROPERTY DESCRIPTION

3.1 Location and Legal Description

The Property is Federal Levee Reach LPV 106 Citrus Lakefront Levee located along the northwest side of Hayne Boulevard in New Orleans, Louisiana. Its southwestern terminus is located just across from the intersection of Hayne Boulevard and Edgelake Court. It can be recognized by the end of the concrete-capped earthen levee (which represents LPV 105) and the beginning of an earthen levee without the concrete cap (LPV 106). The southwestern terminus of Federal Levee Reach 106 is at latitude 30.04038 degrees and longitude 90.0049 degrees. The levee reach is approximately 4.3 miles. Its northeastern terminus is at the juncture of Hayne Boulevard and Paris Road ([Photographs 10 and 11 in Appendix C](#)), at a location know as Little Woods on some maps. This is located at latitude 30.07581 and longitude 89.9439. The levee reach can be accessed from Interstate 10 by taking exit number 240A and traveling north on Downman Road approximately 1.9 miles to Hayne Boulevard. Turn right onto Hayne Boulevard and travel approximately 1.5 miles to the southwestern terminus of the levee reach. The location of LPV 106 is depicted on [Figures B-2 and B-3 in Appendix B](#). Additional description of the physical characteristics of levee reach LPV 106 is presented in Section 3.4.

3.2 Property and Vicinity General Characteristics

Federal Levee Reach LPV 106 is an earthen levee whose top maintains an elevation of approximately 15 feet above mean sea level (MSL; USACE 1984). The reach extends approximately 4.3 miles. The levee reach is interrupted (for approximately 0.3 miles) in its northeastern sector by Federal Levee Reach 107, which is described under a separate ESA report by the Contractor (Earth Tech, 2007). The area encompassing LPV 106 and the 1,000-foot footprint is approximately 910 acres. Lake Pontchartrain is northerly adjacent to the levee reach. The Norfolk Southern rail line parallels the levee on its north side ([Photographs 1, 3, 6, and 7 in Appendix C](#)). Hayne Boulevard is present adjacently to the south of Levee Reach LPV 106 and runs parallel to the levee. The parcels to the south of Hayne Boulevard contain primarily residential with some light commercial occupants. The presence of individual residences and multi-family residences (apartments) becomes more prominent to the northeast.

According to the National Wetlands Inventory (NWI), subtidal estuarine wetlands exist within the boundaries of Lake Pontchartrain and the connecting canals. Intertidal estuarine wetlands are generally present along the shoreline of Lake Pontchartrain.

3.3 Current Use of the Property

According to information obtained from the Orleans Levee District (Gillen, 2006; USACE, 1984), parts of Levee Reach LPV 106 were constructed during the middle 1900s. The Citrus Lakefront Levee of LPV 106 was enlarged around 1984. Since that time, the levee reach has been used for flood control to protect the neighborhoods and businesses from the waters of Lake Pontchartrain.

3.4 Detailed Property Description

Levee Reach LPV 106 is an earthen structure approximately 15 feet high above mean sea level. Its southern flank is gently sloped and grassed. The top of the levee is flat and is capable of supporting

one-way vehicle traffic (Photographs 1, 3, 6, 7, and 11 in Appendix C). The northern flank grades down to the Norfolk Southern Railbed which is at a slightly lower elevation than the crown of the levee and rests on a bed of gravel.

No parts of the levee floodwalls or levees along LPV 106 are fenced or otherwise restricted from access by the public. At intermittent locations concrete stairs are present leading up to the crown of the levee (Photograph 4 in Appendix C). The levee crown is used as a pathway for pedestrians and joggers.

3.5 Current Uses of Adjacent and Surrounding Parcels

The Property is bounded on the northwest by Lake Pontchartrain, on the southwest and northeast by continuation of the levee system (Federal Levee Reaches LPV 105 and 108, respectively), and on the southeast by residential and light commercial facilities (Figure B-2). The area south of Hayne Boulevard consists predominantly of single family residences. These homes are mainly on approximately 0.25-acre lots. Some larger lots are located near the northeastern part of the 1,000-foot footprint. Several apartment complexes are also present, as well as some schools and churches. The commercial businesses in this area are mainly located along Hayne Boulevard. The land use on the parcels located adjoining to the 1,000-foot footprint is similar to those within the footprint. Many of the commercial and residential parcels described in this report are damaged and/or unused as a result of the effects of Hurricane Katrina.

Historical usages of those parcels within the 1,000-foot footprint that may have involved the use or release of hazardous substances or petroleum products in significant quantities (current/historical LUSTs or current/former use of USTs) include former location of Exxon Co. USA #50780, Nazareth Inn I, Nazareth Inn II, and Family Ranch Market (formerly E-Z Serve #2165; Appendix D-1). The locations of these parcels are shown on Figures B-7 and B-10.

Lincoln Beach is located within the 1,000-foot footprint of LPV 106 (Figure B-2). This facility operated as an amusement park between 1954 and 1964. Environmental work has been performed in recent years to address PCB-impacted soils (Materials Management Group [MMG], November 5, 20003; MMG, May 3, 2004; MMG, October 15, 2004). Currently, the facility does not represent a source of environmental contamination, but is identified as an historical REC (Blanchard, 2007; Earth Tech, 2007). This site is discussed in much more detail in the associated Phase I HTRW ESA Report for Federal Levee Reach LPV 107 (Earth Tech, 2007). It is discussed no further in this Phase I HTRW ESA Report for LPV 106.

4.0 USER PROVIDED INFORMATION

4.1 Title Records

In accordance with the SOW ([Appendix A](#)), a title record search was not included in this Phase I HTRW ESA.

4.2 Environmental Liens or Activity Use Limitations

Representatives of the User reported no environmental liens, activity use limitations, or comparable encumbrances upon the Levee Reach LPV 106 or parcels within the 1,000-foot footprint. The environmental database search did include a search for any environmental liens imposed by the LDEQ ([Appendix D-1](#)).

4.3 Specialized Knowledge

The User provided the Contractor with no specialized knowledge, such as previous assessments, soil or groundwater quality evaluations, or other investigations pertaining to the environmental conditions of the Federal Levee Reach 106 or the 1,000-foot footprint. The Contractor pursued this type of information through field visits, interviews, and evaluating other databases (e.g., those provided by the LDEQ).

4.4 Valuation Reduction for Environmental Issues

The User provided the Contractor no information regarding a reduction in the value of the Federal Levee Reach LPV 106 due to environmental issues.

4.5 Owner, Property Manager, and Occupant Information

According to the Orleans Levee District, Federal Levee Reach 106 was constructed by the USACE, and it is currently maintained by the Orleans Levee District (Gillen, 2006; [Appendix F](#)).

4.6 Reason for Performing the Phase I ESA

The Phase I ESA that resulted in this report was performed in contemplation of rehabilitating and improving the flood protection system of southeast Louisiana. Federal Levee Reach LPV 106 would reportedly be enlarged with compacted fill to authorized grade. The footprint of this enlarged levee would not exceed the limits of the existing right-of-way at this time; however, if this levee is eventually brought to the 100-year flood elevation, the footprint would likely increase outside of the existing right-of-way, by not more than 1000 feet on either side of the levee crown.

4.7 Other User Information

The User provided no other information material to this Phase I HTRW ESA.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

Government databases that identify sites of environmental concern were reviewed via a computerized search conducted by Environmental Data Resources, Inc. (EDR), a commercial database service, to determine if Federal Levee Reach LPV 106 was listed or if any listed sites were nearby. EDR provides a valuable service for firms conducting Phase I HTRW ESAs, because they are specialized in the environmental database search process. They provide a comprehensive search of numerous databases and a useable report in an efficient manner. EDR has represented that its procedures conform to, or exceed, the requirements of ASTM Standard Practice E1527-05. A list of all of the government records searched and the dates of the data obtained are shown in Section 5 (last section) of the EDR Report ([Appendix D-1](#)).

The EDR report includes information about sites within one mile of the 1,000-foot footprint. Some sites in the databases do not have complete address information. In other cases, the algorithms used by the government to map the addresses do not recognize certain street addresses. Both of these types of sites are referred to as Orphan sites. They are in the vicinity of the Property, but not precisely locatable from the address information in the databases. The Contractor evaluated the information available for each Orphan site, and determined that none have the possibility of being within the applicable minimum search distances (based on its associated database) of the 1,000-foot footprint.

Federal databases searched included, but were not limited to: NPL (National Priority List), PROPOSED NPL, DELISTED NPL, NPL Recovery (Federal Superfund Liens), CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System), CERC-NFRAP (CERCLIS No Further Remedial Action Planned), CORRACTS (Corrective Action Reports under RCRA), RCRA (Resource Conservation and Recovery Act Information), ERNS (Emergency Response Notification System), HMIRS (Hazardous Materials Information Reporting System), US BROWNFIELDS, CONSENT (Superfund/CERCLA Consent Decrees), ROD (Records of Decision for NPL sites), FINDS (Facility Index System), PADS (PCB Activity Database System), RAATS (RCRA Administrative Tracking System), TRIS (Toxic Chemical Release Inventory System), and TSCA (Toxic Substances Control Act).

State databases searched included, but were not limited to: LUST (Leaking Underground Storage Tanks), UST (Registered Underground Storage Tanks), SHWS (State Hazardous Waste Sites), SWF/LF (Solid Waste Disposal Facilities), SPILLS (Spills List), AST (Registered Aboveground Storage Tanks), Drycleaners, AULs (Activity and Use Limitations), and VRPS (Voluntary Remediation Program Sites).

Additional databases searched included Tribal Records for Indian Reservations, Indian USTs, and Indian LUSTs, as well as Manufactured Gas Plants.

As described above, the EDR Report presents all of the identified sites that fall within a 1-mile radius of the 1,000-foot footprint ([Appendix D-1](#)). The Contractor evaluated this information using the approximate minimum search distances for the researched databases in accordance with ASTM Standard Practice

E1527-05 and USACE's Scope of Services ([Appendix A](#)). The databases searched and associated search distances included the following (all noted minimum search distances are based on the edge of the 1,000-foot footprint):

- The National Priorities List (NPL; 1-mile radius);
- Delisted NPL (0.5-mile radius);
- The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS; 0.5-mile radius);
- The Comprehensive Environmental Response, Compensation, and Liability Information System No Further Remedial Action Planned Database (CERCLIS NFRAP; 0.5-mile radius);
- The Solid Waste Landfills/Facilities Database (0.5-mile radius);
- The Emergency Response Notification System (ERNS) and Hazardous Materials Incident Reporting System (0.25-mile radius);
- The Resource Conservation and Recovery Information System (RCRAInfo; 1-mile radius for treatment, storage or disposal (TSD) facilities and 0.25-mile radius for generators);
- Any state listing of registered and leaking underground storage tanks (0.25 and 0.5- mile radii, respectively);
- The Louisiana Inactive and Abandoned Sites List (1-mile radius); and,
- Louisiana Department of Natural Resources Oil and Gas Wells Database (1-mile radius).

No sites on the Federal Levee Reach LPV 106 itself, within the 1,000-foot footprint, or within the appropriate minimum search radii were identified for the following databases:

Federal Records

- National Priority List (NPL);
- Proposed NPL;
- Delisted NPL;
- Federal Superfund Liens (NPL Recovery);
- Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS);
- CERCLIS NFRAP;
- RCRA Corrective Action (CORRACTS);
- RCRIS Hazardous Waste TSD Facility;
- RCRIS Hazardous Waste LQG Facility;
- Hazardous Materials Information Reporting System (HMIRS);
- Engineering Controls Sites List (U.S. Engineering Controls);
- Sites with Institutional Controls (U.S. Inst. Control);
- Department of Defense Sites (DOD);
- Formerly Used Defense Sites (FUDS);
- CERCLA Consent Decrees (Consent);
- Records of Decision (ROD);
- Uranium Mill Tailings Sites (UMTRA);
- Open Dump Inventory (ODI);
- Toxic Substances Control Act (TSCA);
- FIFRA/TSCA Tracking System;
- Section 7 Tracking Systems (SSTS);

- Integrated Compliance Information System (ICIS);
- PCB Activity Database System (PADS);
- Material Licensing Tracking System (MLTS);
- RCRA Administrative Action Tracking System (RAATS);
- Toxic Chemical Release Inventory System (TRIS); and
- Mines.

State and Local Records

- LDEQ-Approved Debris Sites (DEBRIS);
- Recycling Directory (SWRCY);
- Environmental Liens (LIENS); and Voluntary Remediation Program Sites
- Potential and Confirmed Sites List (SWHS);
- Solid Waste Facilities/Landfill Sites (SWF/LF);
- Spills and/or Releases (SPILLS);
- Activity and Use Limitations (AUL); and
- Drycleaner Facility Listing.

Tribal Records

- Indian Reservations (Indian Reserv.);
- Leaking Underground Storage Tanks on Indian Land (Indian LUST);
- Underground Storage Tanks on Indian Land (Indian UST).

In addition, no former manufactured gas plants were identified within the search area.

The remainder of Section 5.1 describes the sites identified within the associated databases.

RCRIS Hazardous Waste Generator Sites

Two sites located within the 1,000-foot footprint of LPV 106 filed RCRA notifications as Small Quantity Generators (SQGs) of hazardous waste: former Time Saver Store 165 (currently Family Ranch Market) and Exxon Co. USA #50780 (Figures B-7 and B-10). Both of these sites are located south and topographically downgradient of the levee.

One SQG site was identified within one-fourth mile of the 1,000-foot footprint: Chevron USA Inc. 165730 (7401 Read Boulevard at intersection with Morrison Road), located topographically downgradient of the levee.

No violations have been identified for any of these SQG sites (Appendix D-1). The potential impact of the identified nearby hazardous waste generators upon Federal Levee Reach LPV 106 itself is considered to be low because the sites are located topographically downgradient of the levee and no violations have been issued.

Leaking UST Sites

No current or historical LUST sites were identified on the Federal Levee Reach LPV 106, itself.

One current LUST site was identified as being located within one-half mile of the Federal Levee Reach LPV 106 or the 1,000-foot footprint. This site is the Family Ranch Market located at 11950 Hayne Boulevard ([Photograph 5](#) in [Appendix C](#); [Figure B-10](#); [Appendix D-1](#)). This facility contains three USTs (as described more fully below under the discussion on registered USTs). The identification of the facility as a current LUST appears to be a mistake. According to LDEQ Incident Report 89741, the designation of the Plus UST as leaking in the spring of 2006 was incorrect. Subsequent leak tests performed indicated that the UST and associated piping were tight. LDEQ noted that the "subject failure may have in fact resulted from problems in reporting data and incorrect data entries". The noted incident report and accompanying documentation are presented in [Appendix E](#).

One historical LUST site was identified as being located within the 1,000-foot footprint. This is EZ Serve #2165 which was formerly at the location of the Family Ranch Market.

No current or historical LUST sites were identified as being located within one-half mile of the 1,000-foot footprint.

The potential for the LUST and historical LUST site to have adversely impacted soil or groundwater on the Federal Levee Reach 106 itself is considered to be moderate. The site is topographically downgradient from the levee, but it is approximately 200 feet from the structure and has a history of releases.

Registered UST Sites

No registered USTs were identified on the Federal Levee Reach LPV 106.

Four sites with registered USTs are identified as being within the 1,000-foot footprint. All of these sites are located to the south and topographically downgradient of the levee reach. These sites are Nazareth Inn I, Nazareth Inn II, Exxon Co. USA #50780, and Family Ranch Market ([Figures B-7](#) and [B-11](#); [Appendix D-1](#)). According to the EDR report, Nazareth Inns I and II have a 500-gallon and a 300-gallon UST, respectively, in place. These tanks were installed in 1985. The inns are currently not operating because of the effects of Hurricane Katrina. The two USTs (one 8,000 gallons, and the other 10,000 gallons) at the Exxon facility were installed in 1978 and removed in 1992. Currently, a residence is located at the site. The Family Ranch Market contains three active 10,000-gallon USTs that were installed in 1982.

In the event of a release, the potential for these sites with registered USTs to have a significant adverse impact on soil or groundwater on the levee is considered to be low to moderate. The sites are topographically downgradient from the levee, but they are within hundreds of feet from the structure.

No registered UST sites were identified outside of the 1,000-foot footprint, but within the one-fourth mile search radius ([Appendix D-1](#)).

Other Lists of Sites of Concern

An auto Repair – vacant lot, located at 11222 Hayne Boulevard, is listed as a brownfields site. The facility status is prospective. The parcel is currently grown over and unused (as described in Section 6.3).

An Emergency Response Notification System (ERNS) site was identified at 7900 Berg Avenue. According to the EDR Report, in 1994 lightning struck a PCB-containing transformer and caused an unknown quantity of transformer fluids to leak onto the grass and sidewalk ([Figure B-10](#); [Appendix D-1](#)).

No additional concern was identified by a review of the database search report. The Property is not on any of the other lists searched. No other located site is identified as being near the Property and in a location that is, or might be, upgradient from it, and represent a realistic potential concern with respect to its environmental condition. Also, no other Orphan site was determined to actually be located within an applicable search radius of the Property and potentially upgradient of it.

5.2 Additional Environmental Record Sources

In light of the objective of the records review (to obtain and review records that would help identify RECs in connection with Federal Levee Reach LPV 106), in the professional opinion of the Contractor, no review of additional environmental record sources was required.

5.3 Physical Setting

A Groundwater Technology, Inc. (GTI) report (1989) characterized the shallow soils at a nearby facility (gas station located at corner of Downman Road and Hayne Boulevard, southwest of Levee Reach LPV 106). The soils at that particular location consist of dark gray silty sands and silty clays to a depth of 16.5 feet below land surface (bls). These soils may represent fill material. According to geologic literature, the area of the ESA is underlain by soils deposited during a Mississippi deltaic sequence (Saucier, 1994). This sequence includes an interlayering of material of varying grain size (for example, clays to sands) and composition (for example, quartz, clay minerals, and organic matter) that affects the soil's hydraulic conductivity.

The shallow-most aquifer underlying the study area is the Alluvial Aquifer. This aquifer ranges from 20 to 500 feet thick and exhibits hydraulic conductivities ranging from 10 to 530 feet per day. The groundwater in the aquifer is hard to very hard and has chloride concentrations from 7 to 300 milligrams per liter (mg/L) and dissolved solids of 300 to 1,100 mg/L. The groundwater within this aquifer is unsuitable for potable uses (Boniol and others, 1989).

Depth to groundwater at the gas station was measured from approximately 2 to 3 feet bls (GTI, 1989). This report also documents groundwater flow in the local area to be northward. However, geologic literature, the topography, and the prevailing southerly dip of the aquifers underlying the area (Shaw Coastal, 2004) indicate that, on a broader scale, the groundwater flow is to the south, away from Lake Pontchartrain. Therefore, for the purpose of interpreting the results of this ESA, the Contractor considers the groundwater flow direction to be southerly at a very low hydraulic gradient underneath the study area. The shallow groundwater is interpreted to be minimally influenced by tidal effects (Van Biersel, 2007)

5.4 Historical Use Information

5.4.1 Aerial Photographs

Aerial photographs were reviewed for the years 1952, 1972, and 1985. These aerial photographs are in [Appendix D-2](#). Recent aerial photographs from 2006 were also reviewed. These photographs represent

the base maps for [Figures B-2](#), and [B-4](#) through [B-17](#). The composite historical timeline in Section 5.5 contains a summary of the observations made from those aerial photographs and other historical sources.

5.4.2 Historical Fire Insurance Maps

Historical fire insurance maps ([Appendix D-3](#)) were reviewed from the years: 1979 and 1994. The composite historical timeline in Section 5.5 contains summaries of the observations made from those fire insurance maps.

5.4.3 Historical Topographic Maps

Historical topographic maps were obtained for the Federal Levee Reach LPV 106 for 1951, 1965, 1972, 1979, 1994, and 1998. These maps are shown in [Appendix D-4](#). The composite historical timeline in Section 5.5 contains a summary of the observations made from those historical topographic maps and other historical sources.

5.4.4 Historical City Directories

The Contractor obtained historical Polk City Directories at the New Orleans Public Library. The years 1956, 1964, 1979, 1985, 1991, and 2002 were reviewed. [Table B-4](#) summarizes the businesses identified in these directories that were located within the 1,000-foot footprint. A complete set of the copied material obtained from the library is on file at the Contractor's Fort Walton Beach office and can be obtained upon request.

On the basis of the review of the historical city directories, the following businesses that used to be present within the 1,000-foot footprint and warrant note are as follows:

- U-Haul (current occupant not determined) at 7911 Bullard Avenue;
- Alert Transportation Company (current occupant not determined) at 7921 Bullard Avenue;
- Cast Net Food Store (currently Henry's Place) at 10826 Hayne Boulevard; and
- Time Saver Food Store (anticipated to be currently Family Ranch Market at 11940 Hayne Boulevard.

The businesses noted above do not include those already discussed in this report. The pertinent years of operation for these facilities are shown on [Table B-4](#).

5.4.5 Additional Historical Sources

The Contractor pursued public record information available on the Louisiana Department of Environmental Quality's (LDEQ's) Electronic Document Management System (EDMS) for the sites listed on the EDR Report to obtain more background information.

5.5 Composite Historical Timeline

The following discussion pertains to the levee reach, the land within the 1,000-foot footprint and the land adjacent to the footprint.

Year	Source	Discussion
Early 1950's	Aerial Photograph (1952-A) and 1951 topographic map, Appendices D-2 and D-3	Residences and building just beginning to fill in south of Hayne Boulevard and north of Morrison Road. Majority of the area is undeveloped land. No definitive indications of commercial agricultural activities.
1965	(various)	Hurricane Betsy.
1972	Aerial Photograph (1972-B), Appendix D-2	Building that currently houses Family Ranch Market not constructed. Nazareth Inns not present.
1972	Aerial Photograph (1972-B and C), Appendix D-2	Land east of Jahncke Canal relatively undeveloped; although, neighborhood at northern corner of Hayne Boulevard is established.
1972	Aerial Photograph (1972-B and C), Appendix D-2 ; interview with Kenny Smith (Appendix F)	Citrus and Jahncke Pumping Stations begin operations in early 1970s.
Circa 1984	USACE (1984)	Enlargement of Federal Levee Reach LPV 106
1985	Aerial Photograph (1985 C and D), Appendix D-2	Residences and businesses basically filled out and established south of Hayne Boulevard.
2005	(various)	Hurricane Katrina

Historical Summary:

A levee system has been in place along the southern shoreline of Lake Pontchartrain since middle part of the 20th century. Major renovation and expansion of the Levee Reach LPV 106 was performed around 1984 (USACE, 1984).

On the basis of the historical aerial photographs and historical topographic maps, in the early 1950s most of the land on the south side of Hayne Boulevard near LPV 106 was undeveloped. On the basis of observations of the current conditions inland from Federal Levee Reach LPV 106, as well as the historical fire insurance maps, some of this terrain was used to keep horses. This Phase I HTRW ESA has identified no evidence of large scale agriculture use within the 1,000-foot footprint of Federal Levee Reach LPV 106.

During the early 1970s the residential neighborhoods were beginning to be established, and by 1985 the current infrastructure was generally in place.

6.0 RECONNAISSANCE

6.1 Methodology and Limiting Conditions

Mr. Terry Konkin and Mr. Alec Macbeth conducted a visual reconnaissance of accessible parts of the Levee Reach LPV 106, the 1,000-foot footprint, and the adjacent parcels on November 29, 2006 through December 4, 2006. One hundred percent of the Levee Reach was walked. Similarly, the residential neighborhoods were driven, although no interviews or site visits were performed. All of the observed transformers were mapped and documented. [Table B-1](#), in [Appendix B](#) identifies each of the transformers identified. The locations of two identified leaking or possibly transformers are shown on [Figures B-13](#) and [B-14](#) and summarized in [Table B-2](#).

Attempts were made to contact owners and request permission to access all of the commercial and light industrial facilities. If no permission was obtained, a "fence line" reconnaissance was performed on appropriate businesses. Pertinent environmentally related observations and findings are described in the following sections.

6.2 General Property Setting

The height of the existing levees along LPV 106 is an average of 15 feet above mean sea level (MSL). Lake Pontchartrain represents sea level. The terrain of the 1,000-foot footprint south of the levee is fairly constant with a very gentle slope southward. The ground elevation of the 1,000-foot footprint decreases inland (southward) from 0 feet above MSL at Hayne Boulevard to approximately 5 feet below MSL south of Curran Boulevard ([Figure B-3](#)).

The nearest downgradient bodies of surface water are four ponds located just south of Morrison Road, and the Citrus and Jahnke Canals. Except for the northern part of the canals, these water bodies are located just south of the 1,000-foot footprint. On the basis of this surface topography, Lake Pontchartrain is considered upgradient of LPV 106; groundwater is interpreted to move southerly, albeit slowly under a low hydraulic gradient.

Shallow groundwater is expected to be encountered within 5 feet below grade, based upon surface topography and GTI (1989).

The inferred direction of shallow groundwater flow in the area, based upon the reconnaissance and an examination of the topographic map, is to the south, although buildings and other conditions on the levee and nearby parcels, and sewer lines and/or other buried utility lines, may be significantly affecting the local flow pattern. Based upon the inferences regarding hydraulic conductivity and the local hydraulic gradient, shallow groundwater would be expected to move at a slow rate.

6.3 Exterior Observations

The following discussion includes descriptions of facilities associated with this ESA that represented some potential of environmental risk. Businesses that represented little or no environmental risk (on basis of site reconnaissance and the historical environmental records) are not mentioned in this section.

During the site reconnaissance, the effects of Hurricane Katrina were commonly observed. The physical effects included trash, construction debris, and damaged structures (homes, apartment buildings, and commercial buildings). No obvious signs of environmental contamination directly attributable to the hurricane were observed. It appears, on the basis of anecdotal information, however, that the hurricane dislodged some or many containers of potentially hazardous material. Different sources of information (for example, anecdotal information and LDEQ data) support the conclusion that these containers were appropriately managed and disposed of by government personnel (mainly EPA contractors). The Contractor observed no such "unsecured" containers within the study area of LPV 106.

No signs of major contamination were discerned during the inspection of Federal Levee Reach LPV 106. However, some 1-quart motor oil containers were identified at one location along the levee reach ([Photograph 2](#) in [Appendix C](#); [Figure B-5](#)). The southern shoreline of Lake Pontchartrain paralleling Levee Reach LPV 106 was also inspected. No signs of significant contamination, including impacted sediment, were observed. Similarly, The Contractor did not identify any literature or other sources of information indicating that the Lake Pontchartrain sediments near the southern shoreline along Federal Levee Reach LPV 106 are currently impacted.

A railroad parallels the northern part of Federal Levee Reach LPV 106. This railroad is owned by Norfolk Southern, who has indicated no environmental concerns along this reach.

The remainder of Section 6.3 describes only the facilities within the 1,000-foot footprint that, on the basis of current or past operations, have a higher potential of an environmental condition than other facilities not described in this section. The Contractor visited facilities not mentioned in this section, and several are listed in the EDR Report. Specific information on who the Contractor interviewed is presented in Section 7.0. The facilities listed on the EDR Report are described in Section 5.0.

Except for Lincoln Beach, no businesses or structures were identified on the north side of Levee Reach LPV 106 that might represent a potential for environmental contamination. The former location of Lincoln Beach is located in the northeast part of LPV 106 and is described in another Phase I HTRW ESA Report (Earth Tech, 2007). The 1985 historical aerial maps ([Appendix D-2](#)) and the 1979 and 1994 historical fire insurance maps ([Appendix D-3](#)) show many wooden private piers extending out on the southern shoreline of Lake Pontchartrain. Some of these piers had boathouses. None of these structures survived Hurricane Katrina intact, and the Contractor observed only relict pilings.

The following paragraphs describe noteworthy businesses located south of the Federal Levee Reach LPV 106 and within the 1,000-foot footprint. Six newly constructed light office buildings are present at the southwestern corner of Crowder and Hayne Boulevards. Only one building currently houses an operating business, Allergy, Asthma, and Sinusitis Specialists (8030 Crowder Boulevard). The Sprint New Orleans East Communications facility is located just to the south of these buildings. The 1994 and 1979 Historical Fire Insurance Maps indicate that this land used to be a horse riding area. An operating horse stock farm, which includes a horse track, is located just west of these new buildings. Jaeger's Feed and Horse Supply is present nearby on Edgelake Court. Edgelake Preparatory Academy, located south of the Sprint facility, has been damaged by Hurricane Katrina and is not operating. Castlake Private School is present on the northeast corner of Crowder and Hayne Boulevards. According to the school's principal, they do not have any petroleum products or hazardous substances on site. All of the structures described in this paragraph are shown on [Figure B-5](#).

A 300-foot by 600-foot cleared lot is present on the southwest corner of Burke Avenue and Hayne Boulevard ([Photograph 1](#) in [Appendix C](#); [Figure B-6](#)). It contains grass-covered piles of dirt, wooden footers, a skeleton of a building, and some staged piping, casing, and culverts. According to Mr. Carl Howat, of Gulf South Commercial Construction, this parcel is currently owned by Father Flanagan's Boys Town of Omaha who were in the process of constructing a Boys Town facility when Hurricane Katrina hit and halted construction. Mr. Howat noted that the parcel is in the process of being sold to the City of New Orleans Juvenile Judicial System. He also indicated that a Phase I ESA was performed at the site, and no recognized environmental conditions were identified ([Appendix F](#)). The historical fire insurance maps indicate that the parcel was undeveloped in 1994 ([Appendix D-3](#)).

Habiba Grocery store is located at 9530 Hayne Boulevard ([Figure B-7](#)). Based upon a discussion with the store manager, the facility has been operating as a grocery store since 1982, and does not use any petroleum products or hazardous materials.

Citrus Pumping Station #13 is located at 9600 Hayne Boulevard, at the head of Citrus Canal ([Figure B-7](#)). This facility contains large pumps. After heavy rainfall, the pumps move water through underground culverts from the canal to Lake Pontchartrain via an outfall located to the north. No ASTs, drums, or other storage vessels were observed at the facility. Neatly piled lumber was present in the eastern part of the site. The grounds of the facility are paved with concrete. Housekeeping is excellent. This facility was identified as a Louisiana Brownfields site in the EDR Report ([Appendix D-1](#)).

Nazareth Inn I and Nazareth Inn II are located at 9630 and 9640 Hayne Boulevard, respectively. According to EDR, the former facility has a 500-gallon registered UST, and the latter a 300-gallon UST. These were both installed in 1985 ([Appendix D-1](#)). According to LDEQ, neither of the USTs was damaged during Hurricane Katrina ([Appendix E](#)). Currently, both sites exhibited minor storm damage, and neither is operating.

Two abandoned commercial buildings were observed northeast of the inns ([Figure B-7](#)). Innovative Health Care Services was located at 9734 Hayne Boulevard. This facility appears to have had some warehouse capabilities; an open dumpster is also currently present. The 1979 historical fire insurance map shows no structure on this parcel. The second abandoned commercial building, located on the northeastern corner of Symmes Avenue and Hayne Boulevard, had a storage building on the southern corner. The 1979 historical fire insurance map shows a different structure on this parcel.

The former location of Exxon #50780 (8020 Read Boulevard) is on the southwestern corner of Read and Hayne Boulevards ([Figure B-7](#)). The gas station is registered as a conditionally exempt SQG, and has received no violations. It also formerly housed two USTs (10,000 and 6,000 gallons) that were installed in 1978 and removed in 1992. Currently, a relatively new brick one-story residential house is on the parcel.

Two active restaurants, Henry's Place and Walker's Barbecue, are located on Hayne Boulevard between Lady Gray and Lafourche Streets ([Figure B-9](#)). A gravel parking area extends south from the latter restaurant and has been used since Hurricane Katrina to stage vehicles and equipment for hurricane repair and assessment activities. According to the manager at Walker Barbecue, the restaurant has been operating since 1985 and the parcel was a horse stable prior to that date.

The EDR Report lists 11222 Hayne Boulevard as a Louisiana Brownfields site (Figure B-9). It is listed as an auto repair-vacant lot, and it has a prospective status (Appendix D-1). This parcel is currently vacant, and contains no structures. It is grassy, with two oaks and a magnolia tree. It is surrounded by a 3-foot chain link fence.

The Family Ranch Market is located at 11950 Hayne Boulevard (Figure B-11). This facility is an operating small grocery store and gasoline station. It is identified as both a historical LUST and LUST site (Appendix D-1). The historical designation apparently occurred while the site was owned by EZ Serve. The current designation as a LUST resulted from faulty leak testing, and the LDEQ does not consider an actual leak to have occurred (Appendix E). The facility currently contains three 10,000-gallon USTs that were installed in 1982. The owners of the Family Ranch Market did not grant us an interview. According to LDEQ records, the site has a history of soil and groundwater contamination and currently LDEQ is requesting that the facility to perform a site investigation (Appendix D-1).

The Jahncke Pumping Station #10 is located at 12200 Hayne Boulevard, at the head of Jahncke Canal (Figure B-11). Like Station #13 described above, this facility contains large pumps. After a heavy rainfall, the pumps move water through underground culverts from the canal to Lake Pontchartrain via an outfall located to the north. It was constructed in the 1970s. The grounds of the facility are paved with concrete. Housekeeping is marginal. The facility contains four 20,000-gallon ASTs that are bermed. During a "fence line" site visit, approximately twenty-four 55-gallon drums were visible sitting on elevated metal balconies and the concrete pavement. Several 5-gallon paint and tar buckets were also observed.

An abandoned convenience store, Compak Grocery #4, and an abandoned beauty salon, Golden Touch Barber and Beauty Hair Care Center, are located at the southwestern and southeastern corners of Vincent Drive and Hayne Boulevard, respectively (Figure B-13). The convenience store has a considerable amount of household trash about the parking lot and in an open dumpster. The parcel is not registered as having a UST in the EDR Report (Appendix D-1).

The Specialty Hospital is located at the southeastern corner of Shorewood Boulevard and Hayne Boulevard (Figure B-14). The facility is active and provides psychiatric services. The facility grounds are well-maintained, and no environmental concerns were observed during a drive through site visit. Requests for interviews with the owner, Wayne Langford, were denied. The 1994 historical fire insurance map shows the facility as the Ferncrest Manor Nursing Home (Appendix D-3).

Bonnet Weed Control is located at 14900 Hayne Boulevard (Figure B-15). The facility is active and well-maintained. Requests to interview the owner of the business were denied. The Office Bar, located at the corner of Hayne Boulevard and Paris Road, has been operating since 1986 and has never served food (Figure B-15). They do not manage petroleum products or hazardous materials.

The Contractor drove and observed all of the residential properties within the 1,000-foot footprint of Federal Levee Reach LPV 106 (Figures B-5 through B-15). No obvious signs of environmental contamination were observed. However, some concentrations of construction, vehicle, and miscellaneous debris were observed in the northeastern part of the reach (Figure B-15).

The Contractor also visually described and mapped the locations of all transformers observed within the 1,000-foot footprint of Federal Levee Reach LPV 106. These transformers are described in Table B-1, in Appendix B. The locations of two transformers that are leaking or possibly leaking are shown on

Figures B-13 and B-14 and summarized in Table B-2. Also, as noted in Section 5.1, EDR reported a former location of a transformer at 7900 Berg Road (Figure B-10; Appendix D-1). Apparently, on September 1, 1994, a lightning strike caused a release of an unknown quantity of transformer oil onto the nearby grass and sidewalk.

Storm water runoff in the area encompassing the 1,000-foot footprint either percolates through the exposed soil to the groundwater or is transported via storm water drains and culverts to either the various canals in the area (for example, Citrus and Jahncke Canals) or Lake Pontchartrain.

6.4 Interior Observations

Federal Levee Reach LPV 106 has no interior conditions. No interiors of buildings associated with LPV 106 were evaluated as part of this ESA.

7.0 INTERVIEWS

The Contractor conducted interviews with as many business operators and employees as possible during the site inspections, using a standard interview form/questionnaire. Interviewees consistently indicated no awareness of current environmental concerns at their facilities. Their information was generally corroborated by other independent sources of information (for example, the EDR Report and LDEQ environmental records). Subsection 7.1 describes important interviews in detail. Records of all interviews conducted are presented in [Appendix F](#).

7.1 Interviews With Owners or Occupants

Mr. Kenny Smith is a supervisor of the Citrus Pump Station #13 located at 9600 Hayne Boulevard and the Jahncke Pump Station #10 at 12200 Hayne Boulevard ([Figures B-7](#) and [B-11](#)). Operations and conditions at these facilities are described in Section 6.3. Mr. Smith was not aware of any significant environmental concern on or near these facilities.

Unsuccessful attempts were made to interview the following personnel:

- Owner of Family Ranch Market at 11950 Hayne Boulevard ([Figure B-11](#)).
- Mr. Wayne Langford, owner of Specialty Hospital at corner of Hayne and Shorewood Boulevards ([Figure B-14](#)).
- Owner of Bonnet Weed Control at 14900 Hayne Boulevard ([Figure B-15](#)).
- Owner of Kastner Electric on Edgelake Court ([Figure B-5](#)).

7.2 Interviews With Local Government Officials

The Contractor performed phone discussions with Mr. Gerry Gillen, Chief Engineer of the Orleans Levee District, and Mr. Joe Cassanova, Environmental Manager of the Orleans Levee District. These conversations are documented in [Appendix F](#), and are referenced as applicable in various parts of this ESA Report. Neither of these gentlemen was aware of any significant environmental concern on or near LPV 106.

The Contractor also talked to several employees with the New Orleans Fire Department ([Appendix F](#)). Captain Hellmers, with the New Orleans Fire Department HAZMAT unit (504-858-7005), had no recollection of any incident of an environmental nature specific to the Levee Reach LPV 106. However, he did note that after Hurricane Katrina, several containers of potentially hazardous material were collected in the area. Also, a barge designed to contain solvents was found. Captain Hellmers thought the container was empty and that EPA checked it out and removed it. Captain Melvin McEvoy of the New Orleans Fire Department was not aware of a potential environmental concern along Levee Reach LPV 106. Tom Papa, Chief of 4th District New Orleans Fire Department, also was not aware of any potential environmental concerns along Levee Reach LPV 106.

The Contractor also spoke with Mr. Mark Stansberry of the LDEQ (504-736-7754). He described LDEQ's activities in the area immediately following Hurricane Katrina. LDEQ employees and contractors performed reconnaissance in the area looking for environmental impacts, paying particular attention to sewage treatment plant and USTs. Mr. Stansberry also confirmed that the identification of the Family Ranch Market as a LUST was based on faulty leak detection procedures.

Mr. Rich Johnson of the LDEQ (225-219-3200) indicated that soil and groundwater contamination was identified in the soil and groundwater underlying the Family Ranch Market in 2003. The LDEQ has requested the facility to perform a site assessment to characterize the contamination, but, to their knowledge, this has not been performed yet ([Appendix F](#)).

7.3 Interviews With Others

Businesses adjoining to and outside of the 1,000-foot footprint were generally innocuous. On this basis, as well as their distance to the Levee Reach LPV 106, no interviews were conducted with facilities located outside of the 1,000-foot footprint.

8.0 FINDINGS

This section presents the various types of RECs (known, suspected, historical known, and historical suspected), as well as de minimis conditions, associated with Federal Levee Reach LPV 106 identified by the Contractor during this Phase I HTRW ESA. These findings are based on a comprehensive review of data available to the Contractor. These data include the environmental records review (Section 5.0), site reconnaissance observations (Section 6.0), and interviews with knowledgeable personnel (Section 7.0).

No known or suspected current or historical RECs were identified on Federal Levee Reach LPV 106 itself.

For the land outside of LPV 106 but within the 1,000-foot footprint, the only definitive current recognized environmental conditions (RECs) are the two leaking or possibly leaking transformers described in Section 6.3 (Table B-2) and the Family Ranch Market (Figure B-11).

With regard to suspected RECs, the Contractor considers all of the sites that are registered as having current USTs as representing some potential for an environmental impact. They are listed below as suspected RECs because, even though a hazardous substance or petroleum product is present, the Contractor has not identified a material threat of a release. Similarly, suspected RECs exist at several other facilities because of management of relatively high volume and movement of fuels or other hazardous materials (for example, Jahncke Pumping Station).

The Contractor has included the locations of the former registered USTs and historical LUST sites as historical suspected RECs, because of the potential that some residual soil or groundwater impacts may exist (even though the tank removal and closure was done correctly, and approved by the LDEQ). Historical suspected RECs were also identified for sites where the former activities, by their nature, may have caused environmental degradation.

The effects of Hurricane Katrina throw a wild card in identifying RECs. Anecdotal discussions describe potentially hazardous material being dislodged and moved about during the storm. However, no unsecured containers of potentially hazardous material were observed. Information obtained during this Phase I HTRW ESA indicates that such unsecured containers were properly managed and transported off site.

As noted in Section 6.3, the Contractor did not identify information on the current quality of Lake Pontchartrain sediments adjacent to LPV 106. Although no obvious contamination was observed during the walkover, the sediment could have been impacted by the storm activities and its aftermath.

The findings below are based upon the information obtained during this ESA, and discussed in the previous sections of this report. In accordance with ER 1165-2-132 Paragraph 7.c.(2) (USACE, 1992) the potential contaminants of concern (COCs) associated with each site are described or listed in parentheses.

Known or Suspect Recognized Environmental Conditions

Identified known RECs are identified at the following locations/facilities:

- The two leaking or possibly leaking transformers (PCBs or petroleum products) and
- Family Ranch Market (petroleum products). This site has a history of environmental concerns (soil and groundwater) and is currently being asked by LDEQ to perform additional assessment work.

These sites are shown on [Figure B-16](#). The leaking or possibly leaking transformers are also shown on [Figure B-17](#).

Suspected RECs are identified at the following facilities:

- Nazareth Inn I (petroleum products);
- Nazareth Inn II (petroleum products);
- Family Ranch Market (petroleum products); and
- Jahncke Pumping Station #10 (petroleum products).

The locations of these suspected RECs are shown on [Figure B-16](#).

Historical Known or Suspected Recognized Environmental Conditions

The only identified historical REC is at the current location of Family Ranch Market. This site is registered as a historical LUST, when the facility was operated as EZ Serve #2165 ([Appendices D-1 and E](#)).

The Contractor has included the following three sites as historical suspected RECs, because of the potential that some soil or groundwater impacts may exist from historical releases (if any):

- Exxon Station #50780 (petroleum products).
- The location of the lightning strike that caused a leak of transformer oil (PCBs or petroleum products).
- The Brownfields former Auto Repair/Vacant Lot (petroleum products).

The locations of these historical known and suspected RECs are shown on [Figure B-16](#).

Known or Suspect De Minimis Environmental Conditions

The two areas of 1-quart motor oil containers are considered to be de minimis environmental conditions at LPV 106.

Other Environmental Concerns

No other concern was identified.

9.0 OPINIONS

Based upon all of the information obtained, the environmental professionals who conducted this ESA believe that the known or suspected RECs identified in Section 8.0 have not resulted in an impact to the soil or groundwater quality within the Federal Levee Reach LPV 106 itself. Therefore, the Contractor sees no need to collect soil or groundwater quality samples with regard the levee reconstruction efforts within the current levee footprint. The Contractor would suggest, however, vigilance during any invasive or ground breaking activities for physical signs of contamination. Also, if any of the soil will be moved offsite, the USACE is encouraged to follow appropriate characterization protocols.

If the USACE extends the footprint of the levee onto the location of a known REC, suspected REC, historical known REC, or historical suspected REC that is located within the extended footprint area, the Contractor recommends that the USACE consider collecting soil and/or groundwater quality samples at those locations. The locations where sampling should be considered are shown on [Figures B-16](#) and [B-17](#).

10.0 CONCLUSIONS

At the request of USACE-HPO, the Contractor has performed a Phase I HTRW Environmental Site Assessment (ESA) in accordance with the Scope of Services attached in [Appendix A](#) and in general conformance with the scope and limitations of ASTM Standard Practice E1527-05 of the Federal Levee Reach LPV 106. Any exceptions to, or deletions from, the ASTM Standard Practice are described in Chapters 2.0 and 11.0 of this report. This assessment has revealed no evidence of “recognized environmental conditions” (as that term is defined in ASTM Standard Practice E1527-05) in connection with the levee reach itself, although RECs and suspected RECs (both current and historical) have been identified within the 1,000-foot footprint.

11.0 DEVIATIONS/DATA GAPS

Following is a list of the data gaps and deviations from ASTM Standard Practice E1527-05 that occurred during the performance of this assessment:

11.1 Historical Data Gaps/Data Failure

The history of the Property was researched back to the first developed use (including agricultural use or incidence of import of fill material), or to approximately 1950.

No further historical data sources were evaluated, because: (1) they were not *reasonably ascertainable*, and/or (2) the assessor's experience indicates that additional available sources were not likely to be sufficiently useful, accurate, or complete in terms of satisfying the historical research objectives. Based on these two criteria, the following standard historical sources were not evaluated:

- Recorded Land Title Records
- Property Tax Files
- Building Department Records
- Zoning/Land Use Records
- Other Historical Sources, including miscellaneous maps, newspaper archives, community organizations, local libraries, or historical societies.

11.2 Other Deviations/Data Gaps

No interviews were conducted with business operators outside of the 1,000-foot footprint. Such interviews are not required by ASTM Standard E1527-05, and the observed businesses were rather innocuous with regard to potential environmental concerns. Therefore, the lack of these interviews is not considered a data gap.

No other deviation or data gap was identified that was deemed material to this assessment.

12.0 ADDITIONAL SERVICES

No additional services were requested to be included in this Phase I HTRW ESA.

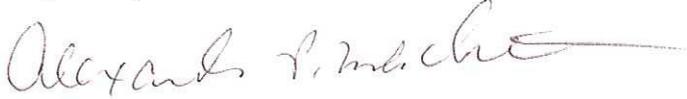
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14.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONALS

Following are the signatures of the environmental professionals who conducted this Phase I HTRW ESA and primarily prepared this report, and who reviewed it.

Prepared by:



Alexander Macbeth, PG
Project Manager

Reviewed by:



Stuart I. Rixman
Manager, EHS Services

15.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Resumes of the environmental professionals named in Chapter 14.0 above are in [Appendix G](#).

16.0 APPENDICES

The remainder of this report consists of the appendices that are listed in the Table of Contents.