

US Army Corps of Engineers

New Orleans District

Phase I Environmental Site Assessment

Lakefront Levee (LPV 101-104), Orleans East Bank

17th Street Canal to Inner Harbor Navigation Canal

Orleans Parish

USACE Contract No. W9128F-04-D-0001

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1.0 SUMMARY

URS Group Inc. (URS) has completed a Phase I Environmental Site Assessment (ESA) on approximately 30,000 linear feet of Lakefront levee from the 17th Street Canal to the Inner Harbor Navigation Canal, designated by the Corps of Engineers as segments LPV 101 through LPV 104, Orleans Parish. This ESA was performed in accordance with the Scope of Work (SOW) provided by the Corps of Engineers (*Appendix A*) and was conducted in general accordance with the American Society for Testing and Materials (ASTM) E 1527-05 guidance document titled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process."

The following tasks were performed as part of the ESA:

- Reviewed current aerials of the segments included with SOW and also located in the LDEQ Make-A-Map web site. *Refer to Appendix A, SOW with aerials and LDEQ Make-A-Map Printouts.*
- Reviewed findings from EDR database search and LDEQ database search. *Refer to Appendix B, EDR Corridor Study and Associated Map.*
- Reviewed Sanborn maps. *Refer to Appendix C, Sanborn Map Report.*
- Reviewed historical aerials dated 1946 and 1960 obtained from the New Orleans Library. *Refer to Appendix D.*
- Reviewed historical topographic maps of the segments. *Refer to Appendix E, Historical Topographic Maps.*
- Performed field observations. URS representatives investigated the levee and surrounding area for "recognized environmental conditions (REC)." *Refer to Appendix F, Site Visit Photographs.*
- Interviewed the Director of Hurricane and Flood Protection and Environmental Manager of the Board of Commissioners, Orleans Levee District, a former navy pilot familiar with the Naval Station that existed along the Lakefront during WWII, a representative of the Orleans Levee Police, and a representative of the University of New Orleans to determine the history of the segments and if they knew of any environmental concerns in the area of the levee segments.

Based upon findings of the above tasks, no RECs have been identified. However, three (3) areas of potential environmental concern have been identified due to past activities at these areas:

- 1) The area adjacent to UNO's main campus that was formerly a Naval Aviation Station- information confirming activities and the presence/locations of USTs in this area could not be found. UNO discovered empty USTs in this area during the construction of the parking lot associated with the Recreation and Fitness Center building.
- 2) The area adjacent to the current Orleans Levee District Building- USTs and a large AST holding water are located within 1000' of the adjacent floodwall. Amphibian aircraft were built in this area during WWII.

- 3) The area adjacent to the former Camp Leroy Johnson- information confirming activities and the presence/locations of USTs in this area could not be found. It is unlikely that USTs exist in this area, but this could not be confirmed or denied.

Additionally, locations noted 1, 2, 4, 7, 8, and 9 on the figure of *Appendix B* contain sites listed within environmental databases as RCRA large and small quantity generators, having former USTs, having active USTs, having former LUST, a dry cleaner, etc... Based on examination of information retrieved from databases concerning these sites, it is URS' opinion that they do not meet the definition of a REC, but are however, within 1000' of the centerline of the existing levees. Of particular note are three sites:

- 1.) USCG- Station, 80 Lakeshore Dr.- UST is reported "closed", but not "removed"
- 2.) Orleans Marina, 7590 Lakeshore Dr.- 4 USTs reported "closed", but not "removed"
- 3.) Dry Cleaner, 117 Robert E. Lee- no violations have been reported, but it is URS experience that dry cleaners pose a concern if chemicals used have been mismanaged.

Note: The conclusions presented in this report are preliminary in nature and are not to be used as a sole basis for final action(s), or as the sole basis for major capital decisions. Background data and information furnished to URS were used in the preparation of this report. URS has not independently verified or otherwise examined it nor is responsible for the accuracy of this information. The findings, although valid as of the present date, are subject to future changes in conditions of the site, adjacent properties, applicable regulations, requirements, or other findings which may invalidate them wholly or in part.

2.0 INTRODUCTION

2.1 Purpose

As stated in the introduction to the SOW (*Appendix A*), due to damage from Hurricane Katrina, the Corps of Engineers is rehabilitating and improving the flood protection system of southeast Louisiana. As part of this work, levee segments LPV 101 through 104 will be enlarged with compacted fill. The footprint of this enlarged levee will not exceed the limits of the existing right-of-way at this time; however, when this levee is eventually brought to the 100-year flood elevation, the footprint will likely increase outside the existing right-of-way by as much as 1,000 feet on either side of the levee crown.

The Corps of Engineers has tasked URS to perform a Phase I ESA to investigate the potential presence of hazardous, toxic or radioactive waste (HTRW) in the vicinity of the proposed construction and future levee enlargement. The focus of the Phase I ESA is to review existing and historical information regarding the site and to document the information to determine the potential presence of HTRW, in order to avoid any areas of concern.

2.2 Detailed Scope-of-Services

Refer to *Appendix A* for the Corps of Engineers provided SOW.

2.3 Significant Assumptions

None at this time.

2.4 Limitations and Exceptions

This report has been prepared for the specific levee segments described herein. This study has been conducted using the standard level of care and diligence normally practiced by recognized firms now performing services of a similar nature under similar circumstances unless specifically stated otherwise. URS intends for this report, including illustrations and appendices, to be used in its entirety.

2.5 Special Terms and Conditions

This report has been developed for the sole use of the Corps of Engineers. Environmental or contaminant assessment efforts other than those described herein are beyond the scope of work on this project. URS intends for this report, including illustrations and appendices, to be used in its entirety. URS reserves the right to revise its conclusions based on a review of information that may be obtained after the date of this report. This report contains opinions based on our professional judgement of client and affiliates-supplied information. This report is not a warranty of site conditions. URS cannot guarantee the accuracy or completeness of information obtained from others for use in this study.

NOTE: No sampling or testing was performed as part of this Phase I Assessment.

3.0 SITE DESCRIPTION**3.1 Location**

Levee segments 101 through 104 are located in New Orleans, Louisiana and protect lands adjacent to the southwestern perimeter of Lake Pontchartrain. Segment 101 begins on the eastern side of the 17th Street Canal near its discharge to Lake Pontchartrain, and extends easterly, with segments 102, 103 and 104 following. Segment 104 ends on the western side of the Inner Harbor Navigation Canal, near its discharge to Lake Pontchartrain. *Reference Appendix A, SOW aeriels.*

Approximate coordinates and lengths of segments are as follows:

Segment	Limit	Longitude (West)	Latitude (North)	Approx. length of segment	
				feet	miles
101	western	90° 7' 15"	30° 1' 19"	3,460	0.7
	eastern	90° 6' 47"	30° 1' 19"		
102	western	90° 6' 47"	30° 1' 19"	5,920	1.1
	eastern	90° 5' 49"	30° 1' 37"		
103	western	90° 5' 49"	30° 1' 37"	7,900	1.5
	eastern	90° 4' 27"	30° 1' 51"		
104	western	90° 4' 27"	30° 1' 51"	12,700	2.4
	eastern	90° 2' 14"	30° 1' 52"		

3.2 Site and Vicinity General Characteristics

Due to the length of the subject levee segments, and varying vicinity characteristics, each will be discussed separately.

LVP 101 MVS- 17th Street Canal to End of Floodwall- Approximately 400' of soil levee extends from the 17th Street Canal to Lake Marina Dr. North of this levee are sand volleyball courts, and south of the levee are condominiums. A concrete floodwall is present for the remainder of the segment. A large portion of the area north of the floodwall is a marina (with some residential boat houses and condominiums) and south is Lake Marina Dr. bordered by high rise condominiums, residential homes and restaurants.

LPV 102 MVM- Lakeshore Drive from western beginning of Lakeshore Dr. to Orleans Canal- West and north of the grassed levee are restaurants and condominiums. East and south of the levee are residential homes and apartments. A strip mall is located east of the very beginning (western end) of this segment, and contains (or contained pre-Katrina) a grocery store, restaurant, health club, drug store and offices.

LVP 103 MVP- Orleans Canal to London Ave. Canal- Earthen grassed levees exist in this segment, with floodwalls present near the Orleans Canal, Lakeshore Dr. ramp at Rail Street and Bayou St. John. Residential homes are present along the entire southern side of this segment.

LPV 104 MVR- London Ave. Canal to Inner Harbor Navigation Channel (IHNC)- From the London Ave. Canal extending eastward for approximately 2600 feet to the intersection with Lakeshore Dr., student housing/ parking and other parking associated with the University of New Orleans (UNO) exist south of the earthen grassed levee. East of this area, a technology park consisting of office buildings is adjacent to the floodwall/earthen levee. This area was formerly Pontchartrain Beach Amusement Park. East of this area is vacant land (currently being used for FEMA trailers), followed by the Orleans Levee District Building (formerly the American Standard building). A large above-ground water tank exists south of and adjacent to the floodwall on the western side of the Franklin Ave. ramp. From the Franklin Ave. ramp to the Leroy Johnson Dr. ramp, the levee is earthen and grassed, with parking for the Lakefront arena and Southern University bordering its southern side. Currently, FEMA trailers are in this area and work is continuing on the restoration of the Lakefront arena that was heavily damaged during Hurricane Katrina. Parking and vacant land associated with the FBI and Army Reserves also exists in this area. From the Leroy Johnson Dr. ramp to the IHNC, the Naval Reserve Training Center exists north and east of the levee and the Army Reserves exists south and west of the levee. The Naval Reserve Training Center and Army Reserve buildings are abandoned as a result of damage from Hurricane Katrina.

3.3 Current Uses of the Property

The subject property is used as a levee for flood protection. The flood protection may consist of an earthen levee or a concrete floodwall. The aerials included with the SOW of Appendix A show where earthen levees are present and where concrete floodwalls are present.

3.4 Description of Structures, Roads, Other Improvements on the Site

A description of the levees and surrounding area is contained in *Section 3.2, Site Vicinity and General Characteristics*, as well as *Section 6.0*.

Reference Appendix F, Site Visit Photographs.

3.5 Current Uses of the Adjoining Properties

Current uses of adjacent properties are contained in *Section 3.2, Site Vicinity and General Characteristics*.

4.0 USER PROVIDED INFORMATION

The owner of the levees and levee parks is the Orleans Levee District. Representatives of the Orleans Levee District have been interviewed and knowledge obtained included in *Section 7.0, Interviews*.

4.1 Title Records

None supplied to URS.

4.2 Information Reported by User Regarding Environmental Liens or Specialized Knowledge of Experience

The owner of the levees and levee parks is the Orleans Levee District. Representatives of the Orleans Levee District have been interviewed and knowledge obtained included in *Section 7.0, Interviews*.

4.3 Specialized Knowledge

The owner of the levees and levee parks is the Orleans Levee District. Representatives of the Orleans Levee District have been interviewed and knowledge obtained included in *Section 7.0, Interviews*.

4.4 Commonly Known or Reasonably Ascertainable Information

The owner of the levees and levee parks is the Orleans Levee District. Representatives of the Orleans Levee District have been interviewed and knowledge obtained included in *Section 7.0, Interviews*.

4.5 Valuation Reduction for Environmental Issues

Not applicable.

4.6 Owner, Property Manager, and Occupant Information

The owner of the levees and levee parks is the Orleans Levee District. Representatives of the Orleans Levee District have been interviewed and knowledge obtained included in *Section 7.0, Interviews*.

4.7 Reason for Performing Phase I

Refer to Section 2.1, Purpose.

5.0 RECORDS REVIEW**5.1 Standard Environmental Record Sources, Federal and State**

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The search was in accordance with the requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-05, including those associated with governmental databases, search distances, and data currency. The complete standard environmental record sources review, dated October 17, 2006 is included as *Appendix B, EDR Corridor Study and Associated Map*.

Through the database review, URS has identified and located sites based on information submitted to government environmental agencies. In some cases, the location information can be misleading or worse, incorrect. To confirm findings and note others not listed, URS conducted a walkover of approximately 1000 feet on either side of the centerline of the levee. By doing so, URS was able to identify and locate sites of environmental concern that are suspected to use significant quantities of hazardous substances, waste or petroleum products.

Each reported site has been given a map identification number and the number shown on the map of *Appendix B*. If sites are very near each other (or are the same site but with different owners over time), they have been given the same map identification number. Referring to the map in *Appendix B*, thirteen (13) locations have been noted. Their proximity to levee segments can be seen. Although within the search radii required by ASTM, map identification numbers 3, 10 and 13 are located across water bodies from levee segments. Site 3 is located across the IHNC. Site 10 is located across the lake marina. Site 13 is located across the 17th St. Canal. Because sites 3, 10 and 13 are located across water bodies, possible environmental releases/ activities from these site locations are not a REC. Additionally, although within the search radii required by ASTM, map identification numbers 5, 6, 11 and 12 are at least 0.3 miles (1600') from the subject levee segments; beyond the 1000' interest of the Corps of Engineers.

NPL and Proposed NPL: National Priorities List (Superfund) and Proposed NPL. The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

A review of the NPL and proposed NPL list, as provided by EDR, dated July 5, 2006, has revealed that there are no NPL or proposed NPL sites within the search area.

DELISTED NPL: National Priority List Deletions. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

A review of the Delisted NPL list, as provided by EDR, dated July 5, 2006, has revealed that there are no delisted NPL sites within the search area.

NPL RECOVERY: Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA complies a listing of filed notices of Superfund Liens.

A review of the NPL Recovery list, as provided by EDR, dated October 15, 1991, has revealed that there are no NPL sites within the search area.

CERCLIS: The Comprehensive Environmental Response, Compensation, and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, dated June 19, 2006 has revealed that there are no CERCLIS sites within the search area.

CERCLIS-NFRAP: CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP). Archived sites are sites that have been removed and archived from the inventory of CERLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERCLIS-NFRAP list, as provided by EDR, July 17, 2006, has revealed that there is one (1) CERCLIS-NFRAP site within the search area. It is:

Site	Address	Map ID #
US Department of Agriculture Southern Regional Research Center	1100 Robert E. Lee Blvd.	12

This site is not deemed a Recognized Environmental Condition (REC) based upon the fact that EPA requires no further assessment of this site, and that the site is approximately 6/10 of a mile away from the Lakefront levee.

CORRACTS: The Corrective Action Report identifies hazardous waste handlers with RCRA corrective action activity.

A review of the CORRACTS list, as provided by EDR, dated March 15, 2006, has revealed that there are no CORRACTS sites within the search area.

RCRA: The Resource Conservation and Recovery Act Information is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste pr month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-LQG list, dated June 13, 2006, as provided by EDR, has revealed that there is one (1) RCRA-LQG site within the search area.

Site	Address	Map ID #
University of New Orleans	2000 Lakeshore Dr.	4

The last biennial reporting year for UNO was 2003. Listed wastes and quantities are reported in the EDR Corridor Study of Appendix B, page 33 and 34. No violations have been found. It is not deemed a REC.

A review of the RCRA-SQG list, dated June 13, 2006, as provided by EDR, has revealed that there are twenty-two (22) RCRA-SQG sites within the search area.

Site	Address	Map ID #
USARC R Fleming Jr	5030 Leroy Johnson Dr.	1
USARC J Diamond	5010 Leroy Johnson Dr.	1
American Standard Inc. New Orleans	6920 Franklin Ave.	2
Board of Commissioners	6920 Franklin Ave. ID 508	2
Halliburton Energy Services	8000 Jourdan Rd.	3*

SECTION FIVE

Records Review

Site	Address	Map ID #
Million Aire of New Orleans	5500 Lakeshore	3*
Navy and Marine Corp Reserve Center	5020 Lakeshore Dr.	3*
RFB Flying SVC Caudle Aviation	5500 Lakeshore Dr. Ste 1	3*
Southern Holdings	5500 Lakeshore Dr. Hangar	3*
Orleans Levee District	6920 Franklin Ave. ID 578	3*
Chevron USA Inc New Orleans Lakefront	6301 Guiseppe Belanca S	3*
LA National Guard AASF 1	6401 S Shore Harbor B Bl	3*
Pat Farrell Bicycles #3	7354 Roadway	8
Sintes Boat Works Inc.	7385 W Roadway	8
M G Mayer Yacht Services Inc.	424 S Roadway St.	8
Municipal Yacht Harbor	401 North Roadway	8
Buckles Cleaners	117 Robert E. Lee Blvd.	9
Board of Commissioners Orleans	221 Lake Marina Dr.	9
Coleman's West End Gulf Ltd	7402 West End Blvd.	9
Schubert's Marine	126 S Roadway	10*
US Dept. of Agriculture Southern Regional Research Center	1100 Robert E. Lee Blvd.	12
Marine Power, Inc	1700 Orpheum St.	13*

*Although sites 3, 10 and 13 are within ASTM guidelines for search distances from the subject levee, they are located across water bodies from the subject levee. Site 3 is located across the IHNC. Site 10 is located across the lake marina. Site 13 is located across the 17th St. Canal. Because sites 3, 10 and 13 are located across water bodies, possible environmental releases/ activities from these site locations (from being SQGs) are not a REC.

Violations have not been reported for the remainder of sites. They are not deemed a REC.

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances.

A review of the ERNS list, as provided by EDR, dated December 31, 2005, has revealed that there are eighteen (18) ERNS sites within the search area.

Site	Address	Map ID #
7300 Lakeshore Dr.	7300 Lakeshore Dr.	9
100 th Block of Lake Marina Dr.	100 th Block of Lake Marina	9

Site	Address	Map ID #
221 Lake Marina Ave. North Boat	221 Lake Marina Ave. Nor	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9
221 Lake Marina Ave.	221 Lake Marina Ave.	9

The address 7300 Lakeshore Dr. is located on the east side of the New Basin Canal. An unknown sheen was reported in the New Basin Canal. Many boats are (or have been) docked in this area. The 100th Block of Lake Marina Drive was the site of a pole break where 3 transformers fell and oil released into the storm drain. The oil was contained and the area cleaned.

The address 221 Lake Marina Dr. is the location of a marina containing numerous boat slips with boats. Cited reports are of sheens (petroleum and unknown substances) in the surrounding lake waters.

While of environmental concern to the integrity of the lake water, the above reports are not deemed a REC for the nearby floodwall.

HMIRS: The Hazardous Materials Information Reporting System contains hazardous material spill incidents reported to DOT.

A review of the HMIRS list, as provided by EDR, dated July 3, 2006, has revealed that the site has no recorded data of hazardous material spill incidents.

US ENG CONTROLS: The Engineering Controls Sites List is a listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

A review of the US ENG CONTROLS list, as provided by EDR, dated March 21, 2006, has revealed that there are no US ENG CONTROLS sites within the search area.

US INST CONTROL: The Sites with Institutional Controls is a listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROLS list, as provided by EDR, dated March 21, 2006, has revealed that there are no US INST CONTROLS sites within the search area.

DOD: Department of Defense Sites. This data set consists of federally owned or administrative lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, dated December 31, 2004, has revealed that there are no DOD sites within the search area.

FUDS: Formerly Used Defense Sites. The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, dated December 5, 2005, has revealed that there are no FUDS sites within the search area.

US BROWNFIELDS: A Listing of Brownfields Sites. Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments – EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities – especially those without EPA Brownfields Assessment Demonstration pilots – minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use

EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

A review of the US BROWNFIELDS list, as provided by EDR, dated July 10, 2006, has revealed that there are no US BROWNFIELDS sites within the search area.

CONSENT: Superfund (CERCLA) Consent Decrees are major legal settlements that establish responsibility and standards for clean-up at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

A review of the CONSENT list, as provided by EDR, dated December 14, 2004, has revealed that there are no CONSENT sites within the search area.

ROD: Records of Decision documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the clean-up.

A review of the ROD list, as provided by EDR, dated July 10, 2006, has revealed that there are no ROD sites within the search area.

UMTRA: Uranium Mill Tailings Sites. Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

A review of the UMTRA list, as provided by EDR, dated November 4, 2005, has revealed that there are no UMTRA sites within the search area.

ODI: Open Dump Inventory. An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

A review of the ODI list, as provided by EDR, dated June 30, 1985, has revealed that there are no ODI sites within the search area.

PRP: Potentially Responsible Parties

A review of the PRP list, as provided by EDR, dated July 20, 2006, has revealed that there are no listed PRPs within the search area.

TRIS: The Toxic Chemical Release Inventory System identifies facilities which release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313.

A review of the TRIS list, as provided by EDR, dated December 31, 2004, has revealed that there were no recorded releases of toxic chemicals to the air, water, or land in reportable quantities.

TSCA: The Toxic Substance Control Act identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

A review of the TSCA list, as provided by EDR, dated December 31, 2002, has revealed that there are no TSCA sites within the search area.

FTTS: FIFRA / TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act) / TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

A review of the FTTS list, dated July 14, 2006, as provided by EDR, has revealed that there are no FTTS sites within the search area.

FTTS INSP: FIFRA / TSCA Tracking System – FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A review of the FTTS INSP list, dated July 14, 2006, as provided by EDR, has revealed that there are no FTTS INSP sites within the search area.

SSTS: Section 7 Tracking Systems. Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

A review of the SSTS, dated December 31, 2004, as provided by EDR, has revealed that there are no SSTS sites within the search area.

ICIS: Integrated Compliance Information System supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

A review of the ICIS list, as provided by EDR, dated February 13, 2006, has revealed that there are no ICIS sites within the search area.

PADS: The PCB Activity Database System identifies generators, transporters, commercial stores, and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

A review of the PADS list, as provided by EDR, dated July 7, 2006, has revealed that there is one (1) PADS sites within the search area.

Site	Address	Map ID #
US Department of Agriculture Southern Regional Research Center	1100 Robert E. Lee Blvd.	12

This site is not deemed a REC based upon the fact that EPA requires no further assessment of this site (see CERCLIS-NFRAP), and that the site is approximately 6/10 of a mile away from the Lakefront levee.

MLTS: The Material Licensing Tracking System is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

A review of the MLTS list, as provided by EDR, dated February 10, 2006, has revealed that the site has no recorded data of radioactive materials.

MINES: The Mines Master Index File contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

A review of the MINES list, as provided by EDR, dated May 16, 2006, has revealed that there are no mine sites within the search area.

FINDS: The Facility Index System / Facility Registry System contain both facility information and "pointers" to other sources that contain more detail. EDR includes the following FINDS databases in this report:

- PCS (Permit Compliance System),
- AIRS (Aerometric Information Retrieval System),
- DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for environmental statutes),
- FURS (Federal Underground Injection Control),
- C-DOCKET (Criminal Docket System used to track criminal enforcement actions for environmental statutes),
- FFIS (Federal Facilities Information System),
- STATE (State Environmental Laws and Statutes), and
- PADS (PCB Activity Data System).

A review of the FINDS list, dated July 21, 2006, as provided by EDR, has revealed that there are twenty-two (22) FINDS sites within the search area.

Site	Address	Map ID #
USARC R Fleming Jr	5030 Leroy Johnson Dr.	1
USARC J Diamond	5010 Leroy Johnson Dr.	1
American Standard Inc. New Orleans	6920 Franklin Ave.	2
Halliburton Energy Services	8000 Jourdan Rd.	3*
Million Aire of New Orleans	5500 Lakeshore	3*
Navy and Marine Corp Reserve Center	5020 Lakeshore Dr.	3*
RFB Flying SVC Caudle Aviation	5500 Lakeshore Dr. Ste 1	3*
Southern Holdings	5500 Lakeshore Dr. Hangar	3*
Orleans Levee District	6920 Franklin Ave. ID 578	3*
Chevron USA Inc New Orleans Lakefront	6301 Guiseppe Belanca S	3*
LA National Guard AASF 1	6401 S Shore Harbor B Bl	3*
University of New Orleans/ MA	2000 Lakeshore Dr.	4
Pat Farrell Bicycles #3	7354 Roadway	8
Sintes Boat Works Inc.	7385 W Roadway	8
M G Mayer Yacht Services Inc.	424 S Roadway St.	8
Municipal Yacht Harbor	401 North Roadway	8
Buckles Cleaners	117 Robert E. Lee Blvd.	9
Board of Commissioners Orleans	221 Lake Marina Dr.	9
Coleman's West End Gulf Ltd	7402 West End Blvd.	9
Schubert's Marine	126 S Roadway	10*
US Dept. of Agriculture	1100 Robert E. Lee Blvd.	12
Southern Regional Research Center		
Marine Power, Inc	1700 Orpheum St.	13*

* Although sites 3, 10 and 13 are within ASTM guidelines for search distances from the subject levee, they are located across water bodies from the subject levee. Site 3 is located across the IHNC. Site 10 is located across the lake marina. Site 13 is located across the 17th St. Canal. Because sites 3, 10 and 13 are located across water bodies, possible environmental releases/ activities from these site locations are not a REC.

Further detail is not provided for the remaining listed sites. Based upon other supplied information and knowing the activities of the subject site, it is unknown, but not likely that these sites are a REC based upon FINDS.

RAATS: RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

A review of the RAATS list, as provided by EDR, dated April 17, 1995, has revealed that the site has no recorded data of enforcement actions.

BRS: The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal facilities (TSDFs).

A review of the BRS list as provided by EDR, dated December 31, 2003, has revealed that there are no BRS sites within the search area.

SHWS: Potential and Confirmed Sites List. Confirmed status denotes that assessments have been performed and a determination made that (1) hazardous waste(s) or substance(s) are present at the site and (2) these sites are under the jurisdiction of the LDEQ/RSD. Potential status is an indicator that sites are either waiting to be assessed or the assessment is in progress.

A review of the SHWS list, dated August 7, 2006, as provided by EDR, has revealed that there are no SHWS sites.

SWF/LF: Landfill List. Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

A review of the SWF/LF list, dated July 11, 2006, as provided by EDR, has revealed that there are no SWF/LF sites within the search area.

DEBRIS: LDEQ Approved Debris Sites. A listing of LDEQ Approved Debris Sites where hurricane debris is dumped.

A review of the DEBRIS sites, dated April 18, 2006, as provided by EDR, has revealed that there are no DEBRIS sites within the search area.

SWRCY: Recycling Directory. A list of recycling facilities.

A review of the SWRCY list, as provided by EDR, dated July 11, 2006, has revealed that there are no SWRCY sites within the search area.

LUST: Leaking Underground Storage Tanks Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

A review of the LUST list, as provided by EDR, dated July 17, 2006, has revealed that there is one (1) LUST site within the search area.

Site	Address	Map ID#
Exxon Co USA #58088	1600 Robert E. Lee	11

This site had a waste oil tank on the premises suspected of leaking. A site assessment was completed and sent to the LDEQ on March 30, 1993. Analytical results indicated low levels of contamination, and the site was officially closed without remediation by the issuance of a closure letter by the LDEQ UST Division dated January 4, 1991. Steel USTs were replaced with fiberglass double walled USTs. Based upon this information and the fact that the site is approximately ½ mile from the subject levee, it is not a REC.

HIST LUST: Underground Storage Tank Case History Incidents. This listing includes detailed information for Leaking Underground Storage Tanks reported through November 1999. It is no longer updated. Current LUST incidents, without detail, can be found in the Leaking Underground Storage Tank Database.

A review of the HIST LUST list, dated November 1, 1999, as provided by EDR, has revealed that there are six (6) HIST LUST sites within the search area.

Site	Address	Map ID#
GSRI Site	6801 Press Dr.	5
Port of New Orleans	6201 France Dr.	6
Coleman's West End Gulf Ltd	7402 Lakeshore Dr.	9
Orleans Marina	7590 Lakeshore Dr.	9
Lake Terrace Shell #137486	1546 Robert E. Lee Blvd.	11
E-Z Serve 2093	200 Live Oak St.	13*

*Not a REC due to location on the eastern side of the IHNC.

The GSRI Site does not have a release notification in the LDEQ files, but has an inspection report on closure and a closure letter within the LDEQ file. A Corrective Action Plan is not on file, but the tanks are noted as closed on May 21, 1993. Due to a closure letter and the fact that the site is at least 1/4 mile from the subject levee, it is not deemed a REC.

The Port of New Orleans site is a release of used oil from the rupture of a UST during the trenching for sub-surface electrical conduit. A small amount of used oil entered the Industrial Canal and booms and sorbent pads were used to contain and clean the release. On September 10, 1998 3 USTs were removed from the site. A limited site assessment was performed and institutional controls of a conveyance record have been put into place. Due to LDEQ oversight and the fact that the site is at least ¼ mile from the subject levee, it is not deemed a REC.

Coleman's West End Gulf Ltd. is listed as a HIST-LUST, but no information is provided about the incident. However, all site USTs are reported removed. The site is not deemed a REC.

The Orleans Marina- the site was energy exchange/Orleans Levee at the time of the incident. The tanks were closed and removed. Soil samples were collected and found to be at acceptable levels. The site is not deemed a REC.

Lake Terrace Shell- A waste oil tank on the premises was suspected of leaking. A site assessment was completed and submitted to the LDEQ on March 30, 1993. Analytical results indicated low levels of contamination, and the site was officially closed without remediation by issuance of a closure letter by LDEQ UST Division on January 4, 1991. Steel USTs were replaced with fiberglass double walled USTs. The site is not deemed a REC.

UST: Louisiana Underground Storage Tank Database. Registered Underground Storage Tanks are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

A review of the UST list, dated July 5, 2006, as provided by EDR, has revealed that there are nineteen (19) UST sites within the search area.

Site	Address	Map ID #
Board of Commissioners Orleans	69220 Franklin Ave. ID 508	2
Coleman American Moving Service	7020 Franklin Ave.	2
Louisiana Army National Guard	6001 Lakeshore Dr.	3*
Caudle Aviation Inc	5500 Lakeshore Dr.	3*
Million Aire of New Orleans	5500 Lakeshore Dr.	3*
General Aviation Inc.	5500 Lakeshore Dr.	3*
New Orleans Lakefront Airport	5401 Lakeshore Dr.	3*
Food for Family Warehouse	5600 Hayne Blvd.	3*
University of New Orleans	2000 Lakeshore Dr.	4
GSRI Site	6801 Press Dr.	5
Port of New Orleans	6201 France Dr.	6

Site	Address	Map ID #
USCG-Station New Canal	80 Lakeshore Dr.	7
Coleman's West End Gulf Ltd.	7402 West End Blvd.	9
Westend marine	7500 Lakeshore Dr.	9
Orleans Marina	7590 Lakeshore Dr.	9
Vacant Parking Area	7612 Lakeshore Dr.	9
Schuberts Marine	126 S. Roadway	10*
Lake Terrace Shell #137486	1546 Robert E. Lee Blvd.	11
Live Oak Discount Zone LLC	200 Live Oak St.	13*

* Although sites 3, 10 and 13 are within ASTM guidelines for search distances from the subject levee, they are located across water bodies from the subject levee. Site 3 is located across the IHNC. Site 10 is located across the lake marina. Site 13 is located across the 17th St. Canal. Because sites 3, 10 and 13 are located across water bodies, possible environmental releases/ activities from these site locations are not a REC.

Board of Commissioners Orleans Levee District, 1-10,000 gal UST installed 1/1/91, gas, fiberglass or plastic, double wall suction with release detection; 1-10,000 gal UST installed 1/1/91, diesel, fiberglass or plastic, double wall suction without release detection; 1-6,000 gal UST installed 5/16/82, diesel, fiberglass or plastic; all USTs active.

Coleman American Moving Service- 1 closed 1000 gallon gas steel tank installed 12/1/93 and 1- removed 1000 gallon gas steel tank installed 1/1/80. Due to closed USTs, this site is not deemed a REC.

University of New Orleans, 2000 Lakeshore Dr.- UNO has reported 1-1500 gal. active, fiberglass or plastic, gas UST, installed 5/22/71 and 1-10,000 gal. active, diesel UST, installed 5/22/75. Many other USTs have been removed.

The GSRI Site- tanks are noted as closed on May 21, 1993. Due to a closure letter and the fact that the site is at least 1/4 mile from the subject levee, it is not deemed a REC.

The Port of New Orleans site- On September 10, 1998, 3 USTs were removed from the site. A limited site assessment was performed and institutional controls of a conveyance record have been put into place. Due to LDEQ oversight and the fact that the site is at least 1/4 mile from the subject levee, it is not deemed a REC.

The USCG Station-New Canal reports 1- 1000 gal. closed diesel UST. Because it is closed, the site is not deemed a REC.

Coleman's West End Gulf Ltd.- all site USTs are reported removed. The site is not deemed a REC.

West End Marine- is reported to have a removed 700 gal. UST. The site is not deemed a REC.

The Orleans Marina- The tanks were closed and removed. Soil samples were collected and found to be at acceptable levels. The site is not deemed a REC.

Vacant- reported 1- 2000 gal. removed diesel UST. The site is not deemed a REC.

Lake Terrace Shell- Steel USTs were replaced with fiberglass double walled USTs. The site is not deemed a REC.

LIENS: Environmental Liens.

A review of the LIENS list, as provided by EDR, dated September 6, 2006, has revealed that there are no LIENS sites within the search area.

SPILLS: Emergency Response Section Incidents. Spills and/or releases, to land, reported to the Emergency Response Section.

A review of the SPILLS list, as provided by EDR, dated June 27, 2006 has revealed that there is one (1) SPILLS site within the search area.

Site	Address	Map ID #
Lake Terrace Shell #137486	1546 Robert E. Lee Blvd.	11

A gasoline spill was reported at this site. The meter reader alarm went off and the leak fixed. Based upon this information and the fact that the site is approximately ½ mile from the subject levee, it is not deemed a REC.

AUL: Listing of Institutional and/or engineering controls. A notice of contamination (nature and level of contaminants) and restriction of property to non-residential use are placed in the conveyance records for the property.

A review of the AUL, dated August 10, 2006, as provided by EDR, has revealed that there are two (2) AUL sites within the search area.

Site	Address	Map ID #
Port of New Orleans	6201 France Rd	6
Exxon Co USA #58088	1600 Robert E. Lee	11

These sites have a conveyance notice due to historic leaks from USTs. Each has had oversight by the LDEQ and found not to require further assessment. Due to this information and the fact that the sites are ¼ to ½ mile from the subject levee, they are not deemed a REC.

VCP: Voluntary Remediation Program Sites. Sites that have entered the Department of Environmental Quality's Voluntary Remediation Program.

A review of the VCP list, as provided by EDR, dated August 15, 2006, has revealed that there are no VCP sites within the search area.

DRYCLEANERS: Drycleaner Facility Listing.

A review of the DRYCLEANERS list, dated May 15, 2006, as provided by EDR, has revealed that there is one (1) DRYCLEANERS site within the search area.

Site	Address	Map ID #
Dry Cleaning by Louis (also Buckles Cleaners)	117 Robert E. Lee Blvd.	9

No violations were reported as Buckles Cleaners. It is not a REC.

5.2 Additional Environmental Record Sources

The LDEQ web site data base was searched for sites of potential environmental concern located near to the subject levee property. One site was noted as potential environmental concern- the Orleans Levee District Building on Franklin Avenue. It is listed as a large quantity generator for 2002.

5.3 Physical Setting Source(s)**Geology**

The soils present along the Lakefront are mapped as two varieties of dredged Aquents. From the seawall to the interior side of the flood levee the soils are identified as frequently flooded aquents (AT). These soils consist of poorly drained soils formed from hydraulically deposited fill material dredged from nearby marshes or swamps during the construction and maintenance of waterways. The interior land protected by the levees is also characterized as aquents (An) of the same character and origin as the AT unit. Deposited fill is the main soil characterization for the Lakefront area extending from the Seabrook Bridge to the 17th Street Canal. The site soils / geology are located in a hydrologic group "Class C" which has slow infiltration rates. The soil component name is Ouachita. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures. The soil is well drained, and has intermediate water holding capacity. Depth to water table is more than 6 feet.

Flood Zone

Per the EDR report from the Federal Emergency Management agency (FEMA), the target property is located within the boundary of the 100-year flood plain, and is not listed in the national wetland inventory.

Reference Appendix B, EDR Corridor Study.

5.4 Historical Use Information on the Property and Adjoining Properties**5.4.1 Sanborn Maps**

A search for insurance maps of the subject area was conducted by EDR. (*Appendix C, Sanborn Map Report*). Sanborn fire insurance maps often contain information relating to individual structures, location of certain petroleum and chemical storage tanks, and the storage of other potentially toxic substances. URS reviewed Sanborn Maps for the years (as presented by EDR) 1929, 1950, 1978, 1983, and 1994. The following are descriptions and interpretations from the plotted maps.

Date	Description
1929 (1 map)	#865- A map of the west end area only is available. The levee is not present. The New Orleans Navigation Canal is present and extends south of Lake Avenue.
1950 (1 map)	#865- This map is very similar to the 1929 map, but with additional boat slips and restaurants.
1978 (9 maps)	#1051- Shows residential area east of Bayou St. John. Area near lake is open/vacant.

Date	Description
1983 (7 maps)	#1057- Shows open/vacant area near London Canal and extending to UNO.
	#1059- Shows nearest activities to levee area as "campus police" for UNO; Pontchartrain Beach Amusement Park is evident.
	#1060- Police station near Lakeshore Drive is evident. Open/vacant land near lake.
	#1061- Shows new car storage yard, and two tanks near the area of the existing floodwall. One tank is a water tank made of concrete and the other is labeled "UT", made of brick. It is unknown if "UT" means upright or underground. The area is operated by Coleman-American Moving Services, Inc. Propane tanks are also noted in this area.
	#1062- shows area south of previous map
	#1063- Shows no activity near lake on property owned by UNO (East Campus)
	#1064- A public water closet/concession stand area is shown near Lakeshore Dr. The Gulf South Research Institute is also seen. USAF Reserve buildings are seen in the northern area.
	#1065- The US Naval & Marine Corps Reserve Center is seen within Lakeshore Dr. and Leroy Johnson Dr. Buildings noted are marked as built in 1952. Adjacent to Leroy Johnson Dr., are US Army Reserve Center buildings noted as built in 1965, 1969, and 1978. In the northern portion of this area is a vacant building noted as formerly belonging to the USAF Reserve.
	#836- Shows only residential homes south of the parkway from Lakeshore Dr.
	#838- Shows only residential homes near the areas of the existing levee.
	#840- Shows only residential homes near the areas of the existing levee. Public water closet building is shown near Lakeshore Dr.
	#842- Shows only residential homes near the areas of the existing levee. Public water closet building is shown near Lakeshore Dr.
	#834- Shows only residential homes near the areas of the existing levee.
	#835- Shows only residential homes near the areas of the existing levee. Public water closet building is shown near Lakeshore Dr. Two electric transformer vaults are shown west of Lakeshore Dr.
	#865- Earthen levee is shown from 17 th St. Canal to Lake Marina Ave. A playground is noted north of the earthen levee. Iron sea wall is noted along Lake Marina Ave. (formerly Lake Ave.) Piers, boat houses, and apartments are near the sea wall.
1994 (16 maps)	#834, 835, 836, 838, 840, 842, 865 - Basically the same as 1983 maps
	#1050- Shows open/vacant area near western side of London Canal and Lake Terrace Park near the lake.

Date**Description**

- #1051- Shows residential area east of Bayou St. John. Area near lake is open/vacant.
- #1057- Basically the same as 1978 map with addition of UNO Police building north of the Fine Arts Building.
- #1059- Basically the same as 1978 map with a few building changes at UNO and the removal of Pontchartrain Beach Amusement Park.
- #1060- Basically the same as 1978 map with removal of the UNO tennis courts and addition of the UNO Children's Center and Newman Center.
- #1061- Basically the same as 1978 map with removal of Pontchartrain Amusement Park and Coleman-American Moving Services, Inc building. Two tanks are still present.
- #1062- Basically same as 1978 map, with removal of some warehouses to be replaced by shopping center
- #1063- Shows no activity near lake on property owned by UNO (East Campus); Lakefront Arena is now present
- #1064- Same as 1978 map with exception of removal of USAF Reserve buildings. Only NO Levee Board building (Emergency Field Operations Center) with a sand pile next to it is left.
- #1065- Same as 1978 map with exception of removal of the formerly USAF Reserve vacant building.

Reference Appendix C, Sanborn Map Report

5.4.2 Historic Aerial Photos

URS retrieved 1946 and 1960 aerial photos of the subject levee segments from the New Orleans Public Library. Copies are included in *Appendix D*. Due to the length of the subject levee segments, numerous aerials were copied in order to cover the subject area. Each aerial photo has a date stamped on its upper left and a unique identification number on its upper right. The entire length of subject levee can be viewed if the individual aerials are placed in the order listed on the first page of *Appendix D*. Please note, many aerials overlap a great deal.

1946 Aerial- Levees are not visible in these aerials. By superimposing the location of the existing levees on these aerials, the following is of environmental interest:

- There is a building on the northwestern side of Bayou St. John as it enters Lake Pontchartrain. It is a Coast Guard Station and was built in 1942.
- East of the London Ave. Canal to the middle of the former Pontchartrain Beach Amusement Park, the US Naval Reserve Aviation Base and its airport with aircraft are visible. Buildings associated with the base are present in the area of the current levee.

Buildings also exist in the area of the former Pontchartrain Beach where the current levees reside.

- Four buildings are noted in the area north of the present day SUNO where the levee exists.

1960 Aerial- Some portions of the levees are visible in the aerials. By superimposing the location of the existing levees on these aerials, the following is of environmental interest:

- There is a building on the northwestern side of Bayou St. John as it enters Lake Pontchartrain. It is a Coast Guard Station and was built in 1942.
- East of the London Ave. Canal to the middle of the former Pontchartrain Beach Amusement Park, buildings associated with the US Naval Reserve Aviation Base are present. No aircraft are visible; automobiles are present in areas that were formerly runway. Buildings noted in the 1946 aerial present in the area of the current levee are no longer present. Buildings still exist in the area of the former Pontchartrain Beach where the current levees reside.
- Four buildings are noted in the area north of the present day SUNO where the levee exists.

Historic knowledge gained to interpret aerials-

An internet search was performed in attempt to determine activities performed at buildings present on historical aerials within or near the areas of the existing levees. The following pertinent information was retrieved.

Evolution of the UNO area-

"UNO was acquired when the United States Navy abandoned its air station on the shore of Lake Pontchartrain in late 1957 and the Orleans Levee Board leased it to the LSU Board of Supervisors. A quick renovation of barracks, service clubs, and other existing facilities made it possible to begin classes in September 1958.... To the original 178-acre site, a 17.5-acre strip along its western boundary was added in 1963. This land was also acquired from the Orleans Levee Board, and it brought the total campus acreage to 195.5. Still more acreage was obtained in 1964, half a mile east on the Lakefront, when the United States Army abandoned its Camp Leroy Johnson facility and the Levee Board made this site available to the University. A 50-acre parcel of this 150-acre site was released to the Gulf South Research Institute in 1965. The remaining 100-acre East Campus subsequently became the location of a Special Education Center, various outdoor sports facilities, and a multipurpose Senator Nat G. Kiefer/UNO Lakefront Arena....The Alumni Center is built around a red brick smokestack, one of the few reminders of the naval air base that became the UNO main campus."

Uses of Naval Air Station-

"Naval Aviation first came to New Orleans in July 1941, when the Naval Air Reserve Air Base, located on the shores of Lake Pontchartrain, was commissioned. Due to the Navy's need for Naval Aviators in the early part of World War II, the station was re-designated a Naval Air Station in November, 1942, and assumed the role of a primary training base for student aviators.

After the end of hostilities, the station again changed its primary mission. In 1946, the training of selected Naval Air Reservists became the chief task."

URS representative visited the UNO Library to determine if schematics, aerial photographs were available to better determine the location of USTs that were used at the Naval Base. Photographs of the base and its evolution into UNO were available and viewed, but did not give knowledge of the location of USTs or other activities that would be of environmental interest.

Development of residential areas-

"Land reclaimed from the lake (some 5000 ft. from the old shore) during the 20s and 30s resulted in the demise of the camps, resorts, and amusement area in Milneburg, Spanish Fort, and much of West End. The results included the seawall, Lakeshore Drive, some green space, and many new homes. These neighborhoods were developed with deed restrictions imposed by the Levee Board. Lake Terrace, opened in 1953, contained 440 residential lots and 93 acres of park space in the area bounded by Lake Pontchartrain, London Avenue Canal, Robert E. Lee Boulevard and Bayou St. John. Photo shows the London Avenue Canal, as it entered the Lake in 1948, with the Naval Air Station on the right and, what is now Lake Terrace on the left." Photo credit: <http://nutrias.org/~nopl/monthly/sept98/sept985.htm>



1958 LSUNO opens-

Formerly the U.S. Navy Air Station, the Louisiana State University of New Orleans site was acquired in 1956 under a 99-year lease. After renovation of existing buildings, classes were offered in 1958. The school, late re-named the University of New Orleans, became a full four-year university in 1961. The photo below shows the general area in 1948, and includes the air station and Pontchartrain Beach. During the 1930s this area would have been known as "Milenburg"--the local pronunciation of Milneburg.



Pontchartrain Beach- (below photo)

The New Orleans lakefront at the site of the old Pontchartrain Beach, August, 1958. NOTE that Pontchartrain Beach was originally located near Spanish Fort (where this photo was shot). It moved to Milneburg (at Elysian Fields and the Lake in 1939). Even today, locals call the location of this photo "The Old Beach" but few probably know why it is called this. Photograph by Jerry Bray. City Hall Public Relations Office. Source: <http://nutrias.org/photos/recent/morerecent4/recent291.htm>



Some of the Lakefront's jazz and entertainment history

At one time, the Milneberg settlement was located on the land at the end of Elysian Fields. In 1830 when the Pontchartrain Railroad connected the Faubourg Marigny with this settlement, it consisted only of a couple of hotels, bars and a few houses.

When the Milneburg pier was built, New Orleans residents started building small wooden houses on stilts (which they referred to as "fishing camps" or just "camps") around Milneburg.

The Milneburg resort area continued to be popular through the 1930s, and many of the city's early jazz greats played there.



© Stanley Beck
(atneworleans.com).
Milneburg Lighthouse,
a popular old meeting
place.

But, in the 1930s the Levee Board and WPA implemented lakefront reclamation plans that included demolishing the many camps, and building bathing houses and a reinforced shoreline. By 1941, the Milneburg resort was gone except for the old Milneburg lighthouse, which still stands today.

New Orleans Lakefront Reclamation

Prior to the 1920s, much of the rest of the lakefront was marshy swampland comprised of scattered fishing shacks and camps. In an effort to develop strategies for providing improved levee protection from flood disasters, the Louisiana legislature named Colonel Marcel Garsaud to be Chief Engineer of the Orleans Levee Board in 1924. He was commissioned to plan and implement the reclamation and improvement of the lakefront.

In 1928, a plan was adopted that included provisions for a public park area between the lake drive and the lake, recreational features and residential development with one section of homes fronting on the lake. The principal reason for the adoption of this plan was its potential for becoming self-supporting. In 1926, prior to the adoption of the plan, pumping and draining of the swamps as well as seawall construction began.

By 1930, work on the lakefront plan began. The new lakeshore consisted of a stepped concrete seawall built 3000 feet from the shore with a filled area raised five to ten feet. Above the lake level were a beautiful public waterfront, beaches and parks. The transformation of the lakeshore allowed for the construction of the Lake Terrace and Lake Oaks subdivisions.

Higgins boat testing

With the advent of World War II, this land became part of the New Orleans Naval Air Station and was used as a training facility, as well as a test site for the boats constructed by Higgins Shipbuilding. Higgins built many boats used during World War II. The Navy abandoned the property after the war to the state.

The Orleans Levee Board leased the bulk of the site to the Louisiana State University system, which opened LSU-New Orleans.

Pontchartrain Beach Amusement Park

After World War II, a section of the property that fronted the lake was leased to the Batt family who developed it into an amusement park with rides from one end of the mid-way to the other, including a big wooden roller coaster called the Zephyr. Pontchartrain Beach was closed in 1984.

Descriptions of Lake Terrace and Lake Oaks subdivisions

The Levee Board opened Lake Terrace in 1953. This area is bounded by Lake Pontchartrain, the London Avenue Canal, Robert E. Lee Boulevard and Bayou St. John. The area has 93 acres of park space. In 1964, Lake Oaks was opened, which was bounded by Elysian Fields Avenue, Music Street and New York Street.

Lake Oaks is smaller than Lake Terrace and conforms to the traditional linear arrangement of streets. Houses are built on rather small lots. A park area near Lakeshore Drive offers picnic and playground accommodations for the neighborhood.

With the opening of Lake Terrace/Lake Oaks, plans for lakefront development were fulfilled. The reclaimed lakefront realized its potential with additional housing and naturally beautiful recreational open space for the city.

Camp Leroy Johnson-

Camp Leroy Johnson in New Orleans, Louisiana, formerly known as the New Orleans Air Base, is located on the south shore of Lake Pontchartrain in the area bounded west by Franklin Ave. south by Leon C. Simon Dr. and east by Inner Harbor Navigation Canal. The area is occupied today by the University of New Orleans. The base used jointly with the New Orleans Airport for training during World War II. It was transferred to the Air Service Command and became part of the New Orleans Port of Embarkation facilities. Signal and Quartermaster units were trained on the post and it housed a Transportation Corps Officer Candidate School and a Replacement Training Center.

5.4.3 Historic Topographic Maps

URS reviewed available historic topographic maps of the site and surrounding areas provided by EDR to identify historical land uses that may have involved hazardous substances and petroleum products. URS reviewed historic topographic maps for the years 1965, 1972, 1979, 1992 and 1999. The following are descriptions and interpretations from the historic topographic map reviews.

Date	Description
1965 (3 maps)	Levee not shown on map. Coast Guard Station evident near Bayou St. John at the Lake; Orleans Levee District Building evident with above-ground water tank shown. Camp Leroy Johnson buildings shown.
1972 (3 maps)	Levee not shown on map. Coast Guard Station building near Bayou St. John at the Lake is gone; fewer buildings at northern end of UNO; Orleans Levee District Building evident with above-ground water tank shown. Fewer buildings exist at Camp Leroy Johnson, with buildings remaining adjacent to Leroy Johnson Dr. Naval Reserve building can be seen.
1979 (3 maps)	Roads within former Camp Leroy Johnson are not evident. Remainder of area looks very similar to 1972 map.
1992 (3 maps)	Levee is evident on maps. Fewer buildings at Camp Leroy Johnson are present, with two remaining adjacent to Leroy Johnson Dr.
1999 (3 maps)	Basically the same as 1992 maps.

Reference Appendix E, Historical Topographic Maps

6.0 SITE RECONNAISSANCE

On October 13, 20, 25, and 27, 2006, Edward Doepp, David Lasater and Jane Fortier of URS conducted a reconnaissance of the site. The stretch of levee along the lakefront was assessed by foot with photographs taken (*Appendix F*). Particular attention was given to sites listed in the EDR report. Items of interest are described below.

6.1 Hazardous Substances in Connection with Identified Uses (including storage, handling, disposal)

URS observed no hazardous substances and identified no storage, handling or disposal of hazardous substances on the day of the site reconnaissance.

6.2 Hazardous Substances Containers and Unidentified Substance Containers (including storage, handling, disposal)

URS observed no hazardous substances containers and unidentified substance containers on the day of the site reconnaissance.

6.3 Storage Tanks (including contents and assessment of leakage or potential for leakage)

URS observed several USTs just east of the 17th St. Canal (*Appendix F*, photo # 1 and # 2). These were identified by the EDR Report as site 10 (Schubert's Marine- a fuel station for marine vessels). Coordinates of this fuel station are 0778324 E and 3324782 N. Lake waters separate these USTs from levee segments and are therefore, not considered to be of environmental concern to the levee segments.

The sites noted by EDR as site 9 were also examined:

- Buckles Cleaners and Dry Cleaning by Louis, 117 Robert E. Lee Blvd., RCRA-SQG, FINDS, Dry Cleaners; Conditionally exempt small quantity generator, no violations found.
 - The dry cleaner is no longer present. The entire strip mall in which it was located has been vacant since August 28, 2005 due to flooding from Hurricane Katrina.
- 7300 Lakeshore Dr., 100th Block of Lake Marina Dr., 221 Lake Marina Ave. ERNS, numerous sheen sitings and/or spills into Lake Pontchartrain
 - This is the site of numerous boat slips where spills have occurred. Boats are present in the area, with condominiums present nearby.
- Board of Commissioners Orleans Levee District, 221 Lake Marina Dr., RCRA-SQG, FINDS- Was cited as a generator with violations- all requirements being oversights. This site is no longer present. At the address, it is a vacant lot with grass.

- Coleman's West End Gulf LTD, 7402 Lakeshore Dr., HIST LUST, RCRA -SQG, FINDS, UST
 - 2- 6000 gal. removed gas tank made of fiberglass or plastic
 - 1- 2000 gal. removed gas tank made of fiberglass or plastic
 - 1- 3000 gal. removed diesel tank
 - 1- 500 gal. removed used oil tank
 - 1-1500 gas removed gas steel tank
 - 1-2000 gal removed steel gas tank
 - This site is no longer present. It was present along the strip of land between Lakeshore Dr. and the New Basin Canal. The nearest levee segments are on the opposite side of Lakeshore Dr.
- West End Marine, 7500 Lakeshore Dr., UST
 - 1-700 gal. removed; Dirt/debris also removed
 - This site is no longer present. It was present along the strip of land between Lakeshore Dr. and the New Basin Canal. The nearest levee segments are on the opposite side of Lakeshore Dr.
- Orleans Marina, 7590 Lakeshore Dr., UST, HIST LUST
 - 2-11,000 gal. closed steel tank
 - 1-12,000 gal. closed steel tank
 - 1- 500 gal. closed diesel steel tank
 - Owner: Orleans Levee Board
 - The site was energy exchange/Orleans Levee at time of incident. Tanks were closed and removed. Soil samples were collected and found to be at acceptable levels.
 - This site is no longer present. It was present along the strip of land between Lakeshore Dr. and the New Basin Canal. The nearest levee segments are on the opposite side of Lakeshore Dr.
- Vacant parking Lot, 7612 Lakeshore Dr., UST
 - 1-2000 gal. removed diesel tank
 - This site remains vacant land. It was present along the strip of land between Lakeshore Dr. and the New Basin Canal. The nearest levee segments are on the opposite side of Lakeshore Dr.

URS also observed an AST located at the New Orleans Levee District Office (*Appendix F*, photo # 3). This was identified by the EDR Report as site 2 (American Standard Plant and Board of Commissioners Orleans Levee Board). This tank is located at the northeast corner of the levee district property at the intersection of Franklin Ave. and Lakeshore Dr. at coordinates 0784204 E and 3325840 N. This tank is a water storage tank (as reported in interviews and noted on Sanborn maps). The site also contains USTs associated with the fueling area used by the Orleans Levee Board for their vehicles. They are active tanks that are monitored by the Orleans Levee Board.

Two ASTs were located on the new flood gate located on the Orleans Ave. Canal at coordinates 0779700 E and 3324842 N (*Appendix F*, photo # 5 and # 6). These two tanks store fuel for operation of the pumps located at this sector gate complex. The tanks are new and have necessary secondary containment. They are not leaking. This flood gate and its tanks are noted due to the fact that they are very near to 1000' of the existing lakefront levee.

6.4 Indication of PCBs (including how contained and assessment of leakage or potential for leakage)

During the site visit, the subject levee showed no evident signs of PCBs. There are numerous electrical boxes and "shelters" adjacent to the levee, but no signs of the presence of or leakage of any PCBs. From information obtained during interviews with the Orleans Levee District (see *Section 7.0*), the electrical boxes and shelters are owned by the Orleans levee Board, transformers within are less than 10 years old and do not contain transformers with PCBs.

6.5 Indications of Solid Waste Disposal

URS observed no indication of solid waste disposal on the day of the site reconnaissance.

URS did observe a large fenced yard that contains large piles of soil and some debris at the Orleans Levee District property on Franklin Ave. (*Appendix G*, photo # 4). Old light fixtures that were once on Lakeshore Drive are stored here. Some boats are also stored in the area.

6.6 Physical Setting Analysis, if Migrating Hazardous Substances are an Issue

URS observed no indications of migrating hazardous substances from any surrounding areas on the day of the site reconnaissance.

6.7 Other Conditions of Concern

There were several other items of interest noted during the site reconnaissance.

Intermittently spaced near the base of the levee along the entire reach of this project are small buildings with electrical equipment inside (*Appendix F*, photo # 7). The type of equipment is not known and could not be attained. There are also electrical service boxes located on the unprotected side of the levee (*Appendix F*, photo # 8). The majority of these boxes have been blown down by Hurricane Katrina and appear to be out of service.

There are several shelters located along the base of the existing levee. Each of these shelters has electric lines running to them, as well as water and sewer lines.

URS observed two potentially registered historic structures on the lakefront campus of UNO. At coordinates 0782849 N and 3325735 E, there is a smokestack from a boiler that is no longer present (*Appendix F*, photo # 9). This stack was used when this area was the Naval Reserve

Aviation Base. The other structure is a lighthouse located at 0783337 E and 3325713 N (*Appendix F*, photo # 10).

Near the IHNC, the USACE provided scope of work aerial shows two potential levee alignments for the area. This area was part of the closed Camp Leroy Johnson. Currently, there are several Naval Reserve buildings (*Appendix F*, photo # 11 and # 12) in the area that is fenced. One building is at coordinate 0785473 E and 3326133 N and the other is at coordinate 0785339 E and 3326229 N. Based on field observation, there does not appear to be any conditions of concern along either possible levee alignment.

7.0 INTERVIEWS

URS interviewed Mr. Stevan G. Spencer, Director of Hurricane and Flood Protection, Board of Commissioners, Orleans Levee District, on October 13, 2006 at his Franklin Ave. office. The purpose of the interview was to determine if he knew of any possible environmental concerns on or near the levee such that future excavation in the area could disclose. He has been working with the Orleans Levee District for approximately 13 years. He did not know exactly when the levees were built, but believes the land on which the levees reside was pumped in around the 1930's. He does not know of any spills or leaks in the area that would be of an environmental concern. He offered aerials of the subject levee segments from the 1980's that were made for a "green space" study that the Levee District was performing at that time. He advised URS to speak with Joe Casanova of the Levee District who is in charge of environmental related activities and the Orleans Levee District Police.

URS interviewed Major Donald Booth of Orleans Levee District Police, on October 17, 2006. He has worked for the Orleans Levee District Police for 32 years. In the 32 years that he has worked for the police, he does not know of any spills or leaks that would be of concern. He stated that there have been many automobile accidents on Lakeshore Drive, and some have been fatal. But, however, Lakeshore Drive is a "No Truck Route." Therefore, it is highly unlikely that incidents involving trucked hazardous materials would occur. Only when the levees were raised (from about 3' to 25' about 25 years ago) and after Hurricane Katrina were trucks allowed in the area.

URS interviewed Mr. Joseph Casanova, Environmental Manager of the Board of Commissioners, Orleans Levee District, on October 25, 2006 at his office on Franklin Ave. He has been working for the Orleans Levee District since 1995 and is retired from the military. He was one of the first graduating classes from LSUNO and is familiar with the UNO area when it was first opened as a university. He recalls an area adjacent to the levee at UNO where roll-off bins and construction debris was stored. He also recalls a vehicle maintenance building near the same levee area. He does not recall any ASTs or USTs. Other than this area, he does not know of any other within 1000' of the existing levee centerline that would be of an environmental concern. Any electrical transformers present at the levee or at the levee parks are owned by the Orleans Levee District, are less than 10 years old and do not contain PCBs.

Mr. Clarence Albert "Al" Wethern, Jr. was also interviewed on October 25, 2006. He was a pilot at the Naval Station that is now the UNO main campus. He recalls trucks being used to fuel aircraft, but does not know where the trucks obtained the fuel. He does not recall any ASTs at the Station. Buildings on the northern end of UNO were barracks with a mess hall. He also recalls possibly an engine testing facility on a large concrete slab with some concrete walls and no roof near this area.

Both Mr. Clarence and Mr. Wethern recall Camp Leroy Johnson and believe that there were no activities near the existing levee that would be of an environmental concern. They do believe that the camp must have had fueling areas, but do not know where they would have been.

Mr. Casanova stated that there was an area within the camp that the marines had used and that cleanup of the area has been performed prior to the military giving the land back to the Orleans Levee District.

Mr. Casanova and Wethern escorted URS around the Orleans Levee District facility that is within an adjacent floodwall. In this area, during WWII, amphibian aircraft were constructed and tested. It is unknown were they stored fuel for aircraft testing. Subsequent to aircraft construction, American Standard occupied the facility. After they left the New Orleans facility, the Orleans Levee District took over the site. The Orleans Levee District has maintained a fueling area with USTs. There are three active USTs; 1-10,000 gal. and 1-5,000 gal. diesel tanks and 1-10,000 gasoline tank. Numerous old fire hydrants are present along the perimeter of the facility. It is believed that the hydrants are connected to the AST at the eastern end of the property.

A UNO representative, David Richardson of the Facilities Service Department, was interviewed on October 24, 2006. He stated that an old UST filled with water was discovered when constructing the new UNO Recreation and Fitness Center. He does not know of any schematics of the area when it operated as a Naval Station.

8.0 FINDINGS AND CONCLUSIONS

Based upon URS site observations, records review, research and interviews, URS has summarized findings and conclusions in the paragraphs below related to recognized environmental conditions (REC) in the area of the existing levee segments LPV 101 through 104.

With exception of the area near the 17th St. Canal and marina, the land on which the subject levee resides was created during the 1930's during a massive land reclamation project. Sand was pumped from Lake Pontchartrain and a concrete floodwall constructed to contain the sand and prevent future erosion. Residential subdivisions such as Lake Terrace and Lake Vista were formed adjacent to the reclaimed land and levees built to protect these areas. These areas were developed to be residential and have been used for residential purposes since their inception.

World War II prompted the development of military facilities along the lakefront. To the east of the London Canal, along the shoreline, the Naval Reserve Air Base (later renamed the Naval Air Station) was established. To its east, a Navy Assembly Plant, a German POW camp and Camp Leroy Johnson were established. Pontchartrain Beach Amusement Park (adjacent and north of the Naval Reserve Air Base) preceded the military developments and remained after World War II until 1984. It now houses a Technology Park with affiliated UNO and other offices.

Post World War II, the Naval Reserve Air Base became the main campus of UNO. The Navy Assembly Plant became American Standard and then the Orleans Levee District facility. Camp Leroy Johnson was divided into the UNO eastern campus (Lakefront Arena and parking), an FBI building and an Army and Naval Reserve center. The Army and Naval Reserve Centers were heavily damaged by Hurricane Katrina and are currently fenced and abandoned. Part of the UNO land has been occupied by SUNO due to hurricane damage at the SUNO facility.

The western end of the subject levee is shown on 1920's maps as West End Park, New Orleans Yacht Club and a marina. The uses of the area have remained, with addition of restaurants, condominiums and boat houses; many of which have been destroyed or heavily damaged by Hurricane Katrina.

Sanborn, historic aerials and topographic maps were studied to confirm the history of the subject levee segment areas and to determine any other uses of the subject property. In particular, maps were examined for notations of USTs and ASTs. Databases were searched (with the aid of EDR) to determine reported sites within radii recommended by ASTM E 1527-05. EDR identified thirteen (13) locations of sites listed in the environmental databases. Three (3) identified locations (map identification numbers 3, 10 and 13) are across water bodies from the levee segments. Sites at these locations would not be expected to pose an environmental concern to the subject levee segments. Four (4) identified locations (map identification numbers 5, 6, 11, and 12) are beyond the 1000' distance of Corps of Engineers interest. Remaining locations (map identification numbers 1, 2, 4, 7, 8, and 9) contain sites listed as RCRA large and small quantity generators, having former USTs, having active USTs, having former LUST, a dry cleaner, etc...

Based on examination of information retrieved from databases concerning these sites it is URS' opinion that they do not meet the definition of a REC, but are however, within 1000' of the centerline of the existing levees. Of particular note are three sites:

- 1.) USCG- Station, 80 Lakeshore Dr.- UST is reported "closed", but not "removed"
- 2.) Orleans Marina, 7590 Lakeshore Dr.- 4 USTs reported "closed", but not "removed"
- 3.) Dry Cleaner, 117 Robert E. Lee- no violations have been reported, but it is URS experience that dry cleaners pose a concern if chemicals used have been mismanaged.

Interviews with Orleans Levee District and UNO representatives were performed to gain additional information and to review/confirm the above findings. None of the representatives could confirm the presence of petroleum or hazardous materials near the existing levee segments, but concur that there is potential for environmental concern near the following three areas due to past uses of the areas:

- 1.) The area adjacent to UNO's main campus that was formerly a Naval Aviation Station- information confirming activities and the presence/locations of USTs in this area could not be found. UNO discovered empty USTs in this area during the construction of the parking lot associated with the Recreation and Fitness Center building.
- 2.) The area adjacent to the current Orleans Levee District Building- USTs and an AST holding water are located within 1000' of the adjacent floodwall. Amphibian aircraft were built in this area during WWII. The USTs are currently used by the Orleans Levee District.
- 3.) The area adjacent to the former Camp Leroy Johnson- information confirming activities and the presence/locations of USTs in this area could not be found. It is unlikely that USTs exist in this area, but this could not be confirmed or denied.

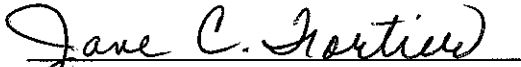
A walkthrough of the above areas (only the perimeter of Camp Leroy Johnson was accessible), as well as the remainder of the levee segments, did not identify REC.

Note: The conclusions presented in this report are preliminary in nature and are not to be used as a sole basis for final action(s), or as the sole basis for major capital decisions. Background data and information furnished to URS were used in the preparation of this report. URS has not independently verified or otherwise examined it nor is responsible for the accuracy of this information. The findings, although valid as of the present date, are subject to future changes in conditions of the site, adjacent properties, applicable regulations, requirements, or other findings which may invalidate them wholly or in part.

SECTION NINE

Signatures of Environmental Professionals

9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS


Jane C. Fortier, P.E.

**10.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS
PARTICIPATING IN PHASE I ENVIRONMENTAL SITE ASSESSMENT**

Refer to *Appendix H, Resumes*, for a resume of site assessment personnel.