

Five-Year Review Report

First Five-Year Review Report for the Old Inger Oil Refinery site Ascension Parish, Louisiana



PREPARED BY:

**Region 6
United States Environmental Protection Agency
Dallas, Texas**

July 23, 2007

[This page intentionally left blank.]

FIRST FIVE-YEAR REVIEW

Old Inger Oil Refinery site
EPA ID# LAD980745533
Ascension Parish, Louisiana

This memorandum documents the United States Environmental Protection Agency's (EPA's) performance, determinations, and approval of the first five-year review for the Old Inger Oil Refinery site performed under Section 121(c) of the Comprehensive Environmental Response, Compensation & Liability Act (CERCLA), 42 United States Code (USC) §9621(c), as described in the attached First Five-Year Review Report prepared by EPA with support from CH2M HILL, Inc.

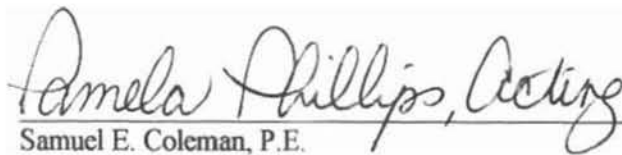
Summary of First Five-Year Review Findings

The first five-year review for the Old Inger Oil Refinery (OIOR) site indicates that the remedial actions set forth in the decision documents for the site continue to be implemented as planned. The Louisiana Department of Environmental Quality (LDEQ) performs Operations and Maintenance (O&M) activities, which include mowing and inspection/maintenance of the cap and maintenance of the perimeter fence. Based on the first five-year review site inspection, data review, interviews, and technical assessment, it appears the remedy is generally functioning as intended by the decision documents.

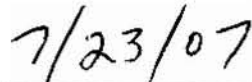
No deficiencies or concerns were identified as part of this five-year review. To ensure continued protectiveness, the ongoing O&M activities for the site should continue, and two action items that do not currently affect the protectiveness of the remedy should be addressed. These action items are: (1) a written O&M Plan should be prepared to describe the O&M requirements and implementation; and (2) the faded warning sign on the front gate should be replaced.

Determinations

I have determined that the remedy for the Old Inger Oil Refinery site is performing as intended and is protective of human health and the environment.



Samuel E. Coleman, P.E.
Director, Superfund Division
U.S. Environmental Protection Agency, Region 6



Date

[This page intentionally left blank.]

CONCURRENCES

FIRST FIVE-YEAR REVIEW

Old Inger Oil Refinery site

EPA ID# LAD980745533

Document Prepared By: The U.S. Environmental Protection Agency, with support from CH2M HILL, Inc.

Concur By:
EPA Region 6
Remedial Project Manager:


Bartolomé J. Cañellas (6SF-RL)

7/10/07
Date

Concur By:
EPA Region 6
Site Attorney:


Gloria S. Moran (6RC-S)

7/11/07
Date

Concur By:
EPA Region 6
Superfund Branch Chief,
Office of the Regional
Counsel:


Mark A. Peycke (6RC-S)

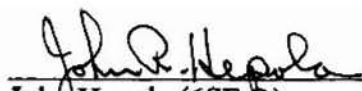
07/17/07
Date

Concur By:
EPA Region 6
LA/OK/NM Team Leader:


Buddy Parr (6SF-RL)


07/19/2007
Date

Concur By:
EPA Region 6
Remedial Branch Chief:


John Hepola (6SF-R)

7/20/07
Date

Concur By:
EPA Region 6
Deputy Director, Superfund
Division:


Pam Phillips (6SF-D)

7/23/07
Date

[This page intentionally left blank.]

Contents

Section	Page
Contents	i
Acronyms	iii
Executive Summary	v
Five-Year Review Summary Form	vii
1.0 Introduction	1
2.0 Site Chronology	3
3.0 Background	4
3.1 Physical Characteristics	4
3.2 Land and Resource Use	5
3.3 History of Contamination	5
3.4 Initial Response	6
3.5 Basis for Taking Action	7
4.0 Remedial Actions	7
4.1 Remedy Selection	7
4.2 Remedy Implementation	9
4.3 Operations and Maintenance and Long-Term Monitoring	13
4.4 Progress Since Initiation of Remedial Action	13
5.0 Progress Since Last Five-Year Review	14
6.0 Five-Year Review Process	14
6.1 Administrative Components	14
6.2 Community Involvement	14
6.3 Document Review	15
6.4 Data Review	15
6.5 Interviews	17
6.6 Site Inspection	17
7.0 Technical Assessment	17
7.1 Question A: Is the Remedy Functioning as Intended by the Decision Documents?	18
7.2 Question B: Are the Exposure Assumptions, Toxicity Data, Cleanup Levels, and Remedial Action Objectives Used at the Time of the Remedy Selection Still Valid?	18
7.3 Question C: Has any Other Information Come to Light that Could Call into Question the Protectiveness of the Remedy?	20
7.4 Summary of the Technical Assessment	20
8.0 Institutional Controls	20
8.1 Types of Institutional Controls in Place at the Site	21
8.2 Effect of Future Land Use Plans on Institutional Controls	21
8.3 Plans for Changes to Site Contamination Status	21
9.0 Issues	22
10.0 Recommendations and Follow-up Actions	22
11.0 Protectiveness Statement	23
12.0 Next Review	24

List of Tables

Table 1	Chronology of Site Events
Table 2	Bioremediation Cleanup Standards for Contaminated Soil, Sludges, Sediments, and Oil
Table 3	Issues Identified During the First Five-Year Review
Table 4	Recommendations and Follow-up Actions

List of Figures

Figure 1	Site Location
Figure 2	Site Map
Figure 3	Site Conditions Prior to the Phase IV-B and IV-C Remedial Action
Figure 4	Site Conditions after Completion of the Phase IV-B and IV-C Remedial Action
Figure 5	Site Survey of Final Elevations after Completion of the Remedial Action

List of Attachments

Attachment 1	Documents Reviewed
Attachment 2	Interview Record Forms
Attachment 3	Site Inspection Checklist
Attachment 4	Site Inspection Photographs
Attachment 5	Notices to the Public Regarding the Five-Year Review
Attachment 6	Deed Notices

Acronyms

ARARs	Applicable or Relevant and Appropriate Requirements
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FOG	Fats, Oils, and Greases
ft	feet
GWSS	Groundwater Screening Standards
ICs	Institutional Controls
LDEQ	Louisiana Department of Environmental Quality
LTU	Land Treatment Unit
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
OIOR	Old Inger Oil Refinery
O&M	Operation and Maintenance
OSWER	EPA Office of Solid Waste and Emergency Response
PAHs	Polynuclear Aromatic Hydrocarbons
ppb	parts per billion
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RA	Remedial Action
RECAP	Risk Evaluation and Corrective Action Program
ROD	Record of Decision
RPM	Remedial Project Manager
SARA	Superfund Amendments and Reauthorization Act
SVOCs	Semi-volatile Organic Compounds
TBC	To Be Considered
TPH	Total Petroleum Hydrocarbons
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey
VOCs	Volatile Organic Compounds
WTU	Wastewater Treatment Unit

[This page intentionally left blank.]

Executive Summary

Pursuant to Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or “Superfund”), 42 United States Code (USC) §9621(c), the first five-year review of the remedy at the Old Inger Oil Refinery (OIOR) site located in Ascension Parish, Louisiana, has been completed as a matter of U. S. Environmental Protection Agency (EPA) policy. The results of this first five-year review, completed in June 2007, indicate that the remedy is protective of human health and the environment. The remedial actions performed appear to be functioning as designed, and the site has been maintained appropriately. No deficiencies were noted that currently impact the protectiveness of the remedy.

The selected remedy for the site included excavation and onsite land treatment of contaminated soils, sediments, oils, and sludges, onsite disposal of the treated material, placement of a clay cap and revegetation of the site, water treatment and discharge, and eight rounds of quarterly ground water monitoring. Based on the results of the ground water monitoring, it was determined that the ground water posed no threat to human health or the environment, and EPA and the Louisiana Department of Environmental Quality (LDEQ) determined that no further action was necessary to address the ground water. The remedy for the OIOR site allows for the anticipated future land use as rural vacant land, but does not allow for unrestricted use or unrestricted exposure. As a result, a conveyance notice has been placed in the property deed records for the site to provide notice of the site contamination and to provide notice that the integrity of the clay cap is to be maintained. O&M activities include mowing and inspection and maintenance of the clay cap and perimeter fence. O&M at the site is the responsibility of the LDEQ.

To ensure continued protectiveness, the ongoing O&M activities for the site should continue, and two action items that do not currently affect the protectiveness of the remedy should be addressed. These action items are: (1) a written O&M Plan should be prepared to describe the O&M requirements and implementation; and (2) the faded warning sign on the front gate should be replaced.

[This page intentionally left blank.]

Five-Year Review Summary Form

SITE IDENTIFICATION

Site name (from WasteLAN): Old Inger Oil Refinery Superfund site

EPA ID (from WasteLAN): LAD980745533

Region: EPA Region 6

State: Louisiana

City/County: Ascension Parish

SITE STATUS

NPL Status: Final Deleted Other (specify):

Remediation status (choose all that apply): Under Construction Operating Complete

Multiple OUs? Yes No

Construction completion date: Sep 12, 2006

Has site been put into reuse? Yes (partially)

No

REVIEW STATUS

Reviewing agency: EPA State Tribe Other Federal Agency:

Author: EPA Region 6, with support from CH2M HILL, Inc.

Review period: March 2002 through June 2007

Date(s) of site inspection: April 18, 2007

Type of review:

Statutory

Pre-SARA

Policy

NPL-Removal only

Post-SARA

NPL State/Tribe-lead

Non-NPL Remedial Action site

Regional Discretion

Review number: 1 (first) 2 (second) 3 (third) Other (specify):

Triggering action: Actual RA Onsite Construction

Actual RA Start

Construction Completion

Recommendation of Previous

Other (specify): Early Policy Review

Five-Year Review

Triggering action date (from WasteLAN): September 12, 2006

Due date (five years after triggering action date): September 12, 2011.

This first five-year review is being conducted early to facilitate deletion of the site from the NPL.

Five-Year Review Summary Form

Issues: Operations and Maintenance (O&M) is ongoing at the site, and based on the data review, site inspection, interviews, and technical assessment, it appears the remedy is functioning as intended by the decision documents. No deficiencies or concerns were identified as part of this five-year review. Two issues identified in the first five-year review for this site that do not currently affect the protectiveness of the remedy. These issues are:

- 1. There is no written Operations and Maintenance (O&M) Plan for the site.** LDEQ performs O&M activities for the site that include mowing and inspections of the perimeter fence and clay cap; however, the procedures and schedule for these activities are not yet documented in an O&M Plan or Manual. A written O&M Plan would specify the requirements to adequately maintain the remedy and ensure future protectiveness. LDEQ has indicated this O&M Plan will be in place by the end of July 2007.
- 2. The warning sign on the front gate is out of date, faded, and difficult to read.** Although trespass across the site would not pose a risk as long as the clay cap is not disturbed, the warning sign provides notice regarding the contamination left onsite and may serve as a deterrent to trespassers, thereby helping protect the long-term integrity of the cap.

Recommendations and Follow-Up Actions: The following recommendations and follow-up actions have been defined for the site:

- 1. Prepare an O&M Plan that stipulates the O&M activities necessary to maintain the site.** The O&M Plan should include the requirements and frequency for mowing the site, inspecting the site integrity of the clay cap, inspecting the site fence and gates, removal of overgrown vegetation when needed, inspection and replacement of warning signs, and documenting the O&M activities performed.
- 2. Replace the faded warning sign posted on the front gate.**

Protectiveness Statement(s): The remedy implemented for the OIOR site is considered protective of human health and the environment. Contaminated soils, sludges, sediments, and oil were treated onsite via biodegradation, and the treated material was used as backfill onsite in the areas of excavation. A protective clay cap was then placed over the excavated areas of the site. The shallow ground water was monitored for a period of two years. Based on the results of this monitoring, it was determined that the ground water posed no threat to human health or the environment, and the United States Environmental Protection Agency (EPA) and LDEQ determined that no further action was necessary to address the ground water. The remedy allows for the anticipated future land use as rural vacant land, but does not allow for unrestricted use or unrestricted exposure. As a result, a conveyance notice has been placed in the property deed records for the site to provide notice of the site contamination and to provide notice that the integrity of the clay cap is to be maintained. Continued O&M will ensure that the selected remedy continues to be protective.

Because the remedial actions implemented at the site are protective, the overall remedy for the site is protective of human health and the environment.

Other Comments: During the five-year review period, the LDEQ actions to implement the O&M activities have helped ensure continued protectiveness of human health and the environment at the site.

First Five-Year Review Report Old Inger Oil Refinery Superfund Site Ascension Parish, Louisiana

1.0 Introduction

The United States Environmental Protection Agency (EPA) Region 6 has performed a five-year review of the remedial actions implemented at the Old Inger Oil Refinery (OIOR) Superfund Site located in Ascension Parish, Louisiana. The purpose of a five-year review is to determine whether the remedy at a site remains protective of human health and the environment, and to document the methods, findings, and conclusions of the five-year review in a Five-Year Review Report. Five-Year Review Reports identify issues found during the review, if any, and make recommendations to address the issues. This First Five-Year Review Report documents the results of the review for the OIOR site performed in accordance with EPA guidance on five-year reviews.

EPA guidance on conducting five-year reviews is provided by Office of Solid Waste and Emergency Response (OSWER) Directive 9355.7-03B-P, *Comprehensive Five-Year Review Guidance (EPA, 2001)* (replaces and supersedes all previous guidance on conducting five-year reviews). EPA followed the guidance provided in this OSWER directive in conducting the five-year review performed for the OIOR site.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) call for five-year reviews of certain remedial actions. The statutory requirement to conduct five-year reviews was added to CERCLA as part of the Superfund Amendments and Reauthorization Act of 1986 (SARA). EPA may also conduct five-year reviews as a matter of policy for sites not addressed specifically by the statutory requirement. EPA therefore classifies each five-year review as either “statutory” or “policy” depending on whether it is being required by statute or is being conducted as a matter of policy. The first five-year review for the OIOR site is a policy review.

The EPA five-year review guidance specifies that five-year reviews are required or appropriate whenever a remedial action results in hazardous substances, pollutants, or contaminants remaining onsite at levels that will not allow for unlimited use or unrestricted exposure. As specified by CERCLA and the NCP,

statutory reviews for such sites are required if the Record of Decision (ROD) was signed on or after the effective date of SARA. CERCLA §121(c), as amended, 42 USC §9621(c), states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented.

The implementing provisions of the NCP, as set forth in the CFR, state at 40 CFR 300.430(f)(4)(ii):

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

EPA five-year review guidance further states that a five-year review should be conducted as a matter of policy for the following types of actions:

- A pre-SARA remedial action that leaves hazardous substances, pollutants, or contaminants onsite above levels that allow for unlimited use and unrestricted exposure;
- A pre or post SARA remedial action that, once completed, will not leave hazardous substances, pollutants, or contaminants onsite above levels that allow for unlimited use and unrestricted exposure, but will require more than five years to complete; or,
- A removal-only site on the National Priorities List (NPL) where the removal action leaves hazardous substances, pollutants, or contaminants onsite above levels that allow for unlimited use and unrestricted exposure and no remedial action has or will be conducted (**EPA, 2001**).

The five-year review for the OIOR site is being conducted as a matter of EPA policy because the ROD for the site was signed on September 25, 1984, before the effective date of SARA, and because hazardous substances, pollutants, or contaminants remain onsite above levels that allow for unlimited use and unrestricted exposure.

This is the first five-year review for the OIOR site. The triggering action for this policy review is the date of construction completion for the OIOR site, which occurred on September 12, 2006. This five-year review is being conducted as an early policy review to facilitate deletion of the OIOR site from the NPL.

2.0 Site Chronology

A chronology of significant site-related events and dates is included in [Table 1](#). Sources of this information are listed in [Attachment 1, Documents Reviewed](#).

Table 1 Chronology of Site Events <i>Old Inger Oil Refinery Superfund Site</i> <i>Ascension Parish, Louisiana</i>	
Date	Event
1967 – 1978	The Old Inger Oil Refinery (OIOR) Superfund Site is operated as an oil reclamation facility.
March 1978	A large spill occurs at the OIOR Site.
1980	The property owner abandons the OIOR Site.
1981	The Louisiana Environmental Control Commission declares the OIOR Site abandoned.
September 1982 – September 1983	The Remedial Investigation of the OIOR Site is performed.
December 30, 1982	The U. S. Environmental Protection Agency (EPA) proposes the OIOR Site to the National Priorities List (NPL).
April 1983 – August 1988	Five emergency removal actions are performed at the OIOR Site to provide site security, control migration of contamination, excavate, consolidate, and contain soils, and perform sampling and analysis.
September 8, 1983	EPA Finalizes OIOR Site on the NPL.
July 1984	The Feasibility Study for the OIOR Site is completed.
September 25, 1985	EPA signs the Record of Decision (ROD) for the OIOR Site.
October 1987	The Remedial Design for the OIOR Site is completed.
1990 – 1992	Phase IV-A of the OIOR Site Remedial Action (RA) is performed under the oversight of the Louisiana Department of Environmental Quality (LDEQ).
September 22, 1993	The EPA signs an Explanation of Significant Differences (ESD) to the ROD to document increases in treatment volumes requiring remediation at the OIOR Site.
July 1998 – March 2002	Phase IV-B and IV-C of the RA is performed under the oversight of the LDEQ.
August 2001 – January 2006	The final phase of the RA, involving investigation and sampling of the site ground water, is performed under the oversight of the LDEQ.
October 21, 2001	The EPA and LDEQ perform the final inspection of the Phase IV-B and IV-C RA for the OIOR Site.
August 29, 2005	Hurricane Katrina makes landfall in southeast Louisiana.

Table 1
Chronology of Site Events
Old Inger Oil Refinery Superfund Site
Ascension Parish, Louisiana

Date	Event
September 24, 2005	Hurricane Rita makes landfall near the Louisiana/Texas border.
October 12, 2005	EPA and LDEQ perform a site inspection to evaluate whether Hurricanes Katrina and Rita compromised the effectiveness of the RA.
December 14, 2005	EPA issues a report documenting no impacts to the RA by Hurricanes Katrina or Rita.
September 12, 2006	EPA signs an ESD to the ROD documenting that an RA to address ground water contamination at the OIOR Site originally deferred by the ROD and the plugging of an abandoned well described by the ROD are not required (the abandoned well was not found). EPA issues the Final Close Out Report for the OIOR Site.

3.0 Background

This section describes the physical setting of the site, including a description of the land use, resource use, and environmental setting. This section also describes the history of contamination associated with the site, the initial response actions taken at the site, and the basis for each of the initial response actions.

Remedial actions performed subsequent to the initial response actions at the site are described in

[Section 4.](#)

3.1 Physical Characteristics

The OIOR site is located on an approximately 19-acre site located approximately 4.5 miles north of Darrow, Ascension Parish, Louisiana. The site is bordered by Louisiana State Highway 75 on the north and the Mississippi River on the south. The nearest residence is located approximately 0.3 miles south of the site (EPA, 1984). The site is currently vacant. The only features remaining at the site related to the remedy are the protective clay cap and a perimeter security fence. Since completion of the remedy, vegetation has become reestablished (see [Section 6.6](#) for a discussion of the current conditions of the site as observed during the five-year review site inspection).

The site is located within the Mississippi River floodplain but is protected by the levee system in place for the river. Surface water at the site ultimately drains to the east to Bayou Conway, Bayou Manchac, and then into Lake Maurepas. The site is underlain by a shallow aquifer, an intermediate aquifer, the alluvial aquifer, and then the Gonzales formation. The shallow aquifer is located within a silty lens that occurs at

approximately six feet (ft) below ground surface (bgs) and pinches out to the north and south. The intermediate aquifer occurs within a sandy silt layer that begins at approximately 45 ft bgs and ranges from 60 to 70 ft thick. The alluvial aquifer underlies the intermediate aquifer at the site. The alluvial aquifer begins at approximately 120 ft bgs, and this aquifer is used as a drinking water source in the area of the site. The Gonzales Formation, which occurs below the regional aquifer, is a major regional drinking water source. Ground water flow in the shallow and intermediate aquifers is influenced by the stage of the Mississippi River. During most of the year, ground water in these two aquifers flows towards the east and away from the river. During low stage of the Mississippi River, ground water in these two aquifers flows towards the river. A downward vertical gradient exists between the shallow and intermediate aquifers (EPA, 1984). A site location map is provided as [Figure 1](#). The layout of former site features (onsite impoundments, etc.) is illustrated as [Figure 2](#).

3.2 Land and Resource Use

The OIOR site is located in a rural area. Land use around the site is predominantly agricultural. The nearest residence to the site is located on the east side of Louisiana State Highway 75 approximately 0.3 miles south of the site. The ROD reported that approximately 200 people lived within a one-mile radius of the site during the 1980s (EPA, 1984). Land use near the site during the five-year review site inspection was observed to be the same as what was noted in the ROD (predominantly rural and agricultural land use). A wildlife conservation area has been established to the north of the site on the east side of Louisiana State Highway 75 (see [Attachment 4, Photograph 27](#)).

The OIOR site is located in a generally flat area inside the flood protection levee of the Mississippi River. The site is subject to water ponding during heavy rainfall. The site is underlain by fluvial sediments consisting of silty to sandy clays, silts, and fine sands to a depth of 115 to 125 ft bgs. These sediments exhibit a wide range of variability in their lateral and vertical distribution at the site. Both the shallow and intermediate aquifers, which are not used in the area as a source of drinking water, are within these sediments. The alluvial aquifer, located at an approximate depth of 120 ft bgs at the site, is used locally as a source of drinking water. The Gonzales Formation underlies the alluvial aquifer and is a regional source of drinking water (EPA, 1984, and CH2M HILL, 2005).

3.3 History of Contamination

The OIOR site was a former oil refinery and waste oil reclamation facility that began operation in 1967. The four primary areas of the site included the surface tankage, the waste lagoons, the swamp, and the

buried waste area. The surface tankage included nine oil storage tanks, a cracking tower, a separating tower, and containment areas. There were also two lagoons present onsite that were 0.8-acres and 0.07-acres in size (shown on Figure 2 as Lagoon 1 and Surface Impoundment). The swamp occupied approximately 7.5 acres of the site. The buried waste-oil pit was located in the south central portion of the site. The facility was purchased by Old Inger Oil Refinery in 1976 and operated until March 1978 (EPA, 1984). The site features are shown on Figure 2. The largest swamp area was previously located in the area where the Land Treatment Unit (LTU) was later constructed.

When the site was active, waste oils were brought to the facility by truck and by barge. The waste oils were processed in the cracking tower and stored onsite. Final products were generally shipped from the site by truck. The lagoons were used for disposal of waste sludges, oils, and surface water. Liquid would occasionally be siphoned from one of the lagoons to the swamp to maintain storage capacity in the lagoon. The siphoning process resulted in the discharge of oily materials into the swamp. Contamination at the site resulted from tanks being overfilled, discharges to the lagoons and swamps, and drums and construction debris being buried in lagoons. A large spill occurred in March 1978 that resulted in the discharge of used oil into the swamp (EPA, 1984, EPA, 2006a, and EPA, 2006b).

After the spill occurred in 1978, ownership of the property changed. The new owners intended to cleanup the site. However, the new property owners found the cleanup to be uneconomical and abandoned the site in 1980. The Louisiana Environmental Control Commission (predecessor agency to the Louisiana Department of Environmental Quality [LDEQ]) formally declared the site abandoned in 1981 (EPA, 1984).

3.4 Initial Response

Initial investigations of the site were conducted beginning in 1982. The investigations conducted by both the EPA and LDEQ discovered the presence of contaminated waste oils, sludges, sediments, and water. Hazardous constituents detected in these wastes included heavy metals, phenols, benzene, naphthalene, benzo (a) pyrene, and benzo (a) anthracene (EPA, 2006a, and EPA, 2006b).

Between April 1983 and August 1988, five emergency removal actions were conducted at the site. These removal actions involved providing site security, providing control of migration of onsite contamination, excavation, consolidation, and containment of soils, and sampling and analysis. The purpose of the emergency removal actions was to reduce the potential for exposure to and migration of onsite

contamination. In addition, the removal actions were conducted to make site conditions safer during the RA activities (EPA, 2006a, and EPA, 2006b).

The site was placed on the NPL in September 1983. The site was found to be contaminated with a wide variety of organic and inorganic compounds in sludges, soil, sediments, ground water, and surface water. The depth of visible contamination associated with the soil and sludges was six feet in the buried waste oil pit. The shallow aquifer was found to be most contaminated in the area of the buried waste oil pit and the large lagoon. The intermediate aquifer was determined to be slightly contaminated. Surface water in the swamp and the lagoons were also determined to be impacted by site contamination. The primary migration and exposure pathways for the contamination were determined to be: (1) offsite migration of onsite contaminated surface water through natural drainage; (2) offsite migration of contaminated shallow ground water; (3) vertical migration of contamination to deeper aquifers with further migration offsite; and (4) direct contact with onsite waste oils, sludges, heavily contaminated soil, water, or vegetation (EPA, 1984).

3.5 Basis for Taking Action

The purpose of the response actions conducted at the OIOR site were to protect public health and welfare and the environment from releases or threatened releases of hazardous substances from the site. The major threats posed by the site were the direct contact with waste oils, sludges, and contaminated soils, water, and vegetation, offsite migration of contamination in the shallow aquifer, downward migration of contamination to the lower aquifers, and the offsite migration of wastes through flooding (EPA, 1984).

4.0 Remedial Actions

Included in this section is a description of the remedy objectives, selection, and implementation at the OIOR site. It also describes the ongoing Operations and Maintenance (O&M) activities performed and the overall progress made at the site in the period since completion of the RA. The LDEQ manages the site O&M activities.

4.1 Remedy Selection

The specific remedial objectives identified in the ROD for the OIOR site RA were:

- Prevent/minimize the migration of onsite heavily contaminated surface water.
- Prevent/minimize the migration of onsite slightly contaminated surface water.
- Prevent/minimize the migration of onsite ground water in the shallow aquifer.

- Prevent/minimize the impact to offsite ground water in the intermediate and alluvial aquifers.
- Prevent/minimize the migration of onsite heavily contaminated soils and sludges.
- Prevent/minimize the migration of onsite slightly contaminated soils (**EPA, 1984**).

The ROD established the following criteria for the site:

- All water discharged from the site would meet the following standards:
 1. Biochemical Oxygen Demand < 30 parts per million (ppm);
 2. Total Suspended Solids < 30 ppm;
 3. Chemical Oxygen Demand < 150 ppm;
 4. Oil and Grease < 15 ppm; and,
 5. Total Organic Priority Pollutants < 100 parts per billion (ppb).
- The establishment of cleanup levels for the shallow and intermediate aquifers was deferred until after completion of the RA to address the waste oils, sludges, and contaminated soils (**EPA, 1984**).

The ROD for the site was signed on September 25, 1984. The EPA has also signed two Explanations of Significant Differences (ESDs) to the ROD. The first ESD was signed on September 22, 1993. The second ESD was signed on September 12, 2006. Both ESDs were issued to explain differences between the implemented remedy at the OIOR site and the remedy selected in the ROD.

The ROD addressed the threats posed by the site to human health and the environment. The site was also addressed through five emergency removal actions as described in [Section 3.4](#). The remedy selected in the 1984 ROD for the OIOR site consisted of the following elements:

- Closing and sealing of an onsite ungrouted well;
- Carbon adsorption treatment and discharge offsite of contaminated fluids;
- Onsite land treatment of heavily contaminated soils and sludges;
- In situ containment and capping of slightly contaminated soils;
- Placement of land use restrictions on the site (Institutional Controls or ICs); and,
- Ground water monitoring (**EPA, 1984**).

The ROD deferred decisions regarding treatment of contaminated wood, establishing cleanup levels for the shallow aquifer, and determining whether cleanup of the intermediate aquifer would be required **(EPA, 1984)**.

The EPA signed the first ESD to the ROD for the OIOR site on September 22, 1993. The ESD explained that the waste quantities requiring treatment were significantly greater than the quantities estimated in the ROD. The ESD also stated that the contaminated waste materials extended deeper into the subsurface than what was originally estimated in the ROD. This information was based on implementation of excavation activities during the first phase of the RA (described below in **Section 4.3**). The ESD stated that approximately 100,000 cubic yards of contaminated soils and sludges requiring treatment were present at the site (the ROD estimated that only 40,000 cubic yards would require treatment). The ESD also stated that up to the date of issuance of the ESD, 14 million gallons of contaminated water had been treated at the site, and it was estimated that an additional 14 million gallons would require treatment before the RA was completed (for a total of 28 million gallons of contaminated water requiring treatment during the RA). The ROD estimated that only 10 million gallons of contaminated water at the site would require treatment during implementation of the RA. The ESD stated that, due to the solicitation being prepared by the LDEQ to implement the second phase of the RA, no cost estimate was being provided in the ESD. The ESD further stated that no fundamental changes to the ROD selected remedy were being made by the ESD **(EPA, 1993)**.

The EPA signed the second ESD to the ROD for the OIOR site on September 12, 2006. The EPA issued this ESD to document final decisions regarding the ungrouted well and the level of cleanup required for shallow ground water at the site. The ESD stated that, through implementation of the RA involving excavation of the entire site, the presence of an onsite well could not be confirmed. In regard to the ground water at the site, the ESD stated that ground water sampling data indicated that no further action was necessary to address ground water in the shallow or intermediate aquifers at the site. This decision was based on eight quarterly sampling events, performed following completion of the RA, which demonstrated that the shallow ground water did not pose an unacceptable risk to human health or the environment **(EPA, 2006a)**.

4.2 Remedy Implementation

The LDEQ was the lead agency for the RA at the OIOR site. The remediation effort was conducted through a Cooperative Agreement between the EPA and LDEQ **(EPA, 2006b)**. Bioremediation was

selected as the remedial technology that would be used to address the waste soils and sludges present at the site based on pilot testing (IT, 2002).

The first phase of the RA (identified as Phase IV-A) was completed between 1990 and 1992. The LDEQ contracted with Westinghouse Remediation Services to complete this work. The Phase IV-A RA work included excavation and stockpiling of sludges from the surface impoundments, construction of the LTU, construction of the wastewater treatment plant, and removal and treatment of contaminated liquids in the surface impoundments (EPA, 2006b, and IT, 2002). It was during this phase of the RA that the additional quantities of wastes requiring treatment were determined, which resulted in the 1993 ESD.

The second and third phases of the RA (Phase IV-B and Phase IV-C) occurred between May 1998 and October 2001. This work was contracted by LDEQ to IT Corporation. The work included excavation and material handling, bioremediation of contaminated soils, sludges, sediments, and oil, clearing and grubbing of vegetation, storm water management and treatment, handling and disposal of onsite tanks, drums and debris, and site restoration work. Mobilization for the RA began in July 1998, and site preparation work commenced in September 1998 (IT, 2002). [Figure 3](#) shows the site conditions prior to commencement of the Phase IV-B and Phase IV-C RA work.

The remediation activities at the site included excavation of contaminated materials, processing the material, and placement of material on the LTU for treatment. Material processing started in November 1998 and continued until September 1999. All excavated materials were screened to remove debris greater than 2 inches in diameter. Additional excavation of contaminated areas began in December 1999. In addition to the material excavated from the surface impoundments during Phase IV-A, additional excavation was performed in the buried waste area, lagoon 1, and the southeast swamp area. Each area was excavated based on visual inspection and acceptance by the LDEQ. After the material was screened, it was stockpiled for placement on the LTU for treatment. Material was placed on the LTU in loose six-inch lifts. Amendments, including manure, hay, nitrate, and phosphorus, were then added to enhance biodegradation, and the material was disked and tilled with 3 inches of clean soil. During treatment, the material was monitored weekly for nitrate, nitrite, ammonia, phosphorus, pH, oxygen, carbon dioxide, and percent moisture to ensure optimum biodegradation conditions existed. Disking and tilling were also performed to enhance biodegradation. The treated soils were tested for fats, oils, and greases (FOGs) and polynuclear aromatic hydrocarbons (PAHs) to verify that remediation was completed. During the RA, testing for FOGs was replaced with testing for total petroleum hydrocarbons (TPH), because TPH was

deemed more consistent with the contamination present at the site (**IT, 2002**). The testing data are further discussed in **Section 6.4**.

Once the cleanup goal was achieved for an individual lift, a new lift was placed onto the LTU. A total of 10 lifts (including treatment of the tank contents – discussed in the following paragraph) were treated in the LTU. Placement of material on the LTU began in December 1998, and treatment of the contaminated soils, sludges, sediments, and oils was completed in December 2000 (**IT, 2002**).

Debris managed during the RA included screened material that was greater than 2 inches in diameter, drums, gas cylinders, and tanks. Debris greater than 2 inches in diameter was cleaned to remove contaminated soil and placed in the buried waste area excavation for disposal. A total of 2,456 cubic yards of debris were buried in the buried waste area excavation. The drums were determined to contain a solidified fiberglass resin. The drums were also placed in the buried waste area excavation. Five acetylene cylinders and one Freon canister were sent offsite for disposal. The contents of the onsite tanks were pumped into Tank A. The tank oils were then solidified with grain dust, pretreated, and then placed on the LTU as the tenth lift for final treatment (**IT, 2002**).

During site RA activities, a portable wastewater treatment unit (WTU) was operated to prevent contaminated storm water from discharging from the site. The WTU was brought into service for the Phase IV-B and IV-C RA during November 1998 and operated until December 2000. During this period, all storm water at the site was conveyed to the WTU for treatment. Prior to January 2000, the treated water was discharged to the Mississippi River. The discharge line was relocated in January 2000 to a storm ditch located on the east side of the site, and the treated water was discharged to this ditch after that time. The WTU operated until all contaminated materials at the site had been treated and backfilled at the site. During this period, the WTU was monitored to ensure compliance with site discharge requirements. The WTU had six excursions (exceedances of the discharge criteria) during its operation. After notification of each excursion, discharge of water was discontinued until the cause was resolved. A new backwashing policy, utilizing a final backwash with fresh water, was implemented in January 2000 and no further excursions occurred. The WTU was decommissioned in May 2001. During the Phase IV-B and IV-C RA, a total of 15,712,300 gallons of water were treated and discharged (**IT, 2002**).

Site restoration work included backfilling excavated areas of the site, placement of a clay cap, placement of topsoil, revegetation, and abandonment of monitor wells. Nine monitor wells, used for quarterly ground water monitoring during the RA, were abandoned during July 2001. Excavated areas of the site

were backfilled with remediated material from the LTU. Early during the project when there was no treated material available, portions of the site were backfilled with clean material imported from offsite. Backfilling began in January 1999 and was completed in October 2000. A two-foot thick clay cap was then placed over all areas of the site that previously contained contaminated materials. A thicker cap was placed in some areas of the site to achieve final grades for placement of the top soil. The clay cap was placed to provide a low-permeability barrier between the backfill and top soil. Clay for the cap was brought to the site from a local offsite source. Construction of the clay cap began in November 2000 and was completed in August 2001. A six-inch layer of loose topsoil was then placed on top of the clay cap. Topsoil placement occurred during September and October 2001. The site was then reseeded with grasses to establish a vegetative cover over the clay cap to protect it from erosion (IT, 2002). An aerial photograph of the site conditions following completion of the RA is provided in [Figure 4](#). [Figure 5](#) shows the final surveyed elevations of the site. As a result of the RA, 16 acres of the site were remediated.

The final phase of the RA involved an evaluation of the ground water conditions at the site after completion of the remediation efforts described above. This work began in August 2001 when the United States Geological Survey (USGS) performed a surface and borehole geophysical investigation at the site to evaluate post-remediation subsurface conditions and geology (USGS, 2001). The LDEQ then contracted with Shaw Environmental to perform an investigation of the shallow ground water at the site. This work began in January 2004 with the installation of ten shallow monitor wells at the site. The wells were installed in the first water bearing zone encountered in the subsurface, generally between depths of 20 and 30 ft bgs. Ground water sampling and water level monitoring were then performed for eight quarters during 2004 and 2005 to evaluate the shallow ground water at the site (data are further discussed in [Section 6.4](#)).

During the ground water sampling activities, there were sporadic detections of some contaminants, mostly at or near detection limits. During the two-year monitoring period, two contaminants were detected at concentrations that exceeded the LDEQ's Risk Evaluation Corrective Action Program (RECAP) Groundwater Screening Standards (GWSS), and each contaminant was only detected once in excess of the GWSS (Shaw, 2006). The EPA and LDEQ concluded, based on the results of the ground water sampling, that the shallow ground water does not present an unacceptable risk to human health or the environment. This determination was the basis for preparation of the second ESD for the site, which stated that no further actions were necessary to address the shallow ground water or the intermediate aquifer at the site (EPA, 2006a). The monitor wells installed at the site were abandoned in accordance

with State of Louisiana requirements in May 2006 (**PSI, 2006**). The construction completion date for the site was September 12, 2006, when the EPA issued the Final Close Out Report (**EPA, 2006b**).

4.3 Operations and Maintenance and Long-Term Monitoring

The remediation of the OIOR site has been completed. There are no operating systems left in place at the site, and no sampling activities are ongoing. The only maintenance required at the site, as stipulated in the Final Close Out Report (**EPA, 2006b**), is maintenance of the cap and perimeter fence present at the site. The LDEQ is currently responsible for O&M activities at the site. Twice per year, LDEQ mows the site and inspects the cap and site fence. There is currently no written O&M Plan in place for the site.

O&M costs were projected in the ROD to be \$10,000 annually. The ROD stated that O&M would include long-term soil and ground water monitoring, maintaining run-on/run-off control, maintaining the vegetative soil cover system, and continuing operation to enhance degradation, transformation, and immobilization of hazardous constituents in the treatment zone. Of these activities, only maintenance of the clay cap is currently required. O&M costs were projected in the Final Close Out Report to be \$25,000 for mowing the site and tracking maintenance of the cap. The actual costs for O&M at the site, as provided by the LDEQ, are approximately \$1,000 annually for site mowing. This number does not include administrative costs associated with tracking and performing O&M activities for the site. The LDEQ indicated there have been no unexpected costs related to O&M at the site (see [Attachment 2, LDEQ Interview Record Form](#)). The O&M costs incurred at this site are not currently considered an indication of potential remedy problems.

4.4 Progress Since Initiation of Remedial Action

Remedial activities specified in the ROD and two ESDs were implemented as planned. The remedy for the site consisted of excavation of contaminated soils, sludges, sediments, and oils, onsite treatment via biodegradation of the contaminated material, onsite disposal as backfill of the remediated materials, debris removal, construction of a protective clay cap and revegetation, storm water run-on and run-off collection and treatment, treatment of contaminated surface water, and two years of quarterly ground water monitoring. The RA for the site resulted in the treatment of approximately 63,398 tons of contaminated material, the treatment of approximately 218,088 gallons of tank oils, and the treatment and discharge of approximately 30 million gallons of contaminated surface water and storm water (**EPA, 2006b**, and **IT, 2002**). The LDEQ currently mows the site and inspects the cap and fence.

On August 29, 2005, Hurricane Katrina made landfall on the southeast coast of Louisiana. Hurricane Katrina caused extensive damage and flooding in areas of Louisiana and Mississippi. As a result of the hurricane, the EPA performed an assessment of NPL sites to determine if site conditions or remedies already in place were adversely impacted. On October 12, 2005, the EPA conducted a site inspection and performed limited ground water sampling at the OIOR site as part of this assessment. No contaminants of concern for the site were detected in either of the samples collected, and the EPA determined that the remedy for the OIOR site was not affected by Hurricane Katrina (**EPA, 2005b**).

5.0 Progress Since Last Five-Year Review

This is the first five-year review conducted for the OIOR Site.

6.0 Five-Year Review Process

This first five-year review for the OIOR site has been conducted in accordance with EPA's Comprehensive Five-Year Review Guidance dated June 2001 (**EPA, 2001**). Interviews were conducted with relevant parties; a site inspection was conducted; and applicable data and documentation covering the period of the review were evaluated. The activities conducted as part of this review are described in the following sections.

6.1 Administrative Components

The five-year review for this site was initiated by the EPA. This five-year review covers activities at the site through June 2007. The review team was led by the EPA Remedial Project Manager (RPM) for this site, Mr. Bartolome Cañellas/EPA Region 6. The components of the review included community involvement, document review, data review, a site inspection, interviews, and development of this First Five-Year Review Report.

6.2 Community Involvement

A public notice announcing initiation of the first five-year review for the OIOR site was published in the *Ascension Citizen* on February 20, 2007. In addition, a fact sheet regarding the performance of the five-year review was prepared. Upon signature, the First Five-Year Review Report will be placed at the following information repositories for the site: the LDEQ office in Baton Rouge, Louisiana, and the EPA Region 6 office in Dallas, Texas. A notice will then be published in the *Ascension Citizen* to summarize

the findings of the review and announce the availability of the report at the information repositories. Copies of the two public notices and fact sheet are provided in [Attachment 5](#) to this report.

6.3 Document Review

This five-year review for the site included a review of relevant site documents, including decision documents, the RA completion reports, ground water monitoring reports, and the Final Close Out Report. Documents that were reviewed are listed in [Attachment 1](#).

6.4 Data Review

The data reviewed as part of this first five-year review included testing data collected from the LTU to confirm achievement of the cleanup goals for bioremediation and ground water sampling data collected from the shallow ground water during 2004 and 2005. The ROD did not specify remediation goals for the bioremediation of the contaminated soils, sludges, sediments, and oil. Cleanup goals were established prior to the start of the bioremediation work and are provided in [Table 2](#). The ROD deferred decisions regarding the level of cleanup for the shallow aquifer and the need for cleanup of the intermediate aquifer. The analytical results from the ground water sampling performed at the site during 2004 and 2005 were compared the LDEQ's RECAP GWSS to evaluate potential impacts to shallow ground water at the site. The 2006 ESD stated that these requirements meet the same level of protection (1×10^{-6} or one in one million risk level) as EPA requires ([EPA, 2006a](#)).

During the bioremediation of the contaminated soil, sludges, sediments, and oil, sampling was performed of each lift placed on the LTU to confirm that the cleanup levels were met by the remediation. For purposes of confirmation sampling, each lift was divided into four quadrants on the LTU, and each quadrant was sampled for FOGs or TPH (FOGs analysis was replaced with TPH for the third through the tenth lifts) and PAHs. If the sample results demonstrated that the cleanup levels were met for all four quadrants, the next lift of material was applied to the LTU for remediation. If a sample result demonstrated that a quadrant failed to meet the cleanup levels, additional time was allowed for the bioremediation process to remediate the material. The quadrant in question was then resampled for the parameters that failed the first sampling. Additional remediation and a second sample were required for the first, second, and seventh lifts ([IT, 2002](#)). The data review of the sampling data provided in IT's final report determined that the cleanup levels were met for each lift of material placed on the LTU for bioremediation.

Table 2
Bioremediation Cleanup Standards for Contaminated Soil, Sludges, Sediments, and Oil
Old Inger Oil Refinery Superfund Site
Ascension Parish, Louisiana

Analytical Parameter	Cleanup Standard (mg/kg)
FOG ¹	5,000
TPH²	5,000
Chrysene	15
Benzo(a)anthracene	15
Dibenzofuran	15
Naphthalene	250 ³
Acenaphthene	
Fluorene	
Pyrene	
2-Methylnaphthene	
Acenaphthylene	

Notes:
 FOG – Fats, oils, and grease
 TPH – Total petroleum hydrocarbons
 mg/kg – milligrams per kilogram
 1 – FOG was analyzed to verify remediation of lifts one and two.
 2 – TPH was analyzed to verify remediation of lifts three through ten.
 3 – Cleanup standard is for combined concentration of naphthalene, acenaphthene, fluorene, fluorene, pyrene, 2-methylnaphthalene, and acenaphthylene.

Eight quarterly ground water sampling events were performed at the site in 2004 and 2005 to assess the conditions of the shallow ground water. Ground water samples were collected for analysis of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs – which include PAHs). The data showed that there were sporadic detections of both VOCs and SVOCs. Most compounds were detected at low concentrations near or below the analytical method detection limits. Two compounds, methyl ethyl ketone and bis(2-ethylhexyl)phthalate, were detected above the RECEP GWSS values. Both compounds were only detected once above the RECAP GWSS values, and neither compound was considered to be site-related (Shaw, 2006). The data review determined that the shallow ground water, when compared to the RECAP GWSS values, is not contaminated above levels that pose an unacceptable risk.

6.5 Interviews

Interviews were conducted with Mr. Glen Landry, P.E., project manager at Shaw Environmental (contractor for the LDEQ), Mr. Todd Thibodeaux, LDEQ Project Manager for the site, Ms. Rosalind Green, contact for the Louisiana Department of Health and Hospitals for the site, and Mr. Ron Sigler, Ascension Parish Planning and Development Department. Copies of the Interview Record Forms are provided in [Attachment 2](#). No problems regarding the site were identified during any interviews.

6.6 Site Inspection

A site inspection was conducted at the site on April 18, 2007. The completed site inspection checklist is provided in [Attachment 3](#). Photographs taken during the site inspection are provided in [Attachment 4](#).

The site is located in a sparsely populated rural area of Ascension Parish adjacent to the levee of the Mississippi River. The RA resulted in the removal of all exposure pathways present at the site as long as the integrity of the clay cap is maintained. In 2006, LDEQ filed an IC for the site in the form of a conveyance notice in the property deed records for the site to prevent disturbance of the clay cap. The fence that was erected around the site during the RA is still intact, although part of the fence is overgrown with dense vegetation ([Photographs 14 – 16](#)). Currently, access is restricted to the site by the fence and two locked gates ([Photograph 19](#)). A warning sign was observed to be present on the main gate to the site, although the sign is faded and difficult to read, and refers to a site office which no longer exists ([Photograph 3](#)). Warning signs could not be observed along the entire perimeter of the fence at the site. Vegetation on the clay cap was well established ([Photographs 5 – 7, 9, and 11-12](#)). There were no signs of erosion, bulging, or cracks on the clay cap. Along the perimeter of the cap, some tire ruts were present in a few areas ([Photograph 15](#)). These ruts were no more than 3 to 4 inches in depth and did not penetrate the top soil and damage the integrity of the underlying clay cap.

7.0 Technical Assessment

The five-year review must determine whether the remedy at a site is protective of human health and the environment. The EPA guidance describes three questions used to provide a framework for organizing and evaluating data and information and to ensure all relevant issues are considered when determining the protectiveness of a remedy. These questions are assessed for the site in the following paragraphs. At the end of the section is a summary of the technical assessment.

7.1 Question A: Is the Remedy Functioning as Intended by the Decision Documents?

The original decision document for the OIOR site is the September 25, 1984 ROD (EPA, 1984). In addition, two ESDs, dated September 22, 1993 and September 12, 2006, have been signed to explain differences between the ROD-selected remedy and the implemented remedy (EPA, 1993, and EPA, 2006a). The site is now undergoing O&M activities, which include mowing, cap maintenance, and fence inspections. Based on the data review, site inspection, and interviews, it appears that the OIOR site remedy is functioning as intended by the ROD. Opportunities for optimization and early indicators of potential remedy problems are described below. ICs are discussed in [Section 8](#).

Opportunities for Optimization. No opportunities for optimization have been identified. The only O&M required at the site is mowing, cap inspections and maintenance as necessary, and perimeter fence inspection and repair as necessary. The current O&M activities are sufficient to monitor site conditions and ensure the integrity of the cap and to track any proposed land use changes at the site.

Early Indicators of Potential Remedy Problems. There were no observed indicators of potential problems that would impact the protectiveness of the remedy. During the site inspection, the site appeared to be well maintained. The clay cap at the site is currently in good condition, and a good vegetative growth is present to prevent erosion. The site fence and gate were in good condition. Site conditions indicate that the site is appropriately maintained to ensure the protectiveness of the remedy.

7.2 Question B: Are the Exposure Assumptions, Toxicity Data, Cleanup Levels, and Remedial Action Objectives Used at the Time of the Remedy Selection Still Valid?

Changes in Exposure Pathways, Toxicity, and Other Contaminant Characteristics. There have been no changes in human health or ecological exposure pathways for the site since completion of the RA. In addition, no new contaminants or routes of exposure have been identified for the site as part of this five-year review. Post-remediation site conditions have eliminated or reduced human health and ecological exposure pathways present at the site.

Changes in Applicable or Relevant and Appropriate Regulations (ARARs). ARARs and other requirements “to be considered” (TBCs) for this site were identified in the ROD dated September 25, 1984. This five-year review included identification of and evaluation of changes in these ARARs to determine whether such changes may affect the protectiveness of the selected remedy.

The OIOR ROD identified the following ARARs and TBCs as having an impact on the proposed remedy:

1. Resource Conservation and Recovery Act (RCRA) requirements for the characterization of hazardous wastes at 40 CFR 261, and RCRA requirements for manifesting and offsite transportation of hazardous wastes, as regulated under 40 CFR 262 and 40 CFR 263.
2. RCRA requirements for operators of hazardous waste landfills, as regulated at 40 CFR 264 Subpart N.
3. RCRA requirements for operators of land treatment units, as regulated at 40 CFR 264 Subpart M.
4. RCRA requirements for the storage of collected wastes, as regulated at 40 CFR 264 Subpart L.
5. LDEQ discharge standards, as established under the technical and substantive requirements of the National Pollutant Discharge Elimination System (NPDES), established under the Clean Water Act (CWA) and regulated at 40 CFR 122 and 125.
6. Requirements of the Executive Order on the Protection of Wetlands, Executive Order No. 11990, to minimize impacts to wetlands during remedial action.

Executive Order No. 11990 requires that federal agencies take actions to avoid adversely impacting wetlands, minimize wetland destruction, and to preserve wetlands wherever possible. The EPA consulted with the USACE regarding the wetlands classification for the OIOR site during preparation of the ROD and regarding the requirements of Executive Order No. 11990. The ROD contains several attachments related to USACE assessments of the site with regard to wetlands protection. The USACE determined that the OIOR site was classified as a wetland. However, the USACE further determined that due to the contamination present at the site, the site was limiting to flora and fauna. The USACE concluded that there was no practicable alternative to protect human health and the environment and preserve the wetland, and the proposed remedy in the ROD would mitigate threats posed to human health and the environment.

The RA at this site has been completed, and the current operations at the site involve only O&M activities related to site maintenance. No hazardous waste treatment or disposal facilities remain at the site. Therefore, the only ARARs that still apply to the remedy at the site are those related to post-closure care and maintenance of the clay cap. These ARARs are specified in 40 CFR 264.117 through 264.120. The

regulations are included in Subpart G, which was not specifically referenced in the ROD. However, these regulations are referenced under the closure and post-closure care requirements in 40 CFR 264 Subpart N. The requirements included in 40 CFR 164.117 through 264.120 state that the integrity and effectiveness of the cap must be maintained. This includes making necessary repairs to correct settling, subsidence, erosion, and preventing erosion from damaging the final cover. In addition, use of the property must not be allowed to disturb the integrity of the final cover. No significant applicable changes have been made to these regulations that affect the remedy's protectiveness.

7.3 Question C: Has any Other Information Come to Light that Could Call into Question the Protectiveness of the Remedy?

Examples of other information that might call into question the protectiveness of the remedy include potential future land use changes in the vicinity of the site or other expected changes in site conditions or exposure pathways; no such information has come to light as part of this first five-year review for the site.

7.4 Summary of the Technical Assessment

The technical assessment, based on the site interviews, site inspection, technical evaluation, and data review indicates that the remedial actions selected for the OIOR site generally appear to have been implemented and are functioning as intended by the ROD and ESDs. The assumptions used at the time of remedy selection are still valid. There are no early indicators related to the remedy that would suggest potential remedy problems at the site. No changes in contaminant toxicity or other contaminant characteristics were identified that affect the protectiveness of the remedy. No new laws or regulations have been promulgated or enacted that would call into question the effectiveness of the remedy to protect human health and the environment. No other information such as a potential future land use change in the vicinity of the site or other changes in site conditions have been identified as part of this five-year review that might call into question the protectiveness of the selected remedy.

Based on the conditions observed during the inspection, the site is adequately and appropriately maintained. The LDEQ is sufficiently implementing the necessary O&M at the site. However, a written O&M Plan has not been prepared for the site, and the warning sign present at the front gate to the site is out of date, and faded and difficult to read.

8.0 Institutional Controls

ICs are generally defined as non-engineered instruments such as administrative and legal tools that do not involve construction or physically changing the site and that help minimize the potential for human

exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use (EPA, 2005a). ICs can be used for many reasons including restriction of site use, modifying behavior, and providing information to people (EPA, 2000). ICs may include deed notices, easements, covenants, restrictions, or other conditions on deeds, and/or ground water and/or land use restriction documents (EPA, 2001a). The following paragraphs describe the ICs implemented at the site, the potential affect of future land use plans on ICs, and any plans for changes to site contamination status.

8.1 Types of Institutional Controls in Place at the Site

A conveyance notice describing the site hazards is recorded in the deed records for the site. The conveyance notice was filed at the Ascension Parish Clerk's office. The conveyance notice covers the site in its entirety. A copy of the conveyance notice for the site is included as [Attachment 6](#) to this five-year review report. The notice describes that contaminants (oil and grease) remain at the site above levels that allow for unrestricted exposure (TPH at less than five percent by weight), that a protective cap is in place at the site, and that disturbance of the cap or contaminated portions of the site may subject the property owner and party causing the disturbance to liability under CERCLA or other laws. The notice also provides maps of the site.

In addition, the USACE and Pontchartrain Levee Control Board have specific requirements for work performed near the levee of the Mississippi River. A permit is required from the Pontchartrain Levee Control Board for any work performed within 300 ft of the centerline of the levee, and the distance requirement is increased to 1,500 ft for any work involving subsurface work, such as coring or excavation. All permits are reviewed by the USACE prior to approval by the Pontchartrain Levee Control Board.

8.2 Effect of Future Land Use Plans on Institutional Controls

No future land uses have been established or are anticipated for the site that would require an adjustment to the ICs currently put into place.

8.3 Plans for Changes to Site Contamination Status

The RA for the site is completed, and no further actions are required or anticipated. No changes to the status of the contamination at the site are anticipated.

9.0 Issues

The O&M activities are ongoing at the site. Based on the data review, site inspection, interviews, and technical assessment, it appears the remedy has been implemented as planned and is functioning as intended by the decision documents. No deficiencies or concerns with the remedy or O&M procedures were identified for the site.

To ensure continued protectiveness, the O&M activities for the site should continue, and two issues identified in the first five-year review for this site that do not currently affect the protectiveness of the remedy should be addressed. The issues are described in [Table 3](#).

Table 3 Issues Identified During the First Five-Year Review <i>Old Inger Oil Refinery Superfund Site</i> <i>Ascension Parish, Louisiana</i>		
Issues	Affects Protectiveness (Y/N)	
	Current	Future
There is no written Operations and Maintenance (O&M) Plan for the site. LDEQ performs O&M activities at the site that include mowing and inspections of the perimeter fence and clay cap; however, the procedures and schedule for these activities are not yet documented in an O&M Plan or Manual. A written O&M Plan would specify the requirements to adequately maintain the remedy and ensure future protectiveness.	N	Y
The warning sign on the front gate is out of date, and faded and difficult to read. Although trespass across the site would not pose a risk as long as the clay cap is not disturbed, the warning sign provides notice regarding contamination left onsite and may serve as a deterrent to people who might otherwise trespass onto the site, thereby helping to protect the long-term integrity of the cap.	N	N

10.0 Recommendations and Follow-up Actions

As described in the previous section, no deficiencies or concerns were identified for the remedy or O&M procedures at the site. In addition to the continuation of O&M activities already being performed, two issues were identified during the first five-year review for this site. To address these issues, recommendations and follow-up actions have been defined and are provided in [Table 4](#).

Table 4
Recommendations and Follow-Up Actions
Old Inger Oil Refinery Superfund Site
Ascension Parish, Louisiana

Recommendations/ Follow-Up Actions	Party Responsible	Oversight Agency	Milestone Date	Follow-Up Actions: Affects Protectiveness (Y/N)	
				Current	Future
Prepare a written O&M Plan that stipulates the O&M activities necessary to maintain the site. The O&M Plan should include requirements and frequency for mowing the site, inspecting the integrity of the clay cap, inspecting the site fence and gates, removal of overgrown vegetation when needed, inspection and replacement of warning signs, and documenting the O&M activities performed.	LDEQ	EPA	July 2007	N	Y
Replace the faded warning sign posted on the front gate.	LDEQ	EPA	December 2007	N	N

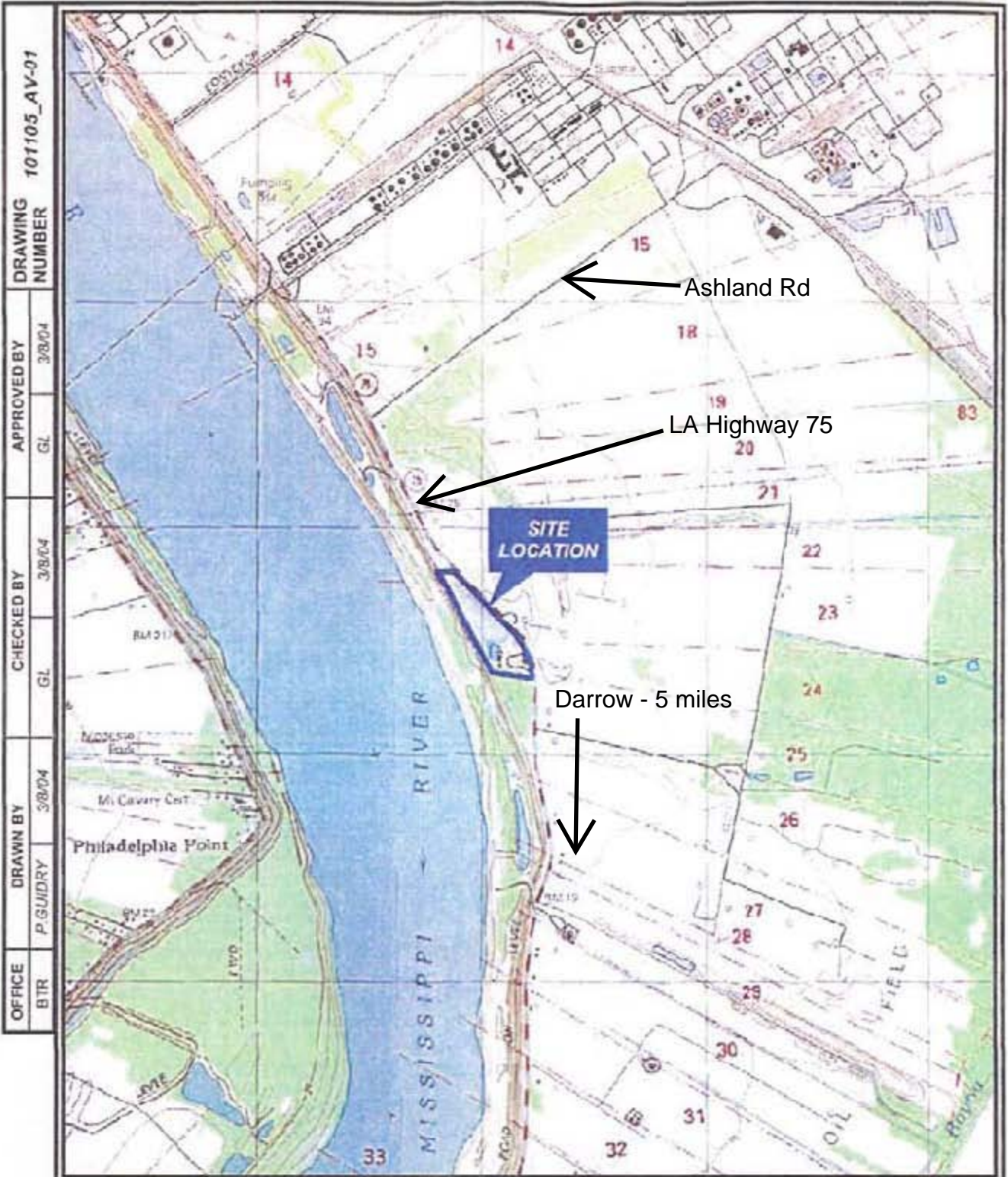
11.0 Protectiveness Statement

The remedy implemented for the OIOR site is considered protective of human health and the environment. Contaminated soils, sludges, sediments, and oil were treated onsite via biodegradation, and the treated material was used as backfill onsite in the areas of excavation. A protective clay cap was then placed over the excavated areas of the site. The shallow ground water was monitored for a period of two years. Based on the results of this monitoring, it was determined that the ground water posed no threat to human health or the environment, and the United States Environmental Protection Agency (EPA) and LDEQ determined that no further action was necessary to address the ground water. The remedy allows for the anticipated future land use as rural vacant land, but does not allow for unrestricted use or unrestricted exposure. As a result, a conveyance notice has been placed in the property deed records for the site to provide notice of the site contamination and to provide notice that the integrity of the clay cap is to be maintained. Continued O&M will ensure that the selected remedy continues to be protective.

Because the remedial actions implemented at the site are protective, the overall remedy for the site is protective of human health and the environment. The recommendations and follow-up actions identified in this five-year review should be addressed to ensure continued protectiveness.

12.0 Next Review

The next five-year review, the second for the site, should be completed during or before July 2012.



REFERENCE:
 USGS 7.5 Minute Quadrangel Topographic Map
 Gonzales, & Carville, LA (1999)



LOUISIANA DEPARTMENT OF
 ENVIRONMENTAL QUALITY
 BATON ROUGE, LOUISIANA

Figure 1
 Site Location Map
 Old Inger Oil Refinery Superfund Site
 First Five-Year Review
 (Reproduced from Shaw, 2006)

DRAWING NUMBER 920564-B1

APPROVED BY

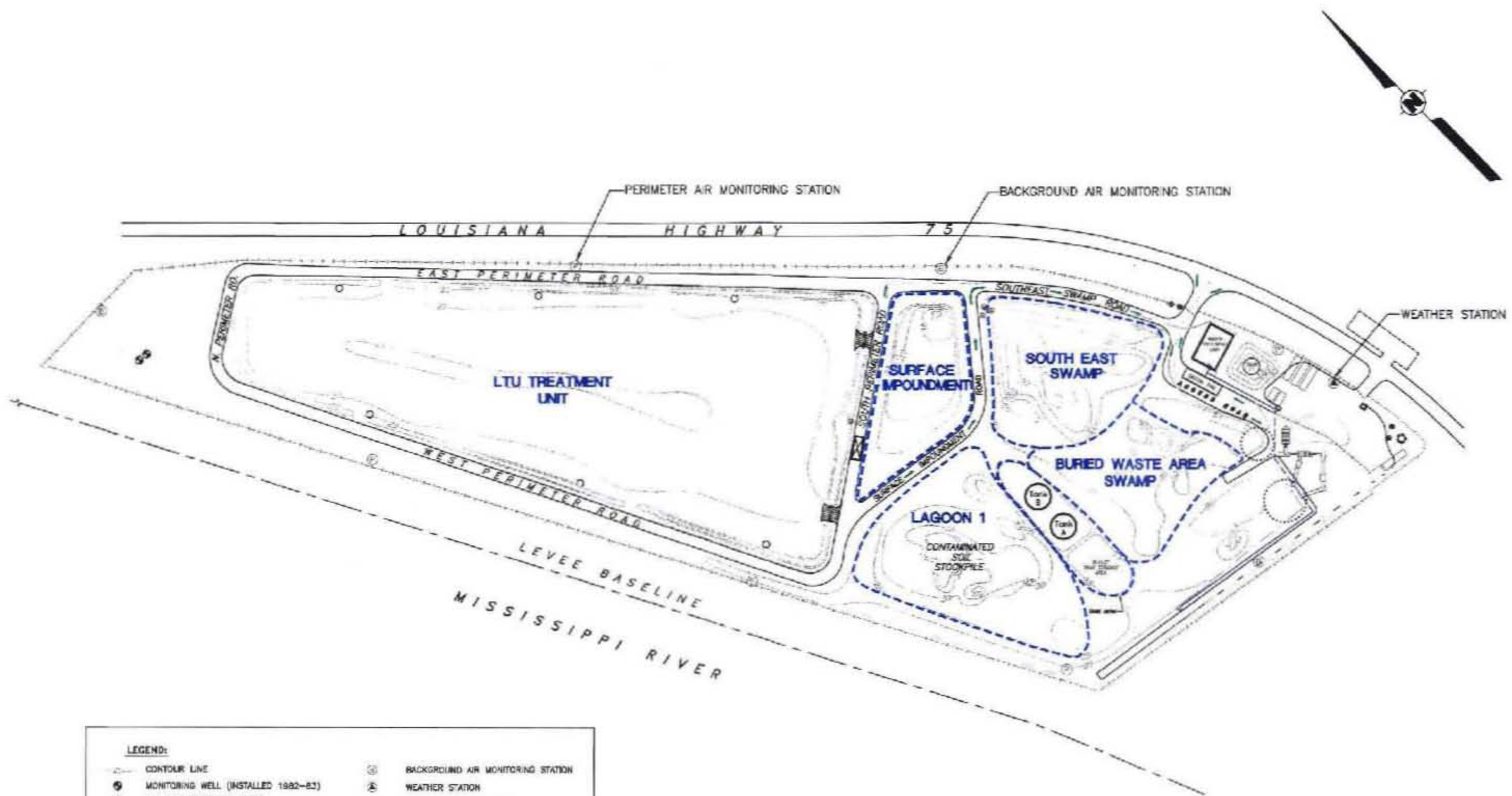
CHECKED BY

DRAWN BY J. RDZ 11/28/01

OFFICE Houston, Texas

X-REF

PLOT DATE: 11/28/01
FORMAT REVISION 3/25/99



LEGEND:

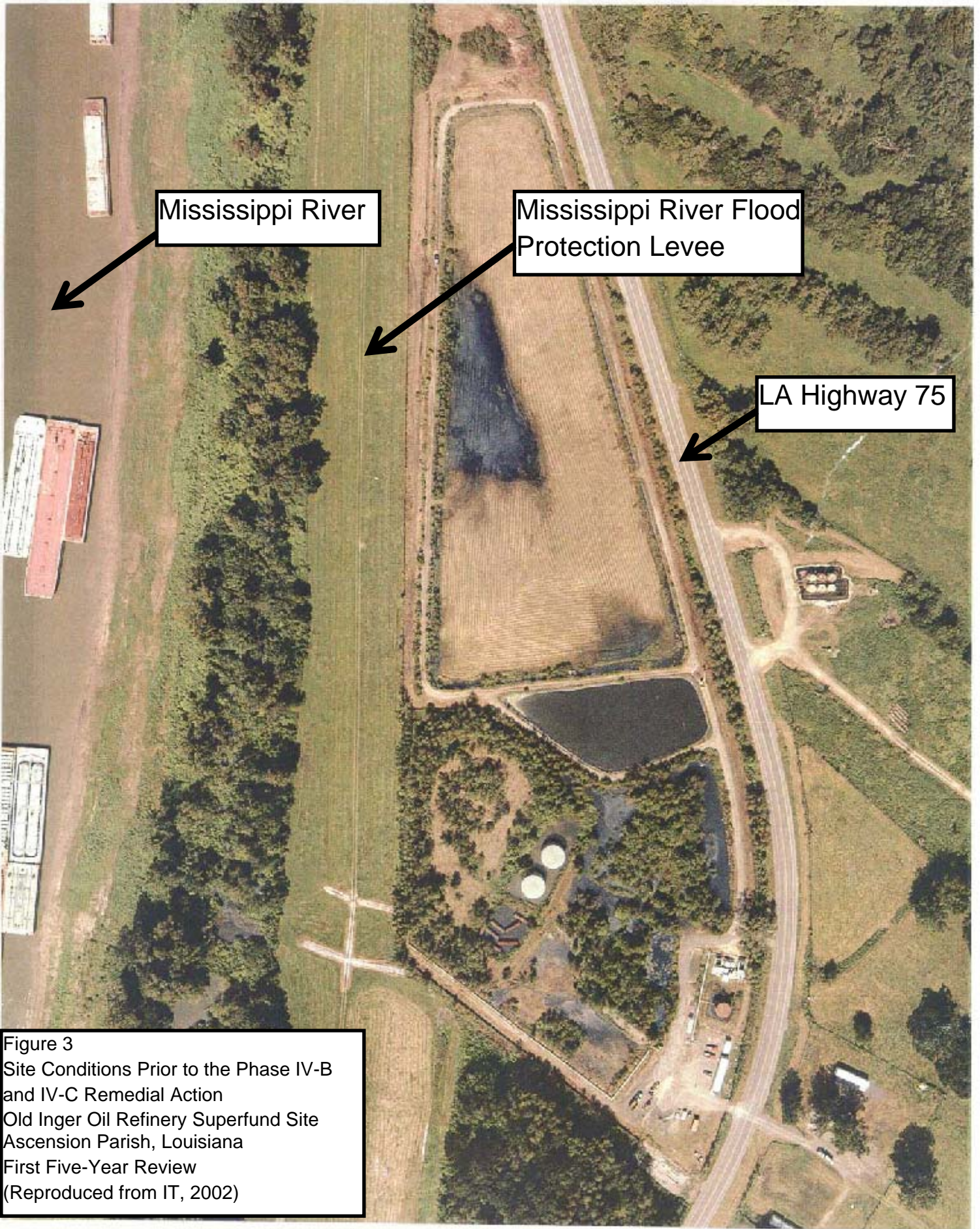
CONTOUR LINE	BACKGROUND AIR MONITORING STATION
MONITORING WELL (INSTALLED 1982-83)	WEATHER STATION
MANHOLE/SUMP WITH PUMP	NORMAL TRAFFIC ROUTE
SAMPLING STATION FOR UNSATURATED ZONE MONITORING DEVICES	WATER TRANSFER PIPE (ABOVE GRADE)
PERIMETER AIR MONITORING STATION	WATER TRANSFER PIPE (BELOW GRADE)
	ELECTRIC LINE (BELOW GRADE)
	SITE BOUNDARY

NOTE:
ELEVATIONS BASED ON LSCDS BN P102, ELEVATION 25.98' MSL.

Note: Features shown on map are no longer present. This figure presents the site as it existed prior to completion of the Remedial Action.



Figure 2
Site Map
Old Inger Oil Refinery Superfund Site
Ascension Parish, Louisiana
First Five-Year Review
(Reproduced from IT, 2002)



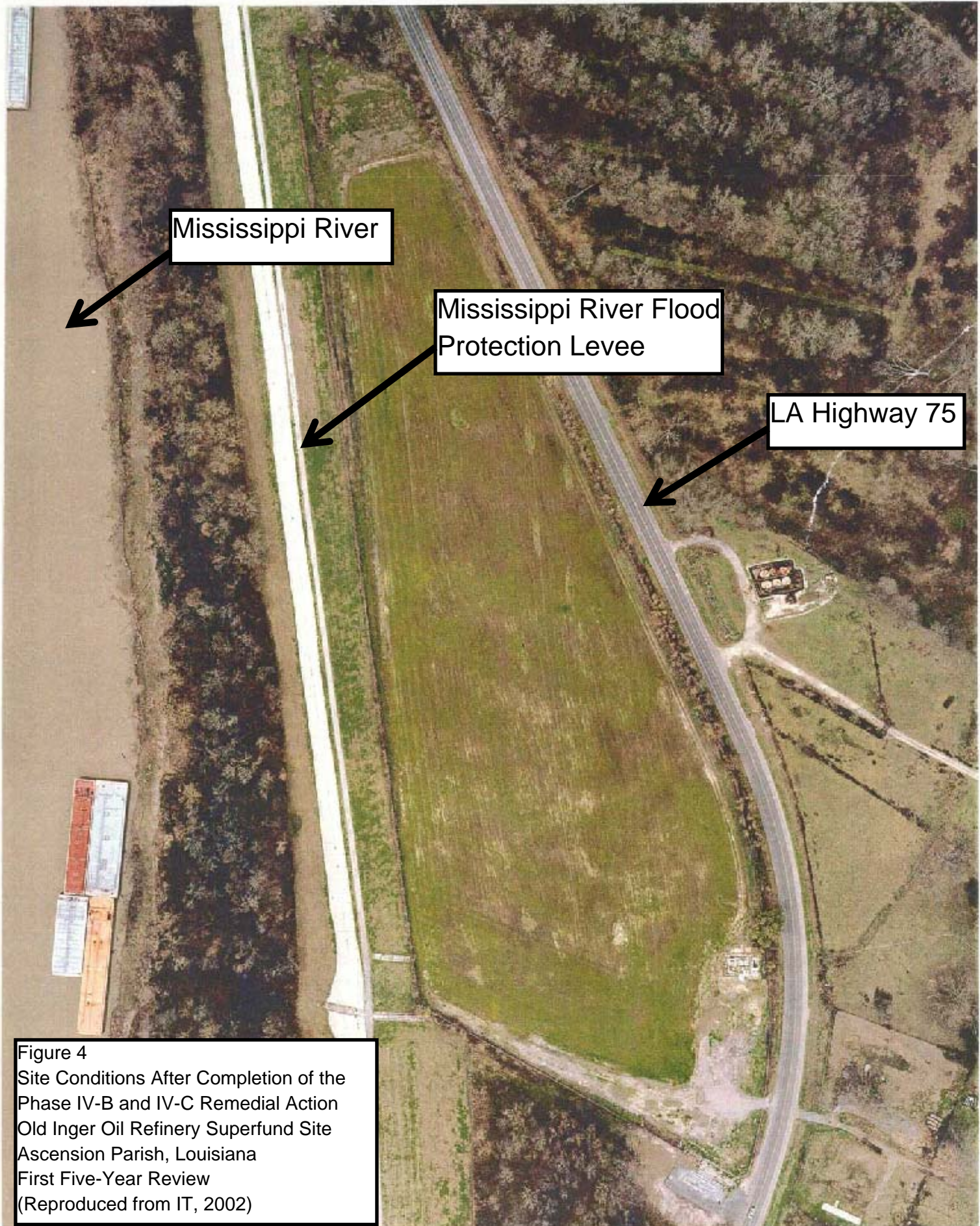
Mississippi River

Mississippi River Flood Protection Levee

LA Highway 75

Figure 3
Site Conditions Prior to the Phase IV-B
and IV-C Remedial Action
Old Inger Oil Refinery Superfund Site
Ascension Parish, Louisiana
First Five-Year Review
(Reproduced from IT, 2002)

Figure 2-1: Aerial Photograph of Site Conditions Prior to Remedial Action



Mississippi River

Mississippi River Flood Protection Levee

LA Highway 75

Figure 4
Site Conditions After Completion of the
Phase IV-B and IV-C Remedial Action
Old Inger Oil Refinery Superfund Site
Ascension Parish, Louisiana
First Five-Year Review
(Reproduced from IT, 2002)

Figure 2-2: Aerial Photograph of Site Conditions Subsequent to Remedial Action



SECURITY MAP
SHEET 1-1-100

TOPOGRAPHIC SURVEY

OF
OLD INGER SUPERFUND SITE
FOR
EARTHTECH, INC.

LEGEND

- EXISTING CONSTRUCTION
- EXISTING UTILITIES
- EXISTING OBSTRUCTIONS
- EXISTING ELEVATIONS

GRAPHIC SCALE

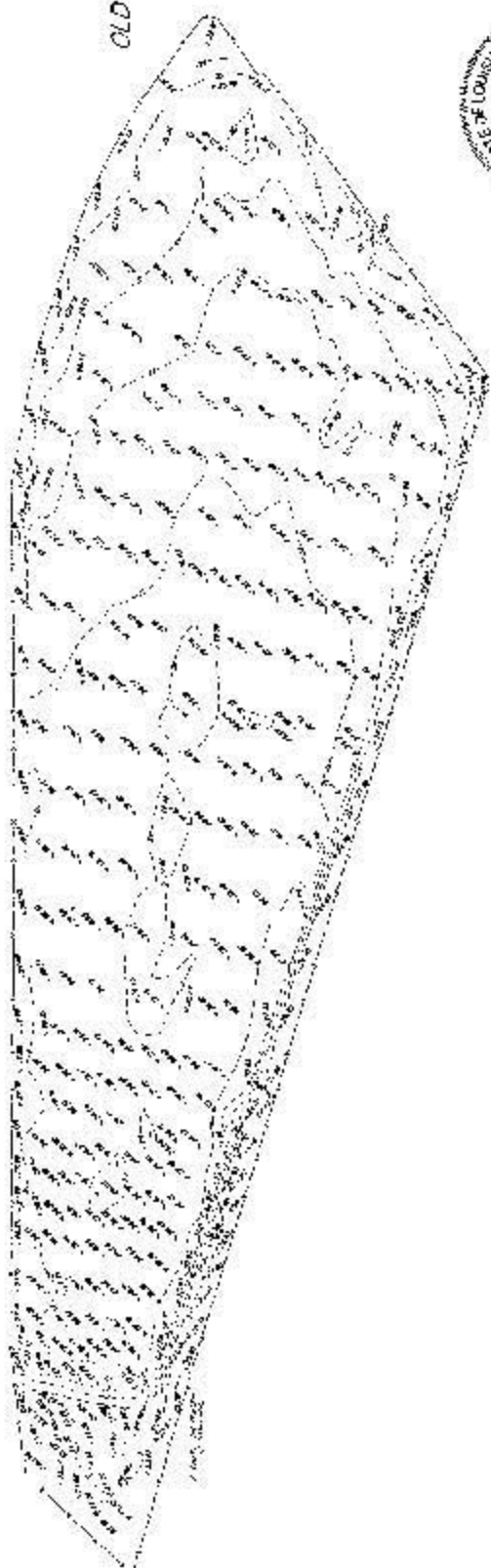
1" = 100'

DATE: 02/06/02
BY: [Signature]

ALL SURVEY CONTROL POINTS FIGURE 1-3

SIB GROUP

CAU ORIGINAL	DATE	BY	SCALE	FIGURE



NOTE: THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE SURVEYING ACT OF 1967 AND THE RULES AND REGULATIONS OF THE BOARD OF SURVEYING ENGINEERS AND LAND SURVEYORS OF THE STATE OF LOUISIANA.

GENERAL NOTES

1. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL UNLESS OTHERWISE NOTED.
2. THE SURVEY WAS CONDUCTED USING A TOTAL STATION AND A LEVELING STAFF.
3. THE SURVEY WAS CONDUCTED UNDER CLEAR SKY CONDITIONS.
4. THE SURVEY WAS CONDUCTED AT A TIME OF DAY WHEN THE TEMPERATURE WAS BETWEEN 60°F AND 80°F.
5. THE SURVEY WAS CONDUCTED AT A TIME OF DAY WHEN THE WIND WAS CALM.
6. THE SURVEY WAS CONDUCTED AT A TIME OF DAY WHEN THE MOON WAS NOT VISIBLE.
7. THE SURVEY WAS CONDUCTED AT A TIME OF DAY WHEN THE SUN WAS AT AN ALTITUDE OF AT LEAST 30°.
8. THE SURVEY WAS CONDUCTED AT A TIME OF DAY WHEN THE AIR WAS CLEAR.
9. THE SURVEY WAS CONDUCTED AT A TIME OF DAY WHEN THE GROUND WAS DRY.
10. THE SURVEY WAS CONDUCTED AT A TIME OF DAY WHEN THE SURFACE WAS FLAT.

[This page intentionally left blank.]

Attachment 1 Documents Reviewed

[This page intentionally left blank]

Attachment 1 Documents Reviewed

- CH2M HILL, 2005. *Hurricane Katrina Response, Old Inger Superfund Site, Louisiana, Site Inspection and Sampling Results*. December 1, 2005.
- EarthTech, Inc., 2002. *Final Report for Old Inger Superfund Site, Phase IV-B and IV-C, Darrow, Louisiana*. August 2002.
- IT Corporation (IT), 2002. *Final Report for Old Inger Superfund Site, Phase IV-B and IV-C, Darrow, Louisiana*. February 18, 2002.
- Louisiana Department of Health and Hospitals (LDHH), 1988. *Health Assessment, Old Inger, Darrow, Ascension Parish, Louisiana*. October 20, 1988.
- Louisiana Department of Health and Hospitals (LDHH), 2006. *Health Consultation, Hurricane Response Sampling Assessment for Old Inger Oil Refinery, Ascension Parish, Louisiana, EPA Facility ID LAD98074553*. October 11, 2006.
- Louisiana Office of Public Health, 1996. *Site Review and Update, Old Inger Oil Refinery Site, Darrow, Ascension Parish, Louisiana, CERCLIS No. LAD980745533*. October 23, 1996.
- Professional Services Industries, Inc. (PSI), 2006. *Monitoring Well Plug and Abandonment, Oil Inger, Darrow, Louisiana*. June 14, 2006.
- Shaw Environmental, Inc. (Shaw), 2004a. *First Quarter 2004 Groundwater Monitoring Report, Old Inger Superfund Site, Darrow, Louisiana*. June 2004.
- Shaw Environmental, Inc. (Shaw), 2004b. *Second Quarter 2004 Groundwater Monitoring Report, Old Inger Superfund Site, Darrow, Louisiana*. August 2004.
- Shaw Environmental, Inc. (Shaw), 2004c. *Third Quarter 2004 Groundwater Monitoring Report, Old Inger Superfund Site, Darrow, Louisiana*. November 2004.
- Shaw Environmental, Inc. (Shaw), 2005a. *Groundwater Monitoring Report, Fourth Quarter 2004, December 2004 – February 2005, Old Inger Superfund Site, Darrow, Louisiana*. February 2005.
- Shaw Environmental and Infrastructure, Inc. (Shaw), 2005b. *Groundwater Monitoring Report, First Quarter 2005, March 2005 – May 2005, Old Inger Superfund Site, Darrow, Louisiana*. May 2005.
- Shaw Environmental and Infrastructure, Inc. (Shaw), 2005c. *Groundwater Monitoring Report, Second Quarter 2005, June 2005 – August 2005, Old Inger Superfund Site, Darrow, Louisiana*. August 2005.
- Shaw Environmental and Infrastructure, Inc. (Shaw), 2005d. *Groundwater Monitoring Report, Third Quarter 2005, September 2005 – November 2005, Old Inger Superfund Site, Darrow, Louisiana*. October 2005.

- Shaw Environmental and Infrastructure, Inc. (Shaw), 2006. *Groundwater Monitoring Report, Fourth Quarter 2005, December 2005 – February 2006, Old Inger Superfund Site, Darrow, Louisiana*. January 2006.
- United States Environmental Protection Agency (EPA), 1984. *Record of Decision, Remedial Alternative Selection, Site: Old Inger, Ascension Parish, Louisiana*. September 25, 1984.
- United States Environmental Protection Agency (EPA), 1993. *Explanation of Significant Difference to the Record of Decision, Old Inger Superfund Site, Darrow, Louisiana*. September 22, 1993.
- United States Environmental Protection Agency (EPA), 2000. *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*. EPA 540-F-00-005. September 2000.
- United States Environmental Protection Agency (EPA), 2001. *Comprehensive Five-Year Review Guidance*. OSWER No. 9355.7-03B-P. EPA 540-R-01-007. June 2001.
- United States Environmental Protection Agency (EPA), 2005a. *Institutional Controls: A Citizens Guide to Understanding Institutional Controls at Superfund, Brownfields, Federal Facilities, Underground Storage Tank, and Resource Conservation and Recovery Act Cleanups*. EPA-540-R-04-003. February 2005.
- United States Environmental Protection Agency (EPA), 2005b. *Hurricane Katrina Evaluation Report, Old Inger Superfund Site, Ascension Parish, Louisiana*. December 14, 2005.
- United States Environmental Protection Agency (EPA), 2006a. *Explanation of Significant Differences, Old Inger Oil Refinery Superfund Site, Ascension Parish, Louisiana*. September 12, 2006.
- United States Environmental Protection Agency (EPA), 2006b. *Final Close Out Report, Old Inger Oil Refinery Superfund Site, Ascension Parish, Louisiana*. September 12, 2006.
- United States Environmental Protection Agency (EPA), 2007. *Old Inger Oil Refinery, Ascension Parish, Louisiana*. Superfund Site Status Summary. February 7, 2007.
- United States Geological Survey (USGS), 2001. Letter from Charles R. Demas/USGS to Bartolome J. Cañellas/EPA, contains results of the USGS surface- and borehole-geophysical investigation of the Old Inger Oil Refinery Site at Darrow, Louisiana. October 25, 2001.

Attachment 2

Interview Record Forms

[This page intentionally left blank.]

Five-Year Review Interview Record Old Inger Oil Refinery Superfund Site Ascension Parish, Louisiana		Interviewee: Todd Thibodeaux/LDEQ email: Todd.Thibodeaux@LA.GOV			
Site Name		EPA ID No.		Date of Interview	Interview Method
Old Inger Oil Refinery Superfund Site		EPA ID# LAD980745533		4-12-07	by email
Interview Contacts	Organization	Phone	Email	Address	
Bart Cañellas	EPA Region 6	214-665-6662	Cañellas.Bart@epamail.gov	1445 Ross Ave Dallas, Texas 75202-2733	
Margaret O Hare	CH2M HILL, as rep of EPA	972-980-2170	mohare@ch2m.com	12377 Merit, Suite 1000 Dallas, Texas 75251	
Darren Davis	CH2M HILL, as rep of EPA	972-980-2170	ddavis9@ch2m.com	12377 Merit, Suite 1000 Dallas, Texas 75251	
Interview Questions					
<p>1. What is your overall impression of the work conducted at the site since completion of the remedial action construction (March 2002)?</p> <p>Response: Seems to have been done in a professional manner, cap is in good condition</p>					
<p>2. From your perspective, what effect has the remedial action at the site had on the surrounding community? Are you aware of any ongoing community concerns regarding the site or its operation and maintenance?</p> <p>Response: None that I'm aware of</p>					
<p>3. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe purpose and results.</p> <p>Response: We've had the grass mowed on site and inspected that</p>					
<p>4. Are you aware of any events, incidents, or activities that have occurred at the site, such as dumping, vandalism, or anything that required emergency response from local authorities? If so, please give details.</p> <p>Response: None that I'm aware of</p>					

5. Have there been any complaints, violations, or other incidents related to the site that required a response by your office? If so, please summarize the events and result.

Response: None that I'm aware of

6. Are you aware of any problems or difficulties encountered which have impacted progress or resulted in a change in O&M procedures? Please describe changes and impacts.

Response: None that I'm aware of

7. Have there been any unexpected costs? If so, please describe what the costs were and why they were incurred. Also, how did the costs impact the overall remedy?

Response: None that I'm aware of

8. Have there been any changes in state or federal environmental standards which may call into question the current protectiveness or effectiveness of the remedial action?

Response: None that I'm aware of

9. Have there been any changes in the actual or projected land use for the site that you are aware of?

Response: None that I'm aware of

10. Do you feel well-informed about the site's activities and progress?

Response: At this point the only activity on site is mowing

11. Do you have any comments, suggestions, or recommendations regarding the site?

Response: None

Five-Year Review Interview Record Old Inger Oil Refinery Superfund Site Ascension Parish, Louisiana	Interviewee: Rosalind M Green/LDHH email: rmgreen@dhh.la.gov
--	--

Site Name	EPA ID No.	Date of Interview	Interview Method
Old Inger Oil Refinery Superfund Site	EPA ID# LAD980745533	3/26/2007	by email

Interview Contacts	Organization	Phone	Email	Address
Bart Cañellas	EPA Region 6	214-665-6662	Canellas.Bart@epamail.gov	1445 Ross Ave Dallas, Texas 75202-2733
Margaret O Hare	CH2M HILL, as rep of EPA	972-980-2170	mohare@ch2m.com	12377 Merit, Suite 1000 Dallas, Texas 75251
Darren Davis	CH2M HILL, as rep of EPA	972-980-2170	ddavis9@ch2m.com	12377 Merit, Suite 1000 Dallas, Texas 75251

Interview Questions

- What is your overall impression of the work conducted at the site since completion of the remedial action construction (March 2002)?**

Response:

The Louisiana Department of Health and Hospitals/Office of Public Health/Section of Environmental Epidemiology and Toxicology (LDHH/OPH/SEET) has had the opportunity to examine recent documents about Old Inger, including a report describing a site visit that took place after Hurricane Katrina in Fall 2005. Periodic EPA reports are available to keep the community aware of activities at the site.

SEET's involvement with Old Inger has been limited to a post-hurricane evaluation, which began on September 12, 2006. Following Hurricane Katrina in Fall 2005, sampling and a site inspection were performed by EPA and the Louisiana Department of Environmental Quality (LDEQ) to ensure that the hurricane had not damaged the remedies in place at the site. SEET assessed the post-hurricane samples to determine whether the site in its post-hurricane state posed any hazard to the health of the surrounding community. SEET determined that the site currently poses no public health hazard.

Due to our limited involvement at this site, SEET cannot give an in-depth evaluation on the overall progress or outcome of the remedial action. Our impression from the periodic reports and from our own post-hurricane sample evaluation is that the appropriate measures have been taken to remediate the site and to monitor any residual contamination that remained after the Remedial Action was completed.

2. From your perspective, what effect has the remedial action at the site had on the surrounding community? Are you aware of any ongoing community health concerns regarding the site or its operation and maintenance?

Response:

SEET is not aware of any community health concerns regarding the site, its operation, or its maintenance.

3. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe purpose and results.

Response:

SEET began to evaluate post-hurricane groundwater samples collected from the Old Inger site on September 12, 2006. On October 11, 2006, SEET (in conjunction with the ATSDR) released a post-hurricane health consultation reviewing these samples. Within the document, SEET stated that the physical damage Hurricane Katrina caused at the Old Inger Oil Refinery site did not compromise the remedy instituted to protect the public against site-related health hazards. There is no evidence of contamination from the site groundwater migrating into the domestic water supply. Groundwater from Old Inger therefore currently poses no public health hazard to the community around the site.

4. Have there been any complaints or other comments related to the site that required a response by your office? If so, please summarize the events and result.

Response:

SEET has not received any requests to address complaints or community concerns about Old Inger.

5. Do you feel well-informed about the site's activities and progress?

Response:

SEET continues to be well-informed about Old Inger through the availability of site updates and documentation at the EPA website and through contact with the EPA site manager.

6. Do you have any comments, suggestions, or recommendations regarding the site?

Response:

SEET has no comments, suggestions, or recommendations regarding this site.

Five-Year Review Interview Record Old Inger Oil Refinery Superfund Site Ascension Parish, Louisiana		Interviewee: Mr. Ron Sigler Ascension Parish			
Site Name		EPA ID No.		Date of Interview	Interview Method
Old Inger Oil Refinery Superfund Site		EPA ID# LAD980745533		4/18/2007	by email
Interview Contacts	Organization	Phone	Email	Address	
Bart Cañellas	EPA Region 6	214-665-6662	Canellas.Bart@epamail.gov	1445 Ross Ave Dallas, Texas 75202-2733	
Margaret O'Hare	CH2M HILL, as rep of EPA	972-980-2170	mohare@ch2m.com	12377 Merit, Suite 1000 Dallas, Texas 75251	
Darren Davis	CH2M HILL, as rep of EPA	972-980-2170	ddavis9@ch2m.com	12377 Merit, Suite 1000 Dallas, Texas 75251	
Purpose of the Five-Year Review					
<p>The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions performed. This interview is being conducted as a part of the second five-year review for the Old Inger Superfund Site. The period covered by this five-year review is from completion of construction in 2002 to present.</p>					
Interview Questions					
<p>1. What is your overall impression of the work conducted at the site since completion of the remedial action construction (March 2002)?</p> <p>Response: The site appears well maintained and mowed 2 or three times per year. The entire site was well drained, and the fencing appears to be in good repair.</p>					
<p>2. From your perspective, what effect has continued remedial operations at the site had on the surrounding community?</p> <p>Response: It's unlikely that the remedial operations pose any problems for the surrounding community, which is sparsely populated, primarily agricultural with occasional industrial installations.</p>					

3. Are you aware of any ongoing community concerns regarding the site or its operation and maintenance?

Response: No

4. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by the Parish regarding the site? If so, please describe the purpose and results.

Response: No

5. Are you aware of any events, incidents, or activities that have occurred at the site, such as dumping, vandalism, or anything that required emergency response from local authorities? If so, please give details.

Response: There are no reported events in the Parish database.

6. Is your office aware of any changes in land use at the site or portions of the site? Has your office had any inquiries regarding potential reuse of the property, and if so, what were they?

Response: No, and no.

7. Do you feel well-informed about the site's activities and progress?

Response: I feel well informed after today's meeting.

8. Do you have any comments, suggestions, or recommendations regarding the site?

Response: Not at this time.

Five-Year Review Interview Record Old Inger Oil Refinery Superfund Site Ascension Parish, Louisiana		Interviewee: Glen R. Landry, P.E./Shaw Environmental & Infrastructure, Inc. email: glen.landry@shawgrp.com			
Site Name		EPA ID No.		Date of Interview	Interview Method
Old Inger Oil Refinery Superfund Site		EPA ID# LAD980745533		3/15/07	by email
Interview Contacts	Organization	Phone	Email	Address	
Bart Cañellas	EPA Region 6	214-665-6662	Canellas.Bart@epamail.gov	1445 Ross Ave Dallas, Texas 75202-2733	
Margaret O'Hare	CH2M HILL, as rep of EPA	972-980-2170	mohare@ch2m.com	12377 Merit, Suite 1000 Dallas, Texas 75251	
Darren Davis	CH2M HILL, as rep of EPA	972-980-2170	ddavis9@ch2m.com	12377 Merit, Suite 1000 Dallas, Texas 75251	
Interview Questions					
<p>1. What is your overall impression of the work conducted at the site since completion of the remedial action construction (March 2002)?</p> <p>Response: There is a world of difference in the condition and appearance at the site. It has been transformed from a very dirty abandoned industrial site / marsh into a neatly groomed pasture-like setting.</p>					
<p>2. Are you aware of any problems or difficulties encountered since completion of the Remedial Action which impacted progress or resulted in a change in O&M procedures? Please describe changes and impacts?</p> <p>Response: I am not aware of any problems or changes at the site since the completion of the remedial action.</p>					
<p>3. Have there been any significant changes in the O&M requirements? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.</p> <p>Response: I am not aware of any changes to the O&M requirements.</p>					

4. Are you aware of any events, incidents, or activities that have occurred at the site, such as dumping, vandalism, or anything that required emergency response from local authorities? If so, please give details.

Response: I am not aware of need for emergency response or any other from local authorities.

5. Do you have any comments, suggestions, or recommendations regarding the site?

Response: I have been aware of the site conditions since the mid-1990's and have managed a project for site maintenance before the final remedial action was performed and groundwater monitoring at the site after the final remedial action was completed. I believe that the remedial actions have accomplished their intended purpose of improving the site conditions and making the site safe to human health and the environment.

Attachment 3 Site Inspection Checklist

[This page intentionally left blank.]

Old Inger Oil Refinery Superfund Site Ascension Parish, Louisiana Five-Year Review Site Inspection Checklist

Please note that "O&M" is referred to throughout this checklist. At sites where Long-Term Response Actions are in progress, O&M activities may be referred to as "system operations" since these sites are not considered to be in the O&M phase while being remediated under the Superfund program. N/A means -"not applicable".

I. SITE INFORMATION	
Site Name: Old Inger Oil Refinery Superfund Site	EPA ID: LAD980745533
City/State: Ascension Parish, Louisiana	Date of Inspection: 04/18/2007
Agency Completing 5 Year Review: EPA	Weather/temperature: Sunny, slight breeze, 75 degrees F.
Remedy Includes: (Check all that apply) <input checked="" type="checkbox"/> Landfill cover/containment <input checked="" type="checkbox"/> Access controls <input checked="" type="checkbox"/> Institutional controls <input type="checkbox"/> Groundwater pump and treatment <input type="checkbox"/> Surface water collection and treatment <input type="checkbox"/> Other:	
Maintenance of the perimeter site fence is an O&M requirement as stipulated in the Final Close Out Report.	
Attachments: <input checked="" type="checkbox"/> Inspection team roster attached <input checked="" type="checkbox"/> Site map attached	
II. INTERVIEWS (Check all that apply)	
1. O&M site manager: Louisiana Department of Environmental Quality Contact: Todd Thibodeaux Title: Project Manager Date: 04/12/2007 Interviewed: <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone Number: <u>Problems, suggestions:</u> <input checked="" type="checkbox"/> Additional report attached (if additional space required).	
2. O&M contractor: Shaw Environmental And Infrastructure Contact: Glen Landry, P.E. Title: Project Manager Date: March 15, 2007 Phone Number: <u>Problems, suggestions:</u> <input checked="" type="checkbox"/> Additional report attached (if additional space required).	

3. Local regulatory authorities and response agencies (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency: Louisiana Department of Health and Hospitals

Contact: Ms. Rosalind Green, Sc. D.

Title: Environmental Health Specialist Coordinator

Date: March 26, 2007

Phone Number:

Problems, suggestions: Additional report attached (if additional space required).

Agency: Ascension Parish Planning Department

Contact:

Name: Mr. Ron Sigler

Title:

Date: March 18, 2007

Phone Number:

Problems, suggestions: Additional report attached (if additional space required).

Agency:

Contact:

Name:

Title:

Date:

Phone Number:

Problems, suggestions: Additional report attached (if additional space required).

4. Other interviews (optional) N/A Additional report attached (if additional space required).

III. ONSITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. O&M Documents

O&M Manuals

Readily available

Up to date

N/A

As-Built Drawings

Readily available

Up to date

N/A

Maintenance Logs

Readily available

Up to date

N/A

Remarks:

2.	Health and Safety Plan Documents <input type="checkbox"/> Site-Specific Health and Safety Plan <input type="checkbox"/> Contingency plan/emergency response plan <u>Remarks:</u>	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
3.	O&M and OSHA Training Records <u>Remarks:</u>	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
4.	Permits and Service Agreements <input type="checkbox"/> Air discharge permit <input type="checkbox"/> Effluent discharge <input type="checkbox"/> Waste disposal, POTW <input type="checkbox"/> Other permits <u>Remarks:</u>	<input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
5.	Gas Generation Records <u>Remarks:</u>	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
6.	Settlement Monument Records <u>Remarks:</u>	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
7.	Groundwater Monitoring Records <u>Remarks:</u>	<input type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
8.	Leachate Extraction Records <u>Remarks:</u>	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A
9.	Discharge Compliance Records <u>Remarks:</u>	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A

10. Daily Access/Security Logs <u>Remarks:</u>	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date	<input checked="" type="checkbox"/> N/A																				
IV. O&M Costs																							
		<input checked="" type="checkbox"/> Applicable	<input type="checkbox"/> N/A																				
1. O&M Organization <input checked="" type="checkbox"/> State in-house <input type="checkbox"/> Contractor for State <input type="checkbox"/> PRP in-house <input type="checkbox"/> Contractor for PRP <input type="checkbox"/> Other:																							
2. O&M Cost Records <div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Readily available <input type="checkbox"/> Up to date <input type="checkbox"/> Funding mechanism/agreement in place </div> <u>Original O&M cost estimate:</u> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Breakdown attached </div> <p style="text-align: center; margin-top: 10px;"><u>Total annual cost by year for review period if available</u></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><u>From (Date):</u></td> <td style="width: 20%;"><u>To (Date):</u></td> <td style="width: 40%;"><u>Total cost:</u></td> <td style="width: 20%; text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td><u>From (Date):</u></td> <td><u>To (Date):</u></td> <td><u>Total cost:</u></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td><u>From (Date):</u></td> <td><u>To (Date):</u></td> <td><u>Total cost:</u></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td><u>From (Date):</u></td> <td><u>To (Date):</u></td> <td><u>Total cost:</u></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> <tr> <td><u>From (Date):</u></td> <td><u>To (Date):</u></td> <td><u>Total cost:</u></td> <td style="text-align: right;"><input type="checkbox"/> Breakdown attached</td> </tr> </table> <p><u>Remarks:</u> Mr. Todd Thibodeaux indicated that O&M costs approximately \$500 per mowing (\$1,000 per year).</p>				<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached	<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached	<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached	<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached	<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached
<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached																				
<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached																				
<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached																				
<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached																				
<u>From (Date):</u>	<u>To (Date):</u>	<u>Total cost:</u>	<input type="checkbox"/> Breakdown attached																				
3. Unanticipated or Unusually High O&M Costs During Review Period <u>Describe costs and reasons:</u>																							
		<input checked="" type="checkbox"/> N/A																					
V. ACCESS AND INSTITUTIONAL CONTROLS																							
		<input checked="" type="checkbox"/> Applicable	<input type="checkbox"/> N/A																				
1. Fencing																							
1. Fencing damaged <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Gates secured <input type="checkbox"/> N/A <u>Remarks:</u> No damage noted to fencing. Much of the fence is overgrown with vines.																							

2. Other Access Restrictions		
1. Signs and other security measures	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A
<u>Remarks:</u> A sign is posted on the front gate. Much of the perimeter fence is overgrown, so signs were not observed on the fence. The sign on the front gate is faded and hard to read.		
3. Institutional Controls		
1. Implementation and enforcement		
Site conditions imply ICs not properly implemented:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Site conditions imply ICs not being fully enforced:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
Type of monitoring (e.g, self-reporting, drive by): LDEQ inspects the site after it is mown.		
Frequency: Twice per year.		
Responsible party/agency: LDEQ		
Contact:		
Name: Todd Thibodeaux		
Title: Project Manager		
Date:		
Phone Number:		
Reporting is up-to-date:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A
Reports are verified by the lead agency:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A
Specific requirements in deed or decision documents have been met:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> N/A
Violations have been reported:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Other problems or suggestions:	<input type="checkbox"/> Additional report attached (if additional space required).	
2. Adequacy <input checked="" type="checkbox"/> ICs are adequate <input type="checkbox"/> ICs are inadequate <input type="checkbox"/> N/A		
<u>Remarks:</u> A Conveyance Notification was filed and recorded by the Ascension Parish Clerk of Court on August 17, 2006. A copy of this notice is provided in Attachment 6 to this five-year review report.		
4. General		
1. Vandalism/trespassing	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> No vandalism evident
<u>Remarks:</u> No signs of trespassing were evident at the site.		
2. Land use changes onsite	<input checked="" type="checkbox"/> N/A	
<u>Remarks:</u> The site is currently vacant.		
3. Land use changes offsite	<input type="checkbox"/> N/A	
<u>Remarks:</u> Mr. Sigler/Ascension Parish Planning Department indicated that residential development in the Parish is expanding towards the area near the site. Land use around the site is primarily agricultural. There are a few residences and businesses located along LA Highway 75.		

VI. GENERAL SITE CONDITIONS	
1. Roads	<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A
1. Roads damaged	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Roads adequate <input checked="" type="checkbox"/> N/A
<u>Remarks:</u>	
2. Other Site Conditions	
<u>Remarks:</u> The site generally appears to be in good condition.	
VII. LANDFILL COVERS	
<input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A	
1. Landfill Surface	
1. Settlement (Low spots)	<input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Settlement not evident
Areal extent:	Depth:
<u>Remarks:</u> Minor tire ruts are present along the outside edge of the clay cap. It appears that driving occurred along the outside edge of the clay cover. The ruts are less than 3-4 inches in depth and do not penetrate the top soil present on top of the clay cap.	
2. Cracks	<input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Cracking not evident
Lengths:	Widths: Depths:
<u>Remarks:</u>	
3. Erosion	<input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Erosion not evident
Areal extent:	Depth:
<u>Remarks:</u>	
4. Holes	<input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Holes not evident
Areal extent:	Depth:
<u>Remarks:</u>	
5. Vegetative Cover	<input checked="" type="checkbox"/> Cover properly established <input type="checkbox"/> No signs of stress <input checked="" type="checkbox"/> Grass <input type="checkbox"/> Trees/Shrubs
<u>Remarks:</u> Vegetation on the clay cap is well established. In most areas, the grass was currently approximately 2 ft tall.	
6. Alternative Cover (armored rock, concrete, etc.)	<input checked="" type="checkbox"/> N/A
<u>Remarks:</u>	

7. Bulges Areal extent: Height: Remarks:	<input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> Bulges not evident
8. Wet Areas/Water Damage <input type="checkbox"/> Wet areas <input type="checkbox"/> Ponding <input type="checkbox"/> Seeps <input type="checkbox"/> Soft subgrade Remarks:	<input checked="" type="checkbox"/> Wet areas/water damage not evident <input type="checkbox"/> Location shown on site map Areal extent: <input type="checkbox"/> Location shown on site map Areal extent: <input type="checkbox"/> Location shown on site map Areal extent: <input type="checkbox"/> Location shown on site map Areal extent:
9. Slope Instability Areal extent: Remarks:	<input type="checkbox"/> Slides <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> No evidence of slope instability
2. Benches <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)	
1. Flows Bypass Bench Remarks:	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay
2. Bench Breached Remarks:	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay
3. Bench Overtopped Remarks:	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay

3. Letdown Channels <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
1. Settlement Areal extent: Depth: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of settlement
2. Material Degradation Material type: Areal extent: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of degradation
3. Erosion Areal extent: Depth: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of erosion
4. Undercutting Areal extent: Depth: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of undercutting
5. Obstructions Type: Areal extent: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A
6. Excessive Vegetative Growth <input type="checkbox"/> Evidence of excessive growth <input type="checkbox"/> Location shown on site map <u>Remarks:</u>	<input type="checkbox"/> No evidence of excessive growth <input type="checkbox"/> Vegetation in channels but does not obstruct flow Areal extent:	

4. Cover Penetrations <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Gas Vents <input type="checkbox"/> Active <input type="checkbox"/> Passive <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Evidence of leakage at penetration <u>Remarks:</u>	<input type="checkbox"/> Routinely sampled <input type="checkbox"/> Functioning <input type="checkbox"/> Needs O& M	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition
2.	Gas Monitoring Probes <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Evidence of leakage at penetration <u>Remarks:</u>	<input type="checkbox"/> Functioning <input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition
3.	Monitoring Wells (within surface area of landfill) <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Evidence of leakage at penetration <u>Remarks:</u>	<input type="checkbox"/> Functioning <input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition
4.	Leachate Extraction Wells <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Evidence of leakage at penetration <u>Remarks:</u>	<input type="checkbox"/> Functioning <input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A <input type="checkbox"/> Good condition
5.	Settlement Monuments <u>Remarks:</u>	<input type="checkbox"/> Located <input type="checkbox"/> Routinely surveyed	<input type="checkbox"/> N/A
5. Gas Collection and Treatment <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Gas Treatment Facilities <input type="checkbox"/> Flaring <input type="checkbox"/> Thermal destruction <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M <u>Remarks:</u>	<input type="checkbox"/> Collection for reuse	<input type="checkbox"/> N/A

2.	Gas Collection Wells, Manifolds and Piping <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M <u>Remarks:</u>	<input type="checkbox"/> N/A
3.	Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings) <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M <u>Remarks:</u>	<input type="checkbox"/> N/A
6.	Cover Drainage Layer	<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A
1.	Outlet Pipes Inspected <u>Remarks:</u>	<input type="checkbox"/> Functioning <input type="checkbox"/> N/A
2.	Outlet Rock Inspected <u>Remarks:</u>	<input type="checkbox"/> Functioning <input type="checkbox"/> N/A
7.	Detention/Sedimentation Ponds	<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A
1.	Siltation Areal extent: Depth: <u>Remarks:</u>	<input type="checkbox"/> Siltation evident <input type="checkbox"/> N/A
2.	Erosion Areal extent: Depth: <u>Remarks:</u>	<input type="checkbox"/> Erosion evident <input type="checkbox"/> N/A
3.	Outlet Works <u>Remarks:</u>	<input type="checkbox"/> Functioning <input type="checkbox"/> N/A
4.	Dam <u>Remarks:</u>	<input type="checkbox"/> Functioning <input type="checkbox"/> N/A

8. Retaining Walls <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
1. Deformations Horizontal displacement: Vertical displacement: Rotational displacement: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Deformation not evident
2. Degradation <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Degradation not evident
9. Perimeter Ditches/Off-site discharge <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A		
1. Siltation Areal extent: Depth: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Siltation not evident
2. Vegetative Growth Areal extent: Type: <u>Remarks:</u> A ditch flows along the west and south sides of the clay cap. Although there was a lot of vegetation present in the ditches, it does not appear to impede flow of water off the clay cap.	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Vegetation does not impede flow
3. Erosion Areal extent: Depth: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Erosion not evident
4. Discharge Structure <input type="checkbox"/> Functioning <input type="checkbox"/> Good Condition <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> N/A
<u>VIII. VERTICAL BARRIER WALLS</u> <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
1. Settlement Areal extent: Depth: <u>Remarks:</u>	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Settlement not evident

2.	Performance Monitoring <input type="checkbox"/> Performance not monitored <input type="checkbox"/> Performance monitored <input type="checkbox"/> Evidence of breaching Remarks:	Frequency: Head differential:	<input type="checkbox"/> N/A
IX. GROUNDWATER/SURFACE WATER REMEDIES			
<input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Groundwater Extraction Wells, Pumps, and Pipelines <input type="checkbox"/> Applicable <input type="checkbox"/> N/A		
1.	Pumps, Wellhead Plumbing, and Electrical <input type="checkbox"/> All required wells located <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M Remarks:		<input type="checkbox"/> N/A
2.	Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances <input type="checkbox"/> System located <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M Remarks:		<input type="checkbox"/> N/A
3.	Spare Parts and Equipment <input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires Upgrade <input type="checkbox"/> Needs to be provided Remarks:		<input type="checkbox"/> N/A
2. Surface Water Collection Structures, Pumps, and Pipelines <input type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	Collection Structures, Pumps, and Electrical <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M Remarks:		<input type="checkbox"/> N/A
2.	Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M Remarks:		<input type="checkbox"/> N/A

3.	Spare Parts and Equipment	<input type="checkbox"/> N/A
	<input type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires Upgrade <input type="checkbox"/> Needs to be provided <u>Remarks:</u>	
3.	Treatment System	<input type="checkbox"/> Applicable <input type="checkbox"/> N/A
1.	Treatment Train (Check components that apply)	
	<input type="checkbox"/> Metals removal <input type="checkbox"/> Oil/water separation <input type="checkbox"/> Bioremediation <input type="checkbox"/> Air stripping <input type="checkbox"/> Carbon adsorbers <input type="checkbox"/> Filters (list type): <input type="checkbox"/> Additive (list type, e.g., chelation agent, flocculent) <input type="checkbox"/> Others (list): <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O&M <input type="checkbox"/> Sampling ports properly marked and functional <input type="checkbox"/> Sampling/maintenance log displayed and up to date <input type="checkbox"/> Equipment properly identified <input type="checkbox"/> Quantity of groundwater treated annually (list volume): <input type="checkbox"/> Quantity of surface water treated annually (list volume): <u>Remarks:</u>	
2.	Electrical Enclosures and Panels (properly rated and functional)	<input type="checkbox"/> N/A
	<input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M <u>Remarks:</u>	
3.	Tanks, Vaults, Storage Vessels	<input type="checkbox"/> N/A
	<input type="checkbox"/> Good condition <input type="checkbox"/> Proper secondary containment <input type="checkbox"/> Needs O&M <u>Remarks:</u>	
4.	Discharge Structure and Appurtenances	<input type="checkbox"/> N/A
	<input type="checkbox"/> Good condition <input type="checkbox"/> Needs O& M <u>Remarks:</u>	
5.	Treatment Building(s)	<input type="checkbox"/> N/A
	<input type="checkbox"/> Good condition (esp. roof and doorways) <input type="checkbox"/> Needs Repair <input type="checkbox"/> Chemicals and equipment properly stored <u>Remarks:</u>	

6. Monitoring Wells (pump and treatment remedy) N/A
 All required wells located Properly secured/locked Functioning Routinely sampled
 Good condition Needs O&M
Remarks:

4. Monitored Natural Attenuation Applicable N/A

1. Monitoring Wells (natural attenuation remedy) N/A
 All required wells located Properly secured/locked Functioning Routinely sampled
 Good condition Needs O&M
Remarks:

5. Long Term Monitoring Applicable N/A

1. Monitoring Wells N/A
 All required wells located Properly secured/locked Functioning Routinely sampled
 Good condition Needs O&M
Remarks:

X. OTHER REMEDIES Applicable N/A

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

1. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

The implemented remedy for the site involved excavation of contaminated soils, sludges, oils, and sediments in an onsite land treatment unit. The contaminated wastes were treated to cleanup levels established by the LDEQ, and the material contains less than 5% by weight of oil and grease. After remediation, the treated wastes were returned to excavated areas. At the completion of remediation, the site was graded, a clay cap installed, and vegetation established on top of the clay cap. The clay cap serves to prevent infiltration through the treated wastes and prevent exposure to any remaining contamination present at the site.

During the site inspection, no observations were made or issues identified that indicate the remedy is not effective or functioning as designed. The site is well maintained by the LDEQ. The LDEQ has the site mowed twice per year to prevent excessive growth of vegetation. This also prevents the growth of trees or shrubs that might have root systems that could penetrate the clay cap. Vegetation during the site inspection was approximately 2 ft high or less over the clay cap, and not trees were observed growing on the cap. There were no signs of erosion of the cap, bulging of the cap, or ponding of water on the cap. Along the outside edge of the cap, there were a few ruts present from driving along the edge of the cap. These ruts were no more than 3-4 inches in depth and did not penetrate the top soil. Overall, the clay cap was in good condition.

A fence to prevent access to the site also surrounds the site. The fence was overgrown with vines in most places. The front gate is kept locked. There was a faded warning sign present on the front gate. Due to the excessive vegetation present on the perimeter fence, no warning signs were observed. A trespasser to the site would not be exposed to site contamination merely by being present on the site, as the contamination is all present underneath the clay cap. Someone driving on the cap when it is wet could cause damage to the surface of the cap, but there was no evidence that this has occurred.

The LDEQ has a conveyance notice on the property deed for the site to provide notice of the presence of contamination at the site. The intent of the deed notice is to prevent disturbance of the clay cap through excavation or drilling. Also, the US Army Corps of Engineers has restrictions on excavating and coring activities near the toe of the Mississippi River Levee. The conveyance notice and Corps of Engineers Restrictions are adequate to prevent penetration of the clay cap on site and disturbance of the treated waste underneath the clay cap.

The overall assessment is that the implemented remedy at the site is functioning as designed. The implemented remedy remains effective at protecting human health and the environment.

2. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

O&M at the site includes twice yearly mowing and inspections of the clay cap by the LDEQ. The LDEQ has implemented the O&M required at the site, and the O&M procedures are adequate to ensure the protectiveness of the remedy in the short-term. As long as O&M at the site is continued, the procedures in place are adequate to ensure the protectiveness of the remedy for the long-term.

There is not currently a written O&M Plan for the site. A written plan would ensure that the procedures in place are documented, O&M requirements are consistent over time, and that O&M activities are documented. A written O&M Plan would enhance the long-term protectiveness of the remedy by ensuring that adequate, consistent procedures are in place and documented for the site.

3. Early Indicators of Potential Remedy Failure

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.

No such issues were observed or identified.

4. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

O&M requirements for this site are minimal. No further optimization is possible for the remedy.

Inspection Team Roster
Date of Site Inspection –

Name	Organization	Title
Bartolome Cañellas	USEPA	Remedial Project Manager
Todd Thibodeaux	LDEQ	Project Manager
Rosalind Green	LDHH	Environmental Health Scientist
Kathleen Golden	LDHH	Environmental Health Scientist
Ron Sigler	Ascension Parish Planning Department	
Darren Davis	CH2M HILL	5-Year Review Assistant Project Manager
Margaret O'Hare	CH2M HILL	5-Year Review Project Manager

Attachment 4

Site Inspection Photographs

[This page intentionally left blank.]



Photo 1: View of site fence and front gate. View is facing southwest

Filename: 001.JPG



Photo 2: View into site from front gate. View is facing west.

Filename: 002.JPG



Photo 3: Warning signs posted on front gate to site.

Filename: 003.JPG



Photo 4: View from near front gate facing south. Pipeline is located next to site outside of fenced area.

Filename: 004.JPG



Photo 5: View of site from near the gate facing west.

Filename: DSCN2217.JPG



Photo 6: View of the site from the gate facing towards the Mississippi River levee (northwest).

Filename: DSCN2218.JPG



Photo 7: View of the site from the gate facing towards the far northwest corner.

Filename: DSCN2219.JPG



Photo 8: View of bird and nest with eggs (at arrow) near front gate.

Filename: DSCN2220.JPG



Photo 9: Close view of vegetation on clay cap.

Filename: DSCN2222.JPG



Photo 10: Blackberries growing on the clay cap.

Filename: DSCN2224.JPG



Photo 11: View of vegetation on clay cap, facing northwest. Fence is in the vegetation in the background.

Filename: DSCN2227.JPG



Photo 12: View of vegetation on clay cap, facing northeast. Fence is in dense vegetation in background.

Filename: DSCN2227.JPG



Photo 13: Crawfish burrow in clay cap.

Filename: DSCN2230.JPG



Photo 14: View of vegetation along west edge of clay cap, facing west. Vegetation can be seen growing on fence. Mississippi River levee is visible in background

Filename: DSCN2232.JPG



Photo 15: View of vegetation along west edge of clay cap, facing north. Bare spot at center of photograph is remnant of former perimeter road that surrounded the LTU.

Filename: DSCN2235.JPG



Photo 16: View of vegetation along west edge of clay cap, facing southeast. Fence is located in dense vegetation to the right. Depression at center of photograph is a drainage ditch.

Filename: DSCN2236.JPG



Photo 17: View of clay cap along south edge, facing towards gate (east).

Filename: DSCN2241.JPG



Photo 18: View of front gate, facing east towards LA Highway 75.

Filename: DSCN2242.JPG



Photo 19: View of front gate, facing towards site (west). Gate is secured with a chain and lock.

Filename: DSCN2243.JPG



Photo 20: View along Mississippi River levee south of site, facing south.

Filename: DSCN2244.JPG



Photo 21: View of access road to Mississippi River levee south of site.

Filename: DSCN2246.JPG



Photo 22: View of site from Mississippi River levee, facing north.

Filename: DSCN2249.JPG



Photo 23: View of site from Mississippi River levee, facing towards front gate (at arrow).

Filename: DSCN2250.JPG



Photo 24: View along Mississippi River levee, facing northwest. Site is located to the right behind trees.

Filename: DSCN2220.JPG



Photo 25: View of site from Mississippi River levee, near the southwest corner of site, facing north.

Filename: DSCN2252.JPG



Photo 26: View of north end of site from base of Mississippi River levee. Site is present behind trees at center background of photo (at arrow).

Filename: DSCN2263.JPG



Photo 27: Sign for wildlife conservation area located north of site on east side of LA Highway 75. Area is located immediately to the left of view in photo 46.

Filename: DSCN2264.JPG

Attachment 5
Notices to the Public Regarding the Five-Year Review

[This page intentionally left blank.]



U.S. EPA REGION 6 FIVE-YEAR REVIEW

OLD INGER OIL REFINERY SUPERFUND SITE Ascension Parish, Louisiana

CHECKING UP ON SUPERFUND SITES: THE FIVE-YEAR REVIEW

The U.S. Environmental Protection Agency (EPA) and the Louisiana Department of Environmental Quality (LDEQ) are conducting the first Five-Year Review of the Old Inger Oil Refinery Superfund site, located in Ascension Parish, Louisiana. EPA performs Five-Year Reviews at selected Superfund sites to let us know if the cleanup at the site is still protecting public health and the environment. During the review, EPA will study information on the site, including the effectiveness of the cleanup and the laws that apply; inspect the site; interview people familiar with the site; and complete a report based on our findings.

SITE HISTORY

The Old Inger Oil Refinery site operated as an oil refinery from 1967 until 1978 and was later abandoned in 1980. The site was added to the National Priorities List on September 6, 1983. Several removal activities were implemented from April 1983 through August 1988. Remedial Action activities were implemented in several phases. Contaminated liquids and sludges were removed from an on-site impoundment. Soils were excavated and treated on-site, returned to the excavation, and the site was graded, capped and seeded. One final activity of the remedial action, evaluation of the shallow ground water, was conducted in 2004 and 2005.

In September 1984, EPA signed a Record of Decision outlining the remedy for the site. Remedial activities were implemented and in September 2006, an Explanation of Significant Differences was issued to document the final decisions on one of the remedial action elements deferred in the 1984 ROD. The Explanation of Significant Differences also clarifies the existence of an ungrouted on-site well that could not be verified.

Residual waste left in place does not allow for “unlimited use and unrestricted exposure.” For this reason, a statutory review will be conducted no less often than every five years to make sure the remedy is protective of human health and the environment.

Residual contaminant concentrations remain at the site but are below established remedial standards. As indicated above, ground water monitoring was conducted and confirmed that shallow ground water does not represent an unacceptable risk.

Due to the location of the site, a rural area adjacent to the Mississippi River levee, additional restrictions against excavation and coring are applicable to the site. Both the U.S. Army Corps of Engineers and the Pontchartrain Levee Control Board have restrictions and prohibitions against coring and excavation on properties adjacent to the toe of the levee.

YOU CAN HELP

We want to hear from you. During the review we will consider any information or concerns that people may have about the site. If you are familiar with the site, you may know things that can help the review team. Here are some examples:

- Broken fences, illegal dumping, or other problems;
- buildings or land being used in new ways around the site;
- any unusual activities at the site such as vandalism or trespassing; and
- how the cleanup at the site has helped the area.

If you have any questions, concerns, or comments about the site, please call EPA’s toll-free number at 1-800-533-3508.

HOW TO GET MORE INFORMATION

If you have further questions regarding the Old Inger Oil Refinery site, please call:

Bartolome Cañellas
Remedial Project Manager
U.S. EPA, Region 6 (6SF-RL)
1445 Ross Avenue
Dallas, Texas 75202
214-665-6662
canellas.bart@epa.gov

Janetta Coats
Community Involvement Coordinator
U.S. EPA (6SF-TS)
1445 Ross Avenue
Dallas, Texas 75202
214-665-7308
1-800-533-3508
coats.janetta@epa.gov

Todd Thibodeaux
Louisiana Department of Environmental Quality
602 N. Fifth St.
Baton Rouge, LA 70802
225-219-3225
todd.thibodeaux@la.gov

Inquiries from the news media should be directed to the Region 6 Press Office at 214-665-2200, or the EPA Superfund Hotline at 1-800-533-3508.

Information can also be accessed via the U.S. EPA Internet Homepage at:

USEPA Headquarters: www.epa.gov

USEPA Region 6: www.epa/earth1r6

USEPA Region 6 Superfund Division:
www.epa.gov/region6/superfund



U.S. EPA REGION 6
1445 Ross Avenue (6SF-TS)
Dallas, Texas 75202-2733

First Class Mail
Postage and Fees Paid
EPA
Permit No. G-35



**OLD INGER OIL REFINERY SUPERFUND SITE
PUBLIC NOTICE
U.S. EPA Region 6 and
Louisiana Department of Environmental Quality
February 2007**



The U.S. Environmental Protection Agency Region 6 (EPA) and the Louisiana Department of Environmental Quality have begun the first Five-Year Review of the remedy for the Old Inger Refinery Superfund Site. The review will let us know if the remedy performed is still protecting public health and the environment. The site is located in Ascension Parish, Louisiana. Once completed, the results of the Five-Year Review will be made available to the public at www.epa.gov and at the following information repository:

Louisiana Department of
Environmental Quality
Public Records Center
602 N. Fifth Street
Baton Rouge, LA 70802

Information about the Site also is available on the Internet at:

www.epa.gov/region6/superfund

For more information about the Site, contact:

Mr. Bartolome Cañellas (214) 665-6662
or 1-800-533-3508 (toll-free),
or by e-mail at canellas.bart@epa.gov or

Mr. Todd Thibodeaux at the Louisiana Department of
Environmental Quality
(225) 219-3225 or by e-mail at
todd.thibodeaux@la.gov

All media inquiries should be directed to the
EPA Press Office at (214) 665-2200.

CONFIRMED PUBLICATION in the Ascension Citizen February 20, 2007

[This page intentionally left blank.]

Attachment 6
Deed Notices

[This page intentionally left blank.]

100
09/17/06 SCANNED 09/17/06

INSTRUMENT # 00645737
FILED AND RECORDED
ASCENSION CLERK OF COURT
2006 AUG 17 02:30:39 PM
COB... OTHER

[Signature]
DEPUTY CLERK & RECORDER

CERTIFIED TRUE COPY BY

CONVEYANCE NOTIFICATION

The Louisiana Department of Environmental Quality (LDEQ) hereby notifies the public that the Old Inger Oil Refinery Superfund Site ("the Site"), Agency Interest Number 4714, located along Louisiana Highway 75, was closed with contaminant levels present that are in accordance with the Record of Decision (ROD), the Explanation of Significant Difference (ESD) to the ROD, and Remedial Action soil contaminant goals as established in the Remedial Action Plan for the Old Inger Refinery Site.

The Site was closed in accordance with the Louisiana Revised Statutes, Subtitle II of Title 30, Chapter 12. Information regarding this site is available in the LDEQ public record and may be obtained by contacting the LDEQ Records Manager at (225) 219-3168. Inquiries regarding the contents of this site may be directed to LDEQ, Remediation Services Division, P.O. Box 4314, Baton Rouge, LA 70821-4314, or (225) 219-3236.

LDEQ hereby notifies interested persons of the following regarding the Site:

- The Site has been the subject of an action by the U.S. Environmental Protection Agency (U.S. EPA) and LDEQ response under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA);
- Hazardous substances (oil and grease) remain in soils at a specified location on the property above levels that allow for unrestricted exposure (less than 5 percent by weight);
- Disturbing or moving soil in these locations may pose a threat to human health or the environment, and may subject the property owner and the party causing the disturbance to liability under CERCLA or other laws;
- A clay protective cap complete with topsoil and grass, necessary for protectiveness of the remedy or for its successful operation and maintenance, remains on the property at a specified location;
- Disturbing or moving this protective feature of the remedy may pose a threat to human health or the environment, and may subject the property owner and the party causing the disturbance to liability under CERCLA or other laws.

Contaminants remaining at the property:

Media	Contaminant	Concentration
Soil	Oil and Grease	< 5% by Weight

6

The Legal Description of the Site is as follows:

A certain tract of land situated in the Parish of Ascension, Louisiana, and being the southern portion of Tract No. 12 and the northern portion of Tract 13 of Belle Helene Subdivision being Strip "C" in the Act of Partition among the heirs of John T. Many dated June 9, 1930, and recorded in C.O.B. 70, Folio 432 of Ascension Parish, Louisiana, which said Strip "C" is more particularly described as bounded on the North by Strip "B", on the lower or South side by Strip "D" and measuring 6.05 chains at its West end or front by a depth of 68.22 chains on its North or upper line and 64.55 chains on its South or lower line and contains 31.66 acres or 37.47 arpents; together with all building and improvements thereon and thereunto belonging.

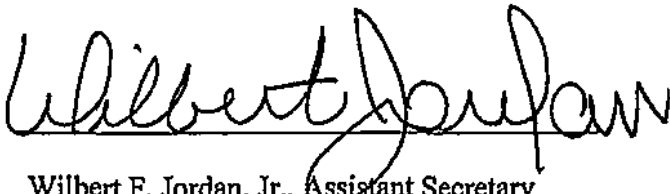
A certain piece or parcel of real estate situated in the Parish of Ascension, State of Louisiana, East of the Mississippi River at about five and one-half miles above the Village of Darrow, and being a certain fractional portion of Tract 12 of the Belle Helene Subdivision and being more specifically described as Lot No. "A" of said Tract No. 12, all as fully described in an Act of Partition between Henry J. Many and others before J.F. Fernandez, Notary Public, dated June 9, 1930, and recorded in C.O.B. 70, Folio 432; said parcel of ground being on the upper or North side of Tract 12 of the Belle Helene Subdivision and measures 5.472 chains at its extreme West end or front by a depth of 74.95 chains and 4.31 chains on the rear line or east end of said tract containing 31.66 acres or 37.47 arpents.

A certain tract of land situated in the Parish of ascension, Louisiana, and being the southern portion of Tract No. 12 and northern portion of Tract 13 of Belle Helene Subdivision being Strip "B" in the Act of Partition among the heirs of John T Many dated June 9, 1930, and recorded in C.O.B. 70, Folio 432 of Ascension Parish, Louisiana, which said Strip "B" is more particularly described as bounded on the North by Strip "A", on the lower or South side by Strip "C" and measuring 5.736 chains at its West end or front by a depth of 71.66 chains on its North or upper line and 68.22 chains on its South or lower line and contains 31.66 acres or 37.47 arpents; together with all buildings and improvements thereon and thereunto belonging.

A certain strip of land together with rights, ways, and privileges thereon and thereto belonging, situated in the Parish of Ascension, State of Louisiana, having a front on the public gravel road of 114 feet, by a depth of 3,228 feet, and a width of 78 feet in the rear, said strip containing 7.57 acres and is situated in the upper or North side of Tract "D" as described in the Act of Partition among the heirs of John T. Many, dated June 9, 1930, and recorded in C.O.B. 70, Folio 432 of Ascension Parish, Louisiana, together with all buildings and improvements thereon and thereto belonging.

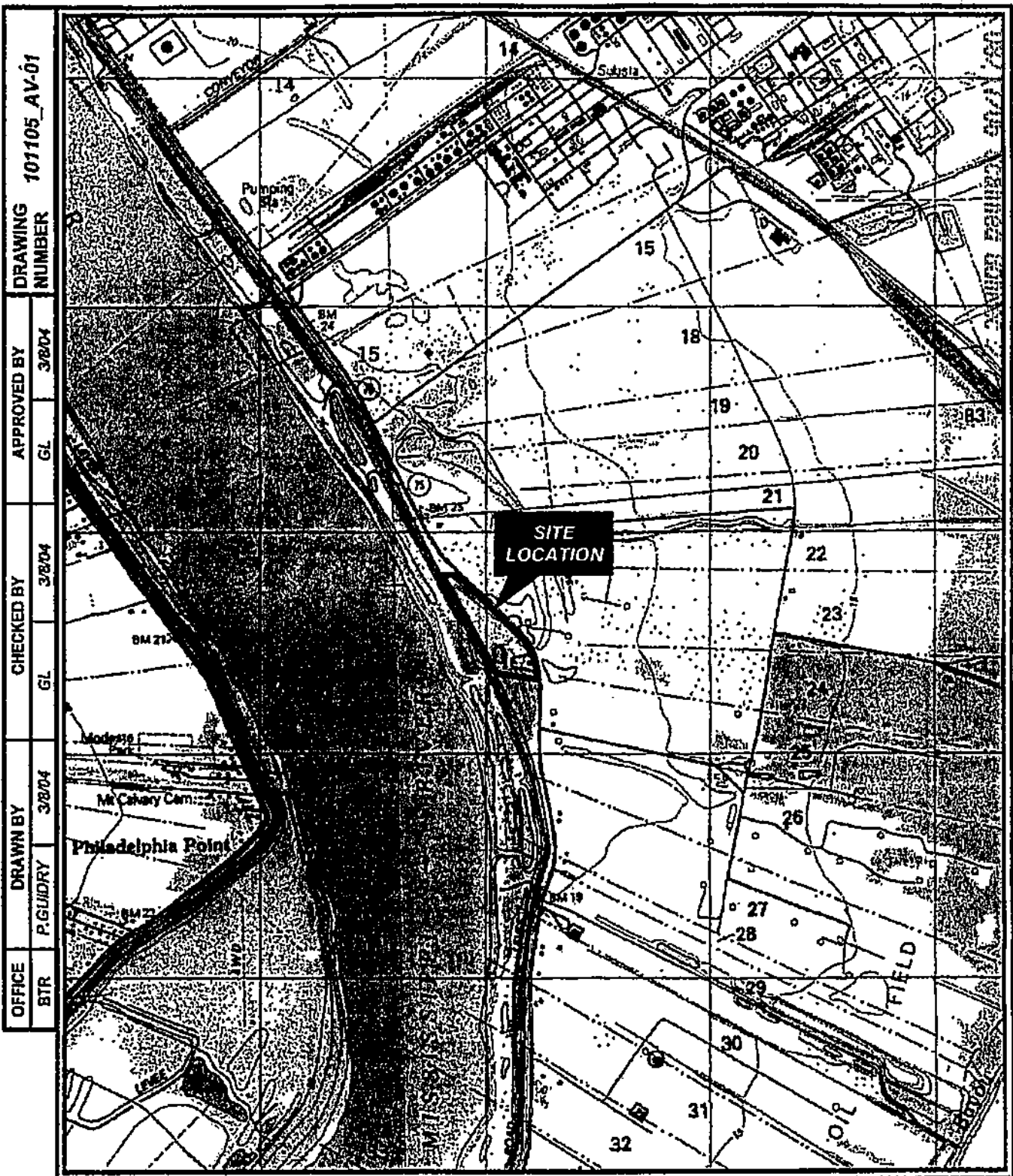
The above described tracts being the properties acquired by Mr. Leola Melancon Many from George J. Melancon by act of sale dated January 14, 1950 and recorded in C.O.B. 91, Folio 74 of the Conveyance Records of the Parish of Ascension, Louisiana. For further acquisition see C.O.B. 90, Folio 349, and C.O.B. 70, Folio 432 of the Conveyance Records of Ascension Parish, Louisiana.

Maps of the property are attached.

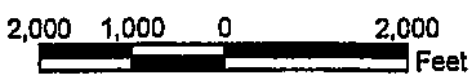


Wilbert F. Jordan, Jr., Assistant Secretary
Office of Environmental Assessment, LDEQ

Aug 17, 2006
Date



OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
BTR	P. GUIDRY 3/8/04	GL 3/8/04	GL 3/8/04	101105_AV-01



REFERENCE:
 USGS 7.5 Minute Quadrangle Topographic Map
 Gonzales, & Carville, LA (1999)



LOUISIANA DEPARTMENT OF
 ENVIRONMENTAL QUALITY
 BATON ROUGE, LOUISIANA

FIGURE 1
SITE LOCATION MAP
 OLD INGER SUPERFUND SITE
 DARROW, LOUISIANA



VERTICAL SCALE
AS SHOWN

TOPOGRAPHIC SURVEY
OF
OLD INGER SUPERFUND SITE
FOR
EARTHTECH, INC.

LEGEND

- BOUNDARY OF INVESTIGATION
- 5% SLOPE
- 1% SLOPE
- 0% SLOPE

GRAPHIC SCALE



THIS SURVEY WAS COMPLETED BY SIB GROUP, INC. ON 02/04/02
DATE OF FIELD WORK: 01/04/02

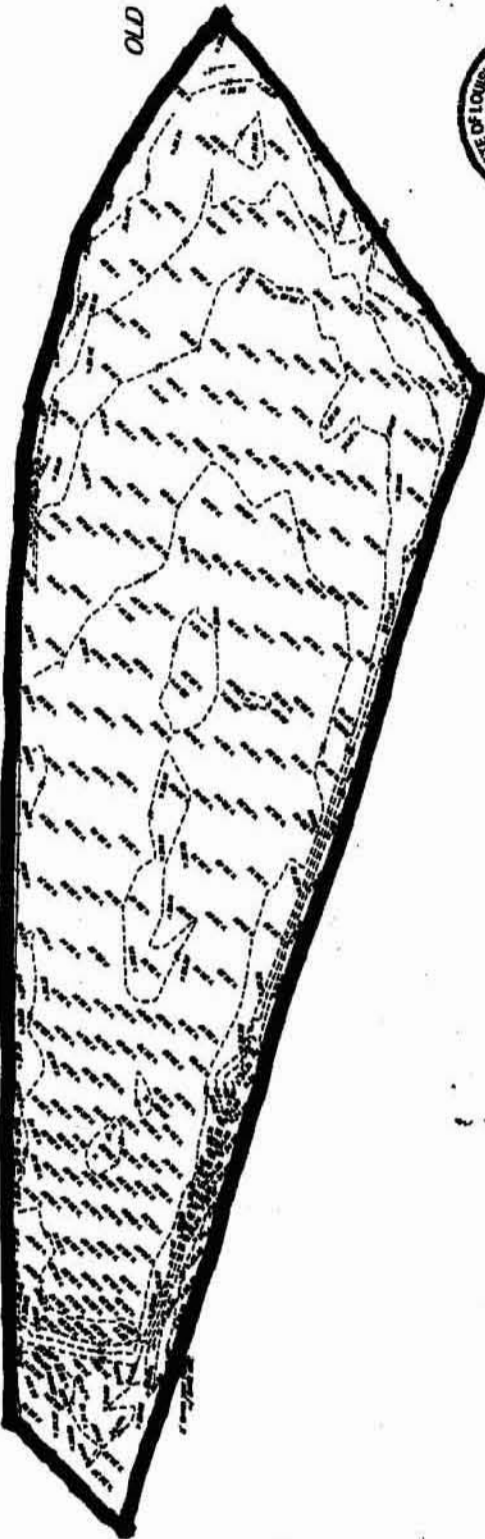


FIELD SURVEY COMPLETED BY SIB GROUP, INC. FIGURE 1-3

SIB GROUP
INCORPORATED
1100 SOUTH RIVER STREET
METairie, Louisiana 70001-5000

CAD ORIGINAL	DATE	BY	SCALE	PROJECT

1 OF 1 30741.1



AREA OF INVESTIGATION
Oil and Grease in soil less than 5% by weight

END OF DOCUMENT APCC

GENERAL NOTES:
1. THE SURVEY WAS CONDUCTED ON 01/04/02 AND 02/04/02.
2. THE SURVEY AREA IS A PORTION OF THE OLD INGER SUPERFUND SITE.
3. THE SURVEY AREA IS BOUNDARY OF INVESTIGATION FOR OIL AND GREASE IN SOIL LESS THAN 5% BY WEIGHT.
4. THE SURVEY AREA IS BOUNDARY OF INVESTIGATION FOR OIL AND GREASE IN SOIL LESS THAN 1% BY WEIGHT.
5. THE SURVEY AREA IS BOUNDARY OF INVESTIGATION FOR OIL AND GREASE IN SOIL LESS THAN 0% BY WEIGHT.
6. THE SURVEY AREA IS BOUNDARY OF INVESTIGATION FOR OIL AND GREASE IN SOIL LESS THAN 5% BY WEIGHT.

NO.	DESCRIPTION
1	BOUNDARY OF INVESTIGATION
2	5% SLOPE
3	1% SLOPE
4	0% SLOPE

A TRUE COPY
[Signature]
Deputy Clerk & Recorder
ASCENSION PARISH 4-12-07

2 SOUTH BOWERS 02/11/02