APPENDIX 6

PHOTOGRAPHIC DOCUMENTATION

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-07-2007 **Time:** 15:07 **Direction:** S

Description: Baton Rouge Trail (BRT), located atop Mississippi River Levee, as it crosses entrance to Gilmar Marine Services, Inc., (GMS) former facility location (Site).

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:08 **Direction:** SW

Description: Panorama of GMS Site as viewed from the intersection of BRT and the GMS Site access road (1 of 5).

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:08 **Direction:** W

Description: Panorama of GMS Site as viewed from the intersection of BRT and the GMS Site access road (2 of 5).

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:08 **Direction:** W

Description: Panorama of GMS Site as viewed from the intersection of BRT and the GMS Site access road (3 of 5).

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:08 **Direction:** NW

Description: Panorama of GMS Site as viewed from the intersection of BRT and the GMS Site access road (4 of 5).

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:08 **Direction:** N

Description: Panorama of GMS Site as viewed from the intersection of BRT and the GMS Site access road (5 of 5). Note Interstate-10 Mississippi River Bridge and Downtown Baton Rouge in background.

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:09 **Direction:** W

Description: GMS Site as viewed from the intersection of BRT and the GMS Site access road.

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:10 **Direction:** NE

Description: Home Oil Company as viewed from the intersection of BRT and the GMS Site access road.

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:10 **Direction:** ESE

Description: Baton Rouge Warehouse Site as viewed from the intersection of BRT and the GMS Site access road.

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:15 **Direction:** S

Description: Panorama of GMS Site as viewed from BRT, approximately 400 feet north of the GMS Site access road (1 of 5).

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:15 **Direction:** SW

Description: Panorama of GMS Site as viewed from BRT, approximately 400 feet north of the GMS Site access road (2 of 5).

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:15 **Direction:** E

Description: Panorama of GMS Site as viewed from BRT, approximately 400 feet north of the GMS Site access road (3 of 5).

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:15 **Direction:** NW

Description: Panorama of GMS Site as viewed from BRT, approximately 400 feet north of the GMS Site access road (4 of 5).

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:15 **Direction:** N

Description: Panorama of GMS Site as viewed from BRT, approximately 400 feet north of the GMS Site access road (5 of 5). Note Interstate-10 Mississippi River Bridge and Downtown Baton Rouge in background.

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:20 **Direction:** SSE

Description: Panorama of GMS Site as viewed from BRT, approximately 800 feet north of the GMS Site access road (1 of 5).

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:20 **Direction:** S

Description: Panorama of GMS Site as viewed from BRT, approximately 800 feet north of the GMS Site access road (2 of 5).

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:20 **Direction:** SW

Description: Panorama of GMS Site as viewed from BRT, approximately 800 feet north of the GMS Site access road (3 of 5).

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:20 **Direction:** E

Description: Panorama of GMS Site as viewed from BRT, approximately 800 feet north of the GMS Site access road (4 of 5).

Photographs of Gilmar Marine Services, Inc., Facility in Baton Rouge, Louisiana

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:20 **Direction:** NE

Description: Panorama of GMS Site as viewed from BRT, approximately 800 feet north of the GMS Site access road (4 of 5).

Site: Gilmar Marine Services, Inc., Preliminary Assessment

Date: 04-03-2007 **Time:** 15:20 **Direction:** N

Description: Panorama of GMS Site as viewed from BRT, approximately 800 feet north of the GMS Site access road (5 of 5). Note Interstate-10 Mississippi River Bridge and Downtown Baton Rouge in background.

APPENDIX 7

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
ELECTRONIC DOCUMENT MANAGEMENT SYSTEM
RECORDS FOR AI 8003

LDEQ EDMS DOCUMENT QUERY RESULTS

query was run on 4/5/2007 10:13:53 AM

Document ID	AI	Document Type	Document Subtype	Date	Description	Media	Division	Pgs	Review Summary - (Added by E&E)
20011093	8003	Correspondence-Received		8/21/1974		Air Quality		1	Memo of field investigation, 1974
15855290	8003	Correspondence-Received		10/2/1974		Surface Water		1	Letter to Water Pollution Division, 1974
15855356	8003	Correspondence-Received		1/15/1975		Surface Water		1	Notice of review of application, 1975
15855341	8003	Correspondence-Received		1/16/1975		Surface Water		8	Application for Water Discharge (description of operations)
15855349	8003	Permits		1/16/1975		Surface Water	Permits	7	Application for Water Discharge Permit
15855357	8003	Permits		1/17/1975		Surface Water	Permits	11	EPA Form 7550-23, National Pollutant Discharge Elimination System Application for Permit to Discharge
21720825	8003	Permits		2/7/1975		Air Quality		100	Certificate for Approval of Emissions for Barge Cleaning Operations, Approval of Permit Request
20011092	8003	Correspondence-Received		2/10/1975		Air Quality		1	Letter to the Division of Air Control and Occupational Health
15855340	8003	Correspondence-Received		5/16/1975		Surface Water		1	Notification of Application Review, 1975
15855132	8003	Permits		5/27/1975		Surface Water	Permits	1	Modification of Permit Application
15855129	8003	Legal		8/1/1975		Surface Water		3	Notice of Receipt of Waste disposalPermit
15855104	8003	Permits		4/25/1978		Surface Water	Permits	12	NPDES Permit
15855116	8003	Permits		4/25/1978		Surface Water	Permits	12	Public Notice NPDES Permit
15855289	8003	Correspondence-Received		6/5/1978		Surface Water		1	Management change notification at Gilmar Marine
21721041	8003	Correspondence-Sent		10/9/1979		Air Quality		1	Cover Letter for Permit
21721039	8003	Correspondence-Internal	Note/Memo	1/6/1980		Air Quality		1	Odor complaint investigation-ethyl acrylate vapors caused odors in Downtown Baton Rouge near 4th street. Operations suspended until wind changed
21721040	8003	Correspondence-Received		1/6/1980		Air Quality		1	Violation
15855291	8003	Reports		12/8/1980	ANALYTICAL	Surface Water		22	Analytical Report
15855028	8003	Compliance	Notice	12/23/1980		Surface Water		2	Notice of Service

LDEQ EDMS DOCUMENT QUERY RESULTS

query was run on 4/5/2007 10:13:53 AM

Document ID	AI	Document Type	Document Subtype	Date	Description	Media	Division	Pgs	Review Summary - (Added by E&E)
15855030	8003	Legal		12/23/1980		Surface Water		7	Notice of Violation Compliance Order – on 12/18/1980 odor complaints prompted LDNR inspection of the facility. Violations included oil and other chemicals discharging to the Mississippi River (MR), oil and chemical wastes overflowed onto the batture, and evidence on the barge decks of discharged directly into the MR. Also GMS had constructed and operated equipment for which no air emission permit had been granted.
21721042	8003	Correspondence-Received		12/23/1980		Air Quality		4	Notice of Violations and Compliance order
15855026	8003	Correspondence-Sent		1/13/1981		Surface Water		2	Letter of intent to discuss notice of violation
15855024	8003	Correspondence-Internal	Note/Memo	1/22/1981		Surface Water		2	Memo to Asst Sec of DNR re the violation
22051339	8003	Permits		1/23/1981		Air Quality		4	Request by GMS for extension
15855259	8003	Reports	Inspection	2/24/1981		Surface Water		30	NPDES Compliance inspection Report
15855258	8003	Reports		3/2/1981	ANALYTICAL RESULTS	Surface Water		1	Analytical results from lab tests
21720703	8003	Forms		4/7/1981		Air Quality		61	Draft Application for Approval of Emissions
15855313	8003	Correspondence-Received		4/10/1981		Surface Water		2	Memo on alleged water violations
21721037	8003	Correspondence-Internal	Note/Memo	4/13/1981		Air Quality		2	Newspaper Article
15855255	8003	Reports		5/22/1981	SAMPLE	Surface Water		3	Samples collected for analysis
15855250	8003	Reports		5/28/1981	ANALYSIS	Surface Water		5	Addendum to samples reported
15855249	8003	Reports	Inspection	1/27/1983		Surface Water		1	Installation Inspection Form
15855248	8003	Reports	Inspection	1/5/1984		Surface Water		1	Facility Inspection Form
15855037	8003	Correspondence-Internal	Note/Memo	5/24/1988		Surface Water		2	Memo of Inspection. Recommendation of site to be turned over to Inactive and Abandoned Sites program.
21721026	8003	Correspondence-Internal	Note/Memo	5/16/1995		Air Quality		1	Memo stating that GMS was not operating
23350464	8003	Reports	Inspection	9/4/2001		Surface Water		1	Field Interview Form
27556097	8003	Correspondence-Sent		6/9/2003		Inactive & Abandoned Sites	Remediation Services	3	Referral of Potential Superfund Sites, GMS included

LDEQ EDMS DOCUMENT QUERY RESULTS

query was run on 4/5/2007 10:13:53 AM

Document ID	AI	Document Type	Document Subtype	Date	Description	Media	Division	Pgs	Review Summary - (Added by E&E)
32451020	8003	Reports		1/8/2004	Preliminary evaluation assessment phase I	Inactive & Abandoned Sites	Remediation Services	71	Preliminary PA by E&E
32451128	8003	Reports		1/8/2004	Preliminary evaluation assessment phase I-cover page	Inactive & Abandoned Sites	Remediation Services	1	PA Phase 1
32451130	8003	Reports		1/8/2004	Site screening	Inactive & Abandoned Sites	Remediation Services	1	Site Screening

APPENDIX 8

FACILITY OWNER INFORMATION

Louisiana Secretary of State
COMMERCIAL DIVISION
Corporations Database

Louisiana Secretary of State
Detailed Record

Charter/Organization ID: 30225860F

Name: GILMAR MARINE SERVICES, INC.

Type Entity: Business Corporation (Non-Louisiana)

Status: Not Active (Action by Secretary of State)

2007 Annual Report/Reinstatement form is required in order to reinstate **Print Annual Report/Reinstatement Form For Filing**

Mailing Address: 100 FIFTH AVENUE, PITTSBURGH, PA 15222

Domicile Address: 100 WEST 10TH STREET, WILMINGTON, DE 19801

Principal Office: 100 FIFTH AVENUE, PITTSBURGH, PA 15222

Principal Bus. Est. in Louisiana: 1500 RIVER ROAD, BATON ROUGE, LA 70802

Qualified: 06/13/1973

President: RAYMOND A. SMEGO, 1750 PATRICK PL., LIBRARY, PA 15129

Secretary: LOIS V. SMEGO, 1142 WOODLAWN, BETHEL PARK, PA 15102

Treasurer: RAYMOND A. SMEGO, 1750 PATRICK PL., LIBRARY, PA 15129

Additional officers may exist on document

Amendments on File
STMT OF CHG OR CHG PRIN BUS OFF (FOREIGN (07/06/1993)
STMT OF CHG OR CHG PRIN BUS OFF (FOREIGN (04/01/1986)
REVOKED (10/21/1985)
STMT OF CHG OR CHG PRIN BUS OFF (FOREIGN (02/22/1985)

New Search | View Cart

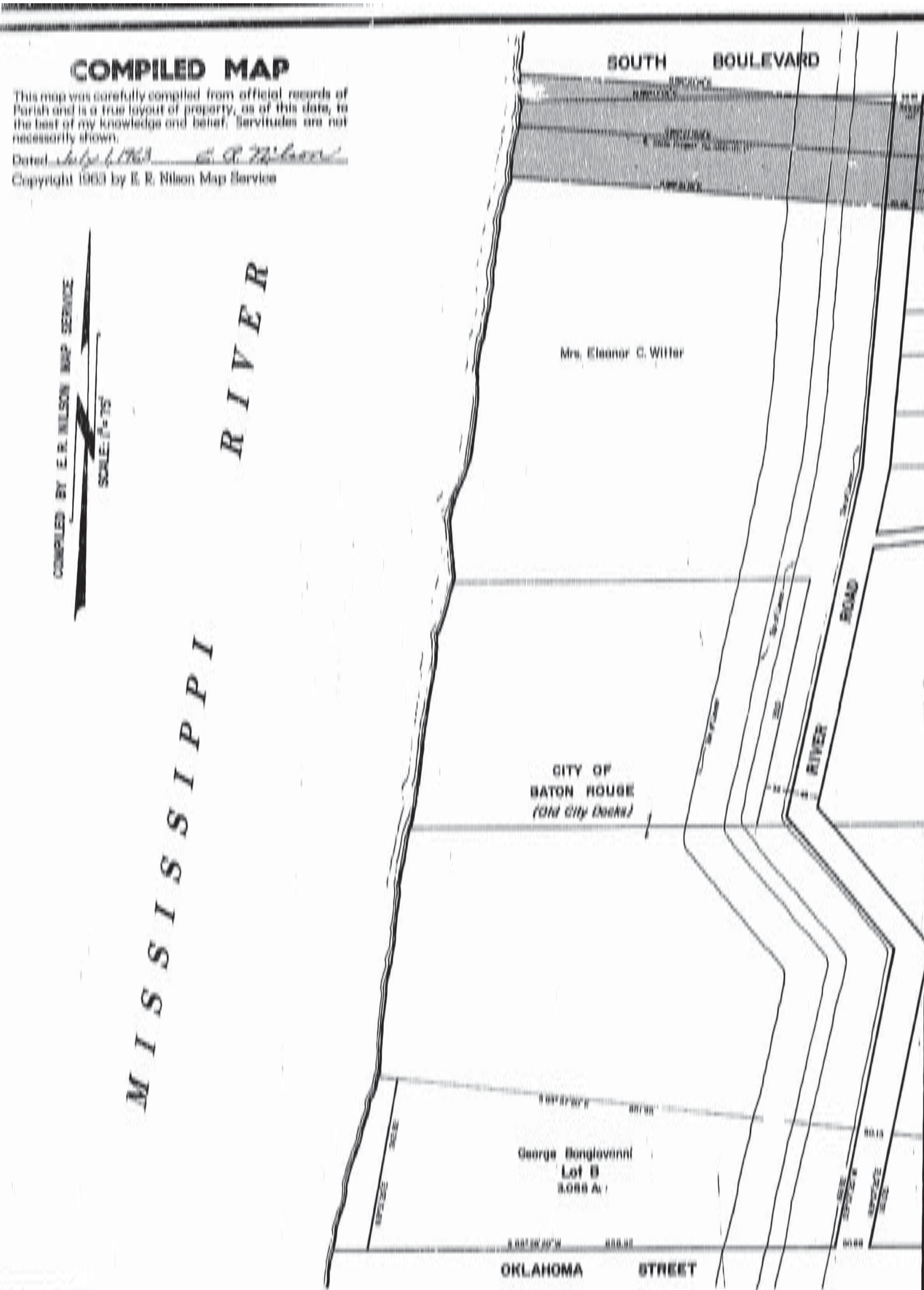
APPENDIX 9

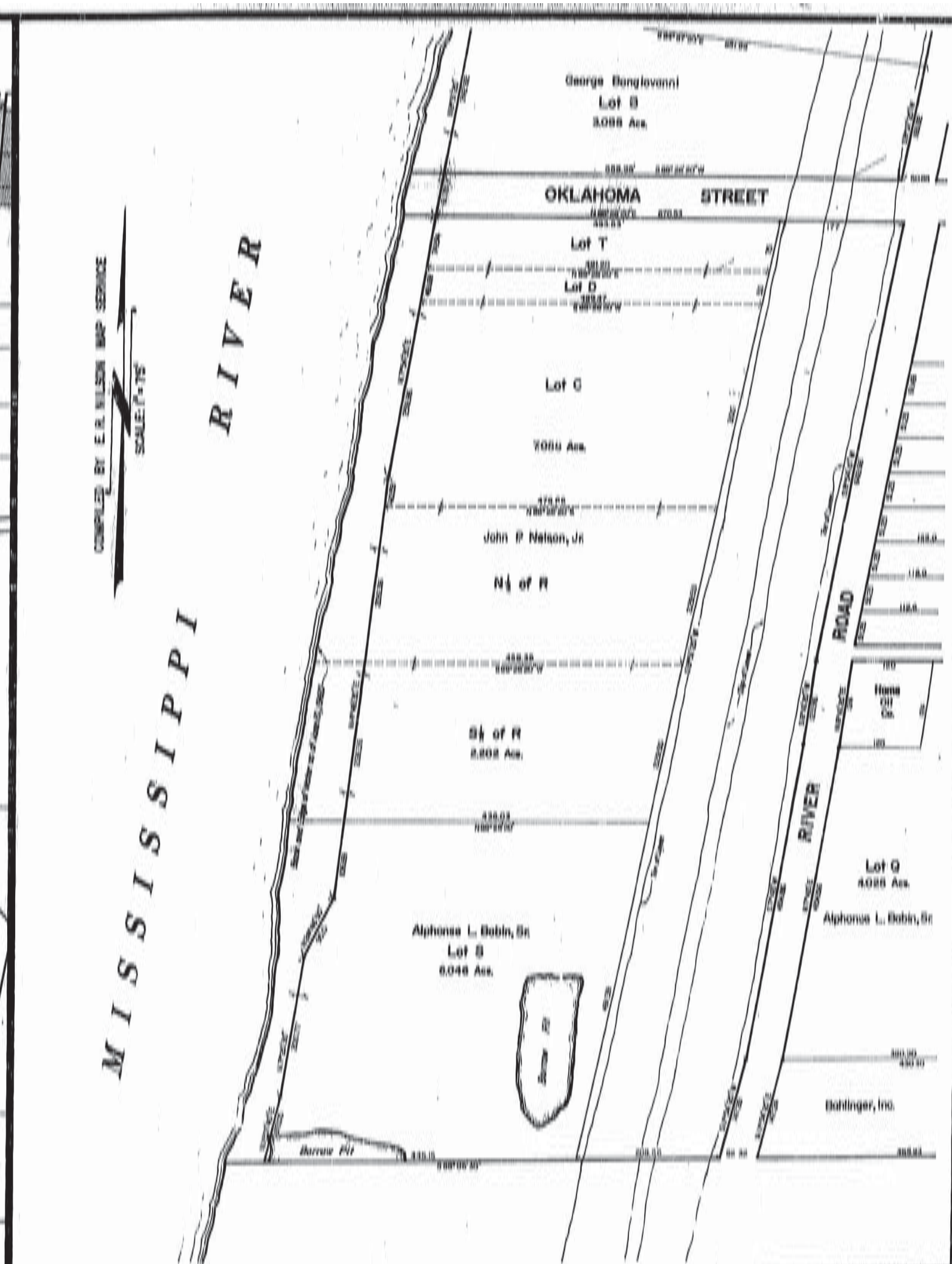
PROPERTY OWNERSHIP DOCUMENTATION

COMPILED MAP

This map was carefully compiled from official records of Parish and is a true layout of property, as of this date, to the best of my knowledge and belief. Servitudes are not necessarily shown.

Dated July 1, 1963 E. R. Nilson





Recorded Maps

DISPLAY PROPERTY INFORMATION DPTTTI07

PROPERTY NUMBER 00629871 TYPE-WARD-SECT-ASSESS 1 1 3 29761

NAME1 W.W. MINERALS, INC. OWNER NO 504-2426-2

NAME2

ADDR 8126 ONE CALAIS AVE., SUITE 1-C

ADDR

ADDR BATON ROUGE, LA 70809 ZIP 70809

SUBDIV

LOT ACRES

SQUARE

LAND ASSESS 0

LOT ASSESS 19,000

IMPROVEMENT 0

HOMESTEAD EXEMPTION 0

HMSTD EXEMPT AMT 0.00

INTEREST DUE 0.00

INTEREST PTD 0.00

INTEREST RTD 0.00

COST DUE 0.00

COST PTD 0.00

COST RTD 0.00

CALC BALANCE DUE 0.00

PF9-RETURN TO PREVIOUS SCREEN

******* PROPERTY DESCRIPTION *******

FOUR CERTAIN LOTS DESIGNATED AS BATTURE LOTS T, D. C AND R, SUB. OF THE A. STRENZKE AND E. WITTING TRACTS, SUB. MAGNOLIA, FRONTAGE OF 874.50 FT. ON EAST SIDE OF MISSISSIPPI RIVER, NORTH LINE OF 493.53 FT.; SOUTH LINE OF 436.03 FT. 1973. (54-8584). (11-16-84) (8-9710)

Louisiana Secretary of State
COMMERCIAL DIVISION
Corporations Database

Louisiana Secretary of State
Detailed Record

Charter/Organization ID: 34131348D

Name: W W MINERALS, INC.

Type Entity: Business Corporation

Status: Active

Annual Report Status: In Good Standing **Add Certificate of Good Standing to Shopping Cart**

Last Report Filed on 12/22/2006

Mailing Address: 8568 GOODWOOD BLVD., BATON ROUGE, LA 70806

Domicile Address: 8568 GOODWOOD BLVD., BATON ROUGE, LA 70806

File Date: 12/30/1983

Registered Agent (Appointed 3/20/1986): JAMES O. ERVIN, 8126 ONE CALAIS AVE., #1C, BATON ROUGE, LA 70809

President: JAMES O. ERVIN, 8126 ONE CALAIS AVE., BATON ROUGE, LA 70809

New Search | View Cart

1 Result matching "(225) 769-7502"

Need More Help With Your Search?

Ervin, James O Atty

street address not available
Baton Rouge, LA 70810
(225) 769-7502

SPONSORED LINKS

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Map and Driving Directions

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Find Nearby Businesses

Type: Land Line
Provider: South Central Bell

Due to number portability, some numbers have been transferred to a new service provider.

APPENDIX 10

RECORDS OF COMMUNICATION

Will Farrar
Print Originator's Name
Ecology and Environment, Inc.

RECORD OF COMMUNICATION

Conversation with:
Name JAMES O ERVIN
Association W W MINERALS
Address

Phone 225-769-7507
(Area Code) (Number)

Date 5/25/07
(Mon) (Day) (Year)
Time 405 AM (PM)
[ ] Originator Placed Call
[ ] Originator Received Call

Proj. No.

Subject GILMAR MARINE SERVICES

Discussion: MR ERVIN CONFIRMED THAT W W MINERALS REMOVED TANKS & THEIR CONTENTS. THEY HIRED A FIRM (ENVIRONMENTATION) FROM SHREVEPORT, LA TO REMOVE & DISPOSE OF TANK CONTENTS & SCRAP TANKS AROUND 1990. HE DID NOT REMEMBER THE NAME OF THE FIRM BUT COULD RETRIEVE THE RECORDS IF REQUIRED.

MR ERVIN ALSO STATED HE HAS TRIED TO GATE & FENCE THE FACILITY BUT THE GATE WAS ~~often~~ KNOCKED DOWN. AFTER THE LOCK WAS CUT SEVERAL TIMES.

HE HAS NOT OBSERVED NOR IS AWARE OF ANY RESIDUAL CONTAMINATION AT THE FORMER FACILITY LOCATION BUT HE HAS HAD PROBLEMS W/ DUMPING OF OLD APPLIANCES & TREE STUMPS

Follow-Up-Action:

Originator's Signature:

Louisiana Department of Environmental Quality
FIELD INTERVIEW FORM

Agency Interest #: 8003 Inspection Date: 08/10/2016 Time of Arrival: 8:10 AM
Departure Date: 08/10/2016 Time of Departure: 9:09 AM

Facility Name: Gilmar Marines Site Phone #:
Location: 1500 South River Road
Baton Rouge, Louisiana
Parish Name: East Baton Rouge

Mailing Address:
Street/P.O. Box City State Zip

Facility Representative: Title:

Inspection Type: Remediation Program Involved: ☐ Air ☐ Waste ☐ Water Other

Inspector's Observations: (e.g. Areas and Equipment Inspected, Problems, Deficiencies, Remarks, Verbal Commitments from Facility Representatives)

The Team Leader traveled to the site to conduct a joint site reconnaissance inspection with EPA. The TL traveled along what appeared to be a road going towards the leeve on the Batture side of the leeve. The area was heavily vegetated and completely overgrown. The EPA was able to determine through site maps and this inspection a projection in the development of a plan for clearing and grubbing the site for the purpose of site sampling activities. The TL along with Edwin Akujobi, and Keith Horn met EPA at the site on August 9, 2016 but was unable to conduct the inspection due to a law enforcement incident.

Areas of Concern	Explanation	Resolved?
		☐YES ☐ NO
		☐YES ☐ NO
		☐YES ☐ NO
		☐YES ☐ NO

Photos Taken? ☐ YES ☒ NO Samples Taken? ☐ YES ☒ NO (Attach Chain-of-Custody)

Received by: Signature: Title:

Print Name:
(NOTE: Signature DOES NOT indicate agreement with Inspector's Notes)

Inspector(s): Regina Atterberry Philson Attachments:

Reviewer:

NOTE: The information contained on this form reflects only the preliminary observations of the inspector(s). It should not be interpreted as a final determination by the Department of Environmental Quality or any of its officers or personnel as to any matter, including, but not limited to, a determination of compliance or lack thereof by the facility operator with any requirements of statutes regulations or permits. Each day of non-compliance constitutes a separate violation of the regulations and/or the Louisiana Environmental Quality Act.

Office of the Planning Commission

City of Baton Rouge and Parish of East Baton Rouge
Post Office Box 1471, Baton Rouge, Louisiana 70821
or
1755 Florida Street, 3rd Floor, Baton Rouge, LA 70802
Phone (225) 389-3144 Fax (225) 389-5342

Troy L. Bunch, FASLA
Planning Director

June 16, 2008

Mr. Keith Casanova, Administrator
Louisiana Department of Environmental Quality
Remediation Services Division
Post Office Box 4314
Baton Rouge, Louisiana 70821-4314

Dear Mr. Casanova:

Enclosed, please find a Voluntary Remedial Investigation Application Form, Partial Voluntary Remedial Action Supplemental Application Form, and Remedial Investigation Work Plan for Baton Rouge Brownfields site BR119 (1320 Highland Road) for your review and approval. As described in this Remedial Investigation Work Plan, soil and groundwater samples will be collected to define site characteristics and to determine the nature and extent of contaminants for closure of the site under the Louisiana Department of Environmental Quality's (LDEQ's) Voluntary Remediation Program (VRP) and the Risk Evaluation/Corrective Action Program (RECAP), as applicable. A copy of the Remedial Investigation Work Plan has also been submitted to the U.S. Environmental Protection Agency for review of the Quality Assurance Project Plan.

Sampling activities will be initiated upon receipt of LDEQ approval of this Remedial Investigation Work Plan. The City-Parish Planning Commission will notify LDEQ in advance of mobilization to the site to allow a representative to be present, if desired.

Please contact our office if you have any questions regarding this information.

Sincerely,

Troy L. Bunch, FASLA
Planning Director

Enclosure

TLB/BMH/st

c: Duane Wilson, Staff Scientist, Louisiana Department of Environmental Quality
Tyson Hackenberg, Business Line Manager, Shaw Environmental and Infrastructure
Ellen Miller, Assistant Planning Director

RECEIPT OF CHECK

AI Number	**20655**
Company Name	**Providence Engineering**
Site Name/	**Personal Touch Car Wash & Used Tires**
Phone	**225-766-7400**
Date Received	**6/24/08**
Date on Check	**6/12/08**
Check Number	**12563**
Amount Received	$500.00

Check one Media:

☐ Accident Prevention	☐ Ground Water	☐ Radiation
☐ Air Quality	☐ Hazardous Waste	☐ Solid Waste
☐ Air Toxics	X Inactive and Abandoned Sites	☐ Underground Storage Tanks
☐ Asbestos and Lead	☐ Multi-Media	☐ Water Resources

Comments:

VRP application fee

Initials:

vrt

JUNE 2008

BATON ROUGE CITY PARISH PLANNING COMMISSION

REMEDIAL INVESTIGATION WORK PLAN 1320 HIGHLAND ROAD SITE, BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA AI NUMBER 20655

Prepared By:

Providence Engineering and Environmental Group LLC
1201 Main Street
Baton Rouge, Louisiana 70802
(225) 766-7400

Project Number 146-007

PROVIDENCE

Voluntary Remedial Investigation Application Form

Voluntary Remediation Program
Louisiana Department of Environmental Quality

The remedial investigation work plan for this site and the application review fee must be included with this Voluntary Remedial Investigation Application form, as provided in LAC 33:VI.911.A, or this Voluntary Remedial Investigation Application will be considered incomplete and not be accepted for review.

I. Applicant Information		
Section A: Applicant		
Name/ Company Name: OSBR Land, LLC		
Mailing Address: 402 N. Fourth St		
City: Baton Rouge	State:LA	Zip Code:70802
Contact Person:Mark Goodson		
Phone No:225-267-6300	Fax No:225-267-6306	
Email Address:mgoodson@c-pex.org		
Interest in Property:Property Owner		
Section B: Co-Applicant		
Name/ Company Name:		
Mailing Address:		
City:	State:	Zip Code:
Contact Person:		
Phone No:	Fax No:	
Email Address:		
Interest in Property:		
Section C: Co-Applicant		
Name/ Company Name:		
Mailing Address:		
City:	State:	Zip Code:
Contact Person:		
Phone No:	Fax No:	
Email Address:		
Interest in Property:		
Section D: Current Property Owner (if different form applicants)		
Name/ Company Name:		
Mailing Address:		
City:	State:	Zip Code:
Contact Person:		
Phone No:	Fax No:	
Email Address:		

II Site Information
Agency Interest Number (if exist):20655
Site Name:Personal Touch Car Wash and Used Tire
Parish:East Baton Rouge Parish
Property Size (acres):
Physical address or direction and distance from nearest intersection:1320 Highland Rd, Baton Rouge, LA, 70802
Latitude: 30 ° 26 " 9.3 '
Longitude: 91 ° 11 " 6.2 '
Section/Township/Range (attach legal property description):S52 / T7S / R1W
Adjacent Property Owners (persons listed as owners of the adjacent properties on the rolls of the parish tax assessor as of the date on which the voluntary remediation application is submitted):The State of Louisiana through the Board of Elementary and Secondary Education, Woodrow A. Jones, Jonco Properties, Inc., Alfred J. Jackson, Franklin Press, Inc., Bank One, N.A., Alsie Banks, Stella M. Banks, Southland Properties, Inc., James Ross, Harold Ross, Charlene Ross
Current Property Use (Describe in detail. Use percentages if more than one use.):The subject tract currently supports one commercial building associated with the former Personal Touch Car Wash and Used Tire business operations at the site. Two abandoned houses are also located on the site near the corner of Highland Road and Oklahoma Street. These buildings are currently not being utilized, and will be demolished prior to redevelopment of the site. Development plans for the property include a mix of residential and commercial use. However, the property will be developed primarily for residential use.
Past (historical) Property Use (Describe in detail):Prior ownership/use included a church (St. Paul's Baptist Church/Rock Zion Baptist Church), a service station (formerly Highland Gulf) and most recently an auto detailing and tire station (Personal Touch Car Wash and Used Tire). This property currently houses an abandoned commercial building from the most recent operations. Other portions of the

subject property were used for residential purposes. Two houses currently present at the site are vacant.

Underground Storage Tank (UST) Registration Certificates for 1320 Highland Road are on file at the LDEQ for the years 2003 and 2005. Registered tanks included three 8,000 gallon gasoline tanks and one 500 gallon used oil tank. However, based on additional information contained in LDEQ's files (i.e. a Field Interview Form dated June 7, 2004), these tanks may have been closed in place sometime prior to 2004. Seven groundwater monitoring wells are also present at the site.

Future Property Use (Describe in detail. Use percentages if more than one use.):Development plans for the property include a mix of residential and commercial use. However, the property will be developed primarily for residential use.

Current Land Use Surrounding Property:Surrounding land use supports commercial and residential development. Specifically, the subject property is bordered to the north across Terrace Avenue by vacant lots and a technical college, to the south by residential properties, and to the west by both residential and vacant lots. The Highland Terrace Mechanic Shop (formerly Highland Terrace Amoco; Agency Interest Number 20637) is located at 1375 Highland Road, opposite the subject property and to the east. Franklin Printing Press is also located to the east of the subject property along Highland Road.

Contaminant Type(s) and Affected Media:Soils - Chromium, BTEX
Groundwater - BTEX, Volatile and Extractable Petroleum Hydrocarbon fractions, Metals, PAHs

Applicant(s) must also attach to this form all available historical assessment and or investigation information available for the site, including Phase 1 and 2 Assessments, analytical data, etc.

III. Eligibility Information		
Permitted Hazardous Waste Unit(s) on site?	☐ Yes	☒ No
Site Proposed for Listing on the NPL?	☐ Yes	☒ No
Site Listed on the NPL?	☐ Yes	☒ No
Any Pending Federal Environmental Enforcement Actions Associated with the Site?	☐ Yes	☒ No
If yes, explain N/A		
Any portion of the site UST Trust Fund Eligible?	☐ Yes	☒ No
If yes, explain N/A		

IV. Type of Voluntary Remedial Action Proposed
☐ Voluntary Remedial Action
☒ Partial Voluntary Remedial Action (See note below)

If Partial Voluntary Remedial Action is checked, the applicant and co-applicants must each complete and attach a Partial Remedial Action Supplemental Application Form.

V. Certification	
All applicants must certify the following with their signature below:	
I (we) certify that all of the information I (we) have provided in this Voluntary Remedial Investigation Application is true and correct to the best of my information, knowledge, and belief. I (we) understand and agree that I (we) am obligate to update and notify this application if I (we) learn that information that I (we) have provided is misleading or no longer correct. I (we) further certify that I (we) understand I (we) am responsible for and agree to reimburse the Louisiana Department of Environmental Quality for all actual direct costs associated with reasonable and appropriate oversight activities of the Department conducted pursuant to LAC 33:VI. Chapter 9, including, but not limited to, review, supervision, investigation, and monitoring activities.	
Primary Applicant Signature:	Date: 5-08-08
Co-Applicant Signature:	Date:
Co-Applicant Signature:	Date:

Partial Voluntary Remedial Action Supplemental Application Form

Voluntary Remediation Program
Louisiana Department of Environmental Quality

If a partial remediation is to be performed, one each of this form must be completed by the applicant and by each co-applicant and attached to the Application Form.

A Partial Remediation Agreement must be completed. Contact the Team Leader for the form.

I. Applicant Information		
Check One: ☒ Applicant ☐ Co-Applicant		
Name/ Company Name: OSBR Land, LLC		
Agency Interest Number (if one exists): 20655		
Site Name: Personal Touch Car Wash and Used Tire		
Interest in Property:Property Owner		
II. Answer the following questions by checking the appropriate answer		
Were you a generator who generated a hazardous substance that was disposed of or discharged at the site?	☐ Yes	☒ No
Were you a transporter who disposed of or discharged a hazardous substance or hazardous waste at the site?	☐ Yes	☒ No
Were you a disposer who disposed of or discharged a hazardous substance or hazardous waste at the site?	☐ Yes	☒ No
Did you contract with someone for transportation or disposal at the site?	☐ Yes	☒ No
III. If you are or were an owner or operator of the site subsequent to the disposal of hazardous waste, answer the following questions by checking the appropriate answer		
Were you engaged in the business of generating, transporting, storing, treating, or disposing of a hazardous substance or hazardous waste on or in the site?	☐ Yes	☒ No
Did you knowingly permit any person to make regular use of the property for disposal of waste?	☐ Yes	☒ No
Did you knowingly permit any person to use the site for disposal of a hazardous substance?	☐ Yes	☒ No
Did you know or should you have reasonable known that a hazardous substance was located in or on the site at the time right, title, or interest in the site was first acquired by the person and engaged in conduct associating that person with the discharge or disposal?	☐ Yes	☒ No
Did you take action that significantly contributed to the discharge or disposal after that person knew or reasonable should have known that a hazardous substance was located in or on the site?	☐ Yes	☒ No

NOTE: If "Yes" is answered to any question, applicant is not eligible for a partial remediation.

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Appendix

1.0 INTRODUCTION

This Remedial Investigation Work Plan describes field sampling activities to be conducted in support of an assessment of the subject property shown in **Figures 1** (Site Location Map) and **2** (Area Parcel Map). The site includes 1320 Highland Road (Personal Touch Car Wash and Used Tire; Agency Interest Number 20655) in Baton Rouge, East Baton Rouge Parish, Louisiana and several neighboring lots (see **Figure 2**). The site is herein referred to as the "1320 Highland Road Site" for simplicity purposes, but includes all lots located within the property boundary as shown in **Figure 2**.

Phase I and Phase II Environmental Site Assessment (ESA) activities have been conducted at the subject property on behalf of the City Parish Planning Commission (CPPC) by Providence Engineering and Environmental Group LLC (Providence). Based on the results of the Phase II ESA activities as further described in Section 3.0, Constituents of Concern (COC) have been detected at the site in soil and groundwater at concentrations exceeding the Louisiana Department of Environmental Quality's (LDEQ's) Risk Evaluation/Corrective Action Program (RECAP) Screening Standards. As described in this Remedial Investigation Work Plan, soil and groundwater samples will be collected to further define site characteristics and to determine the nature and extent of contaminants under the LDEQ's Voluntary Remediation Program (VRP) and the RECAP, as applicable. The site investigation activities will be funded under a grant from the Baton Rouge Brownfields Program, which is administered by the CPPC.

The specific methods and protocol for collecting samples, the analytical procedures and parameters of interest, the field and laboratory Quality Assurance/Quality Control (QA/QC) protocol that will be followed, and the estimated schedule to complete the proposed field sampling activities are presented herein. All site investigation activities will be conducted in accordance with this Remedial Investigation Work Plan as approved by the LDEQ and applicable VRP/RECAP site investigation requirements.

2.0 SITE DESCRIPTION

2.1 Site Location

The location of the property is shown on **Figure 1**. The subject property includes 1320 Highland Road in Baton Rouge, Louisiana and neighboring lots as shown in **Figure 2**. The current layout of the property is shown on the site aerial photograph provided as **Figure 3**.

2.2 Current/Intended Future Use of the Property

The subject tract currently supports one commercial building associated with the former Personal Touch Car Wash and Used Tire business operations at the site. Two abandoned houses are also located on the site near the corner of Highland Road and Oklahoma Street. These buildings are currently not being utilized, and will be demolished prior to redevelopment of the site. Development plans for the property include a mix of residential and commercial use. However, the property will be developed primarily for residential use.

2.3 Current Uses of Adjoining Properties

Surrounding land use supports commercial and residential development. Specifically, the subject property is bordered to the north across Terrace Avenue by vacant lots and a technical college, to the south by residential properties, and to the west by both residential and vacant lots. The Highland Terrace Mechanic Shop (formerly Highland Terrace Amoco; Agency Interest Number 20637) is located at 1375 Highland Road, opposite the subject property and to the east. Franklin Printing Press is also located to the east of the subject property along Highland Road.

2.4 Site Hydrology, Geology, and Hydrogeology

Elevation at the site is approximately 45 feet above the National Geodetic Vertical Datum (N.G.V.D.) for mean sea level. Drainage from the site appears to be to the west.

The site occurs within the southwestern Holocene backswamp deposits. They consist of fine-grained, usually clayey and often organically rich sediments that underlie flood basins between meander-belts. Based on borings installed at the site during the Phase II ESA activities (see **Appendix A**), the shallow subsurface is characterized by a silty to sandy clay to the depth of the boreholes [maximum of 24 feet below ground surface (ft bgs)]. An intermittent transmissive zone (typically comprised of silt to clayey silt) was observed in borings at approximately 15 ft bgs. The transmissive zone was approximately three feet thick. Underlying the transmissive zone is a confining clay layer.

2.5 Current Groundwater Use

A survey of the Louisiana Department of Transportation and Development (LDOTD) registered water wells located within a one-mile radius of the site was conducted. As shown in **Appendix B**, there are 88 registered wells within a one-mile radius of the site. Most of the wells registered are either plugged, abandoned, monitoring wells, or piezometers. Four of the 88 registered wells are utilized as public use; however the wells are all drilled to a depth of over 2,200 feet. Other registered wells include four

observation wells, one domestic well, and one cathodic protection well, and one irrigation well.

2.6 Site History

A search of previous land use and activity was conducted through both a review of historical Sanborn Map reports (1923, 1946, 1950, and 1969) and through a City Directory search conducted by Environmental Data Resources, Inc. During prior ownership, the three lots identified as "UND" and lot 3 on **Figure 2** housed residential properties, a church (St. Paul's Baptist Church/Rock Zion Baptist Church), a service station (formerly Highland Gulf) and most recently an auto detailing and tire station (Personal Touch Car Wash and Used Tire). This property currently houses an abandoned building from the most recent operations. Lot 4E of the subject property was used for residential purposes (1350, 1352, 1356, and 1358 Highland Rd) until the mid 1990's, at which time the area became vacant. The remainder of the property all served as residential lots up to as recently as 2007 (1378 Highland Rd), but are all now vacant.

Underground Storage Tank (UST) Registration Certificates for 1320 Highland Road are on file at the LDEQ for the years 2003 and 2005. Registered tanks included three 8,000 gallon gasoline tanks and one 500 gallon used oil tank. However, based on additional information contained in LDEQ's files (*i.e.* a Field Interview Form dated June 7, 2004), these tanks may have been closed in place sometime prior to 2004. Seven groundwater monitoring wells are also present at the site.

3.0 PREVIOUS SITE INVESTIGATION ACTIVITIES

Providence was contracted by the CPPC to conduct a Phase I ESA of the site and surrounding properties. Based on the results of the Phase I ESA, recognized environmental conditions were identified at the site. Soil and groundwater samples were collected as part of Phase II ESA activities conducted at the site in September 2007 to determine if impacts from previous operations at the site are present prior to redevelopment of the site under the Baton Rouge Brownfields Program administered by the CPPC.

Phase II activities conducted in September 2007 included the installation of seven borings for the collection of soil and groundwater samples. Soil and groundwater analytical results are summarized in **Tables 1** and **2**, respectively. Boring locations are shown in **Figure 3**, while the boring logs are provided in **Appendix A**. The analytical laboratory reports are provided as **Appendix C**. Field activities were conducted in accordance with the LDEQ's RECAP and the September 2007 Quality Assurance Project Plan (QAPP) as approved by the United States Environmental Protection Agency (USEPA). Results of the Phase II ESA are summarized in the following sections.

3.1 Soil Analytical Results

Soil analytical testing parameters included benzene, toluene, ethylbenzene and total xylenes (BTEX), semivolatile organic compounds (SVOCs), volatile and extractable petroleum hydrocarbon (*i.e.* VPH and EPH) fractions, and 8 Resource Conservation and Recovery Act (RCRA) total metals. As shown in **Table 1**, soil analytical results were compared to the soil Limiting Screening Standards (LSS) applied based on non-industrial land use, as redevelopment plans include a mix of residential and commercial use. The soil LSS applied were the lower of the RECAP Non-Industrial Soil ($Soil_{SSni}$) and the Soil Protective of Groundwater ($Soil_{SSGW}$) standards provided in Table 1 of RECAP (LDEQ 2003).

Detected concentrations were less than the LSS applied, with the exception of the following:

- Benzene concentration of 0.13 milligrams per kilogram (mg/Kg) exceeded the LSS applied of 0.051 mg/Kg at location B-7 (0-2).
- Detected concentrations of chromium exceeded the LSS applied of 23 mg/Kg in soil samples collected from borings B-4 (26-28) and B-6 (0-2). Maximum detected chromium concentration was 182 mg/Kg.

Based on initial testing results, the detected concentration of 234 mg/Kg of lead at location B-4 (0-2) exceeded the LSS applied of 100 mg/Kg. Based on subsequent Synthetic Precipitation Leaching Procedure (SPLP) lead analysis, concentrations in soils were determined to be protective of groundwater per Section H1.1.1 of RECAP (LDEQ 2003), as the SPLP-lead concentration of 0.00515 milligrams per liter (mg/L) is less than the GW1 x 20 (or, 0.015 mg/L x 20 = 0.3 mg/L). Therefore, the $Soil_{SSni}$ of 400 mg/Kg was applied as the LSS for lead. Lead concentrations were less than 400 mg/Kg.

Due to potential pica concerns for any future child residents at the site, and a need to better understand the possible source of lead in this area of the site, additional testing of soil lead concentrations was conducted in December 2007 in the vicinity of B-4. Additional lead samples were collected from a total of 10 surface soil locations, including borings B-4 (A) through B-4 (J). As shown in **Table 1**, additional lead testing results ranged from 2.62 – 5.05 mg/Kg. Based on the pattern of detected concentrations, the detected lead concentration of 234 mg/Kg appears to be an anomalous, localized impact. Borings locations are included in **Figure 3**, and the analytical laboratory report is included in **Appendix C**.

3.2 Groundwater Analytical Results

Groundwater analytical results were compared to the RECAP Groundwater Screening Standard (GW_{SS}) provided in Table 1 of RECAP

(LDEQ 2003). The groundwater analytical results compared to the respective GW_{SS} are summarized in **Table 2**.

Groundwater samples were analyzed for BTEX, polycyclic aromatic hydrocarbons (PAHs), VPH and EPH fractions, and total RCRA metals. As shown in **Table 2**, all borings had at least one COC detected at concentrations exceeding the GW_{SS} applied. COC detected above the GW_{SS} in at least one boring included:

- Benzene
- Ethylbenzene
- C_8-C_{10} Aliphatics
- C_8-C_{10} Aromatics
- C_{10}-C_{12} Aliphatics
- C_{10}-C_{12} Aromatics
- C_{16}-C_{21} Aromatics
- C_{21}-C_{35} Aromatics
- Total Mercury
- Total Arsenic
- Total Barium
- Total Cadmium
- Total Chromium
- Total Lead
- 2-Methylnaphthalene
- Naphthalene

Maximum detected concentrations of petroleum hydrocarbons and indicator constituents (*i.e.* benzene, ethylbenzene, applicable VPH and EPH fractions, 2-methylnaphthalene, and naphthalene) were observed at location B-6. For metals, maximum detected concentrations were observed at location B-3.

Location B-3 is outside the current property boundary as shown in **Figure 3**. In addition to total mercury, arsenic, barium, cadmium, chromium, and lead, 2-methylnaphthalene was also detected above the GW_{SS} at this location. Exceedances observed at location B-3 will not be addressed as part of the delineation activities as proposed herein.

4.0 SITE INVESTIGATION ACTIVITIES

A total of ten borings, nine delineation borings and one boring for further source characterization at existing sampling location B-6, are proposed to be advanced for soil and/or groundwater sample collection. Further source characterization will be conducted prior to and separate from the delineation effort. The delineation borings will be installed after results of the source characterization borings are reviewed. The specific methods that will be followed for the collection of soil and groundwater samples are summarized in the following sections.

Shaw Environmental, Inc.
4171 Essen Lane
Baton Rouge, LA 70809
225-932-2500
FAX: 225-987-7300

Shaw™ Shaw Environmental, Inc.

September 20, 2009

Mr. Thomas F. Harris, Administrator
Remediation Services Division
Louisiana Department of Environmental Quality
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

Re: Voluntary Remedial Action Report
OSBR Land, LLC
1320 Highland Road
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest No. 20655

Dear Mr. Casanova:

On behalf of OSBR Land, LLC, Shaw Environmental, Inc. is pleased to submit three (3) copies of the Voluntary Remediation Program Remedial Action Report for the above referenced facility.

If you have any questions, or need additional information, please do not hesitate to call me at (225) 987-7323.

Sincerely,
Shaw Environmental, Inc.

Tyson Hackenberg
Senior Project Manager

Attachments

Cc: Mr. Duane Wilson, LDEQ
Mr. Cornelius Payne, OSBR Land, LLC
Ms. Susan Ludwig, CPEX

VOLUNTARY REMEDIATION PROGRAM (VRP)
REMEDIAL ACTION REPORT

OSBR Land, LLC
1320 Highland Road
Baton Rouge, Louisiana

Agency Interest No. 20655
Project No. 135684

September 2010

Prepared for:

OSBR Land, LLC
1614B Oretha Castle Haley Boulevard
New Orleans, Louisiana 70113

Prepared by:

Shaw Environmental, Inc.
4171 Essen Lane
Baton Rouge, Louisiana 70809

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Acronyms and Abbreviations

bgs	Below ground surface
BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes
COC	Constituent of Concern
CSI	Confirmatory Site Investigation
EPA	U.S. Environmental Protection Agency
LAC	Louisiana Administrative Code
LDEQ	Louisiana Department of Environmental Quality
LDOTD	Louisiana Department of Transportation and Development
mg/Kg	milligrams per kilogram
mg/L	milligrams per liter
MO-2	Management Option 2
MTBE	Methyl-Tert-Butyl Ether
NOI	Notice of Intent
OSBR	OSBR Land, LLC
PAH	Polycyclic Aromatic Hydrocarbons
Providence	Providence Engineering and Environmental, LLC
QA/QC	Quality Assurance/Quality Control
REC	Recognized Environmental Condition
RECAP	Risk Evaluation/Corrective Action Program
RS	RECAP Standard
SAP	Sampling and Analysis Plan
SEMS	Southern Environmental Management Specialties, Inc.
$Soil_{esni}$	Non-Industrial Soil beneath Enclosed Structures
$Soil_{ni}$	Non-Industrial Soil Protective of Human Health
$Soil_{SSGW}$	Soil Protective of Groundwater
SPL	Southern Petroleum Laboratories
SST	Soil Sampling Train
SVI	Soil Vapor Insert
TBA II	Targeted Brownfields Assessment II Program
TPH-GRO	Total Petroleum Hydrocarbons-Gasoline Range Organics
TPH-DRO	Total Petroleum Hydrocarbons-Diesel Range Organics
TPH-ORO	Total Petroleum Hydrocarbons-Oil Range Organics
ug/m^3	Micrograms per cubic meter
UST	Underground Storage Tank
VRAR	Voluntary Remedial Action Report
VRAP	Voluntary Remedial Action Plan
VRIR	Voluntary Remedial Investigation Report
VRP	Voluntary Remediation Program

1.0 Introduction

OSBR Land, LLC (OSBR) is a single entity wholly owned by Gulf Coast Housing Partnership, Inc. This Voluntary Remediation Program (VRP) Remedial Action Report (VRAR) has been prepared to document remedial activities performed at the OSBR site located at 1320 Highland Road, Baton Rouge, Louisiana. This remediation was performed using, in part, funding from a EPA 104(k) Brownfields Cleanup Grant. A vicinity map showing the location of the site is provided as Figure 1. The remedial activities included removal of various subsurface features associated with historical use of the property as an automobile service station. The VRAR has been prepared pursuant to Louisiana Administrative Code (LAC) Title 33, Part VI, Chapter 9.

1.1 Site Description

The OSBR parcels, hereinafter referred to as "the site," include lots 1 through 7 and lot B of square 279, as illustrated in the site boundaries map included as Figure 2. This VRAP specifically targets lot 1 and a portion of lots 2 and 3 of square 279, which were historically operated as an automobile service station with an address of 1320 Highland Road.

The site is currently a vacant concrete paved lot, subsequent to the demolition of on-site structures in July 2008. Figure 3 presents a facility map with locations of pertinent former and existing site features, including boring locations from the voluntary remedial investigation.

Historically and prior to OSBR's acquisition of the site, businesses/tenants that operated at the subject site included a church, a service station, and an automobile detailing and tire business. During the time of operation as a service station, at least four USTs, two fuel dispensers, one hydraulic lift, and one service bay sump were operated on-site.

The site is proposed for a mixed use, residential and commercial, development by OSBR. Accordingly, remedial actions utilized site clean up goals based on non-industrial standards, pursuant to guidance included in the Louisiana Department of Environmental Quality's (LDEQ's) Risk Evaluation / Corrective Action Program (RECAP) document, dated October 2003.

2.0 Previous Activities

2.1 Phase I Environmental Site Assessment

A *Phase I Environmental Site Assessment Report*, dated June 2008, was prepared by Providence Engineering & Environmental Group, LLC (Providence). Findings of the Phase I Environmental Site Assessment included recognized environmental conditions (RECs) associated with former uses of the subject site.

2.2 Voluntary Remedial Investigation

The site was entered into the LDEQ's VRP, and a Voluntary Remedial Investigation Work Plan (Work Plan) was prepared and submitted to the LDEQ in June 2008. The Work Plan was approved by the LDEQ with modifications in correspondence dated October 22, 2008. The site investigation activities were completed in November 2008. A Voluntary Remedial Investigation Report (VRIR), which included a RECAP assessment, was submitted to LDEQ in December 2008. The VRIR was approved, with comment, by the LDEQ in correspondence dated March 6, 2009.

The results of the site investigation indicated that petroleum impacts were present in soil and groundwater, predominantly in the northern half of the property and in the immediate vicinity of the three 8,000 gallon underground storage tanks (USTs). The highest concentrations of petroleum hydrocarbon compounds in soil and groundwater were detected in the area of boring locations B-6 and B-10. Figure 3 depicts the sample locations from the Voluntary Remedial Investigation.

The Results of the VRIR revealed that groundwater concentrations of certain constituents of concern (COC) exceeded the limiting Management Option 2 (MO-2) RECAP Standards (RS). Additionally, the presence of the previously described components of a typical UST site and the potential for impacted soil surrounding those components constituted a potential risk to human health and the environment, if not addressed.

2.3 Voluntary Remedial Action Plan

A Voluntary Remedial Action Plan (VRAP) was prepared by Shaw and submitted to the LDEQ in July 2009. The proposed remedial action activities included excavation, removal, and disposal of the UST systems, the hydraulic lift system, the service bay sump and impacted soil (as necessary) in close proximity to the various components. The VRAP also allowed for the implementation of engineering and/or institutional controls, if necessary. The VRAP included a Sampling and Analysis Plan, Quality Assurance Plan, and Voluntary Remedial Action

application. The LDEQ issued final approval of the VRAP and Voluntary Remedial Action Application in correspondence dated September 3, 2009 (Appendix A).

3.0 VRP Remedial Actions and Results

3.1 Public Notice

Public notice and direct notification to adjacent landowners was made in accordance with LAC Title 33, Part VI, Chapter 9, Sections D & E. The public notice was published in *The Advocate* newspaper on July 15, 2009, followed within five days by certified letters to adjacent landowners. One public comment was received during the prescribed 30-day public comment period. LDEQ determined that the comment "....was not germane to the VRAP and does not require any changes in the VRAP." Shaw submitted public notice documentation to the LDEQ in correspondence dated August 19, 2009

Additionally, the public was invited to attend an informational meeting to discuss the remediation activities and planned redevelopment of the site. The meeting was held on-site the morning of September 21, 2009. The meeting was attended by representatives of LDEQ, CPEX, SEMS and Shaw.

3.2 Tank Closure Notification

Prior to beginning remediation activities, a notification of intent to perform a closure or Change-in-service to an UST system was completed and submitted to the LDEQ. A copy of the form approved by LDEQ is included in Appendix B.

3.3 Underground Storage Tank Removal and Soil Excavation

Under a competitive solicitation, OSBR procured the services Southern Environmental Management Specialties, Inc. (SEMS) to perform the remedial activities specified in the approved VRAP. On September 21, 2009, SEMS mobilized equipment and personnel to the site to initiate the remediation activities. Site activities concluded on October 29, 2009 following site restoration activities. The remedial activities are documented in photographs included in Appendix D. Details of the remedial activities are provided in a summary report prepared by SEMS and included in Appendix C and are summarized as follows.

A back hoe excavator was used to remove the USTs and perform the excavations. Prior to removal, the residual tank fluids and wash water were transported by vacuum truck to an LDEQ-approved disposal/recycling facility. The quantities of recovered fluid and other waste materials are summarized in Appendix C, including waste disposal documentation.

Removal of the four USTs and surrounding soil (fill) was performed on September 23 through 28, 2009. In accordance with the LDEQ's *Underground Storage Tank Closure/Change-In-Service Guidance Document* (October 2003), two soil samples were collected beneath each of

the three 8,000 gallon USTs at a depth of approximately 14 feet below ground surface (bgs). Additionally, two samples were collected beneath the 500 gallon used oil UST at a depth of approximately eight feet bgs. It was not necessary for samples of excavated material to be collected, as all excavated soil was loaded directly into end-dump trucks and immediately transported for offsite disposal at an approved off-site landfill. None of the excavated soil was used to backfill the excavation.

In accordance with the sampling and analysis plan included in the VRAP, confirmatory soil samples were also collected from beneath the former dispenser islands, the piping trenches and the service bay area following the removal of all subsurface equipment (hydraulic lift, service bay sump and product lines). Confirmatory soil sample locations are identified on a sketch prepared by SEMS and included in Appendix C. The areas of excavation are illustrated on Figure 4.

All confirmatory soil samples were delivered to Southern Petroleum Laboratories, Inc. (SPL) and initially analyzed for the following constituents as specified in the VRAP:

- Benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl-tert-butyl ether (MTBE) by U.S. Environmental Protection Agency (EPA) Method 8260B;
- Total petroleum hydrocarbons –gasoline range organics (TPH-GRO) by EPA Method 8015C;
- TPH–diesel range organics (TPH-DRO) by EPA Method 8015C;
- TPH –oil range organics (TPH-ORO) by EPA Method 8015C;
- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270D; and
- RCRA metals by EPA Method 6000/7000 Series.

Laboratory analytical reports, including Quality Assurance/Quality Control (QA/QC) results are presented in Appendix C. Based on Shaw's data usability review, the laboratory analytical data is valid and can be used to determine if site concentrations meet remedial action goals. The results of the analyses are summarized in Tables 1 through 3.

3.4 Initial Soil Analytical Results

As shown in Tables 1 through 3, the majority of the analytical results for the samples collected during the remedial activities were below the appropriate limiting RS as established in the VRAP. Two sample locations resulted in TPH-DRO concentrations above the limiting RS. The exceedances occurred in sample USTP3 (piping trench), shown on Table 1, and sample HLN (service bay area), shown on Table 3. The RECAP exceedances were as follows:

- USTP3 – TPH-DRO concentration of 120 milligrams per kilogram (mg/Kg) exceeded the Limiting RS of 65 mg/Kg
- HLN – TPH-DRO concentration of 500 mg/Kg exceeded the Limiting RS of 65 mg/Kg

During the initial sample collection, sufficient sample volume was collected from each sample location and placed on hold. The additional sample volume was collected by Method 5035 and provided the ability to analyze any given sample for the appropriate aliphatic/aromatic carbon ranges (TPH fractions) in the case of a TPH exceedance. Upon receipt and review of the initial sample results, SEMS requested SPL analyze samples USTP3 and HLN for aliphatics (C_{10}-C_{35}) and aromatics (C_{10}-C_{35}). As shown in Tables 1 and 3, the results of the TPH fractionation were less than the limiting RS.

It should be noted that a maximum lead concentration of 311 mg/Kg was detected in soil sample HLS collected from the service bay area. While this concentration did not exceed the limiting RS of 400 mg/Kg established in the VRAP, it was the only lead concentration that exceeded the soil protective of groundwater ($Soil_{SSGW}$) RS of 100 mg/Kg. To eliminate any possible future concerns regarding this concentration, a 95 percent upper confidence limit on the arithmetic mean (95% UCL-AM) calculation was performed using a spreadsheet provided by LDEQ. The calculation provided a result of 47.6 mg/Kg, which is well below the $Soil_{SSGW}$ of 100 mg/Kg. A copy of the 95% UCL-AM spreadsheet is included as Appendix E.

As required by the LDEQ, SEMS submitted an Underground Storage Tank Closure Assessment report (Appendix C) to the LDEQ's UST Division on November 10, 2009. This report included documentation of the removed USTs

3.5 Attainment of Remedial Action Goals

As noted in Section 3.4, the confirmatory soil sample analytical results demonstrate that the remedial action goals have been successfully attained for the subject property in accordance with VRP regulations (LAC Title 33, Part VI, Chapter 9).

3.6 Waste Disposal

During the course of remedial activities, the following waste material was generated and properly disposed offsite:

- Approximately 2,112 tons of concrete pavement was transported by Dennis Stewart, Inc. to their recycling facility in Baton Rouge, Louisiana.
- Approximately 379 tons of excavated soil was transported to Waste Management's Woodside Landfill in Walker, Louisiana.

- Approximately 780 gallons of residual tank fluids and wash water were transported by Gator Environmental to their recycling facility in Port Allen, Louisiana.
- Approximately 2,923 gallons of excavation/rain water were transported by Gator Environmental to their recycling facility in Port Allen, Louisiana.
- The purged and cleaned 8,000 gallon tanks (3) were transported to Southern Scrap Recycling in Port Allen, Louisiana.
- The purged and cleaned 500 gallon tank was transported to Louisiana Scrap Metal Recycling in Port Allen, Louisiana.

Disposal documentation and manifests are included in SEMS Summary Report in Appendix C.

3.7 Excavation Backfill and Site Restoration

Heavy rainfall occurred at the site while awaiting completion of laboratory analyses. The rain resulted in excessive accumulations of rainwater in the excavations that required removal prior to backfilling activities. Following receipt of acceptable analytical results for water samples collected from each excavation, an LPDES Notice of Intent (NOI) to Discharge was submitted to and approved by LDEQ. Approximately 29,645 gallons of rainwater from the excavations was pumped into the storm drain near Glacier Street on October 12, 2009. The NOI and all supporting documentation are included in Appendix C.

Following removal of the rainwater, the excavations were surveyed to establish their dimension and location relative to site boundaries. The results of the survey are included in Appendix E.

The excavations were filled with clean imported river sand material on October 12 through 16, 2009. The perimeter fencing and all surface pavement was removed from the site on October 19 through 29, 2009.

Six monitor wells (MW-1 through MW-6) were identified on-site that apparently remained following historical site investigation/groundwater monitoring activities. According to the Louisiana Department of Transportation and Development (LDOTD) water well database, the well's registered owner was the LDEQ. As directed by LDEQ, SEMS removed wells MW-1 through MW-6 to complete the on-site remedial activities. Monitor well MW-1 was located near the gasoline/diesel UST hold and was removed during excavation/backfilling activities. The well material and surface completions of MW-2 through MW-6 were removed by SEMS and the resulting borehole was grouted with a cement-bentonite mixture in accordance with LDEQ/LDOTD requirements. SEMS prepared water well plugging and abandonment forms and submitted to LDOTD. Copies of the forms are included in Appendix C.

The site was graded and hydro seeded prior to SEMS demobilization on October 29, 2009.

4.0 Confirmatory Site Investigation

In addition to the affected soil at the site, the results of the VRIR also identified concentrations of several COCs exceeded the groundwater limiting MO-2 RS. In order to address the groundwater exceedances at the site, as discussed in the VRAP, a confirmatory site investigation (CSI) was conducted to further evaluate groundwater hydrocarbon concentrations at the site. The work was conducted under the LDEQ's Targeted Brownfields Assessment II (TBA II) Program.

As part of the TBA II program requirements, a Sampling and Analysis Plan (SAP) was prepared and submitted to the LDEQ on March 8, 2010. The SAP was approved by the EPA and LDEQ on March 17, 2010. The approved SAP was implemented on March 25 through 27, 2010.

4.1 Monitoring Well Installation

Five (5) monitoring wells (MW-7 through MW-11) were installed to a maximum depth of 14.5 ft-bgs on March 25 and 26, 2010. The monitoring well locations, shown on Figure 5, were selected using data from the previous investigation activities and historical site features.

4.2 Soil Vapor Sampling

Based on the groundwater results, soil vapor samples were also collected in the vicinity of monitoring well MW-11, which is located between previous boring locations B-6 and B-10, where the highest volatile petroleum hydrocarbons were detected. Soil vapor samples were collected via soil vapor inserts (SVIs), constructed of an inert material which were installed in two co-located borings installed near monitoring well MW-11 in the former UST tank hold. The SVIs were installed in one boring at a depth of two ft-bgs (SVI-1A) and in the other boring at a depth of four ft-bgs (SVI-1B). The locations of the SVIs are shown on Figure 5.

On April 30, 2010, Shaw personnel conducted the soil vapor sampling. Prior to sample collection, each SVI was purged of a minimum of three volumes of air from the SVI. After purging, each SVI was connected to a soil sampling train (SST) which regulates the flow of the air sample from the SVI to the sample canister with an in-flow rate of less than 200 milliliters per minute. A 1.4L stainless steel air sampling canister was connected to the SST. Once filled, the sample canisters were submitted to SPL for analyses of m,p-xylenes, total xylenes, and TPH-GRO by EPA Method TO-3/TO-15.

4.3 Laboratory Analytical Results

4.3.1 Groundwater Analytical Results

Groundwater samples collected from monitoring wells MW-7 through MW-11 during the March 2010 CSI were analyzed for xylenes (m,p-, and total), TPH-GRO, and TPH Fractions

(aliphatics/aromatics). The groundwater analytical results were compared to the previously established RECAP MO-2 Standards for m, p-xylenes, total xylenes, aliphatics C_8-C_{10}, aliphatics C_{10}-C_{12}, aliphatics C_{12}-C_{16}, and aromatics C_8-C_{10}. Based on the results, one constituent, aliphatics C_8 – C_{10}, was above the RECAP MO-2 Standards in four of the five groundwater samples. Concentrations of aliphatics C_8 – C_{10} above the MO-2 standards ranged from 0.41 milligrams per liter (mg/L) in MW-8 to 6.8 mg/L in MW-11.

4.3.2 Soil Vapor Sampling Analytical Results

The objective of this CSI was to demonstrate that the volatile petroleum hydrocarbons previously detected in the groundwater at the site have declined or are otherwise protective of future unprotected enclosed structures. Since concentrations of aliphatics C_8 – C_{10} were detected above the site-specific MO-2 RECAP Standards in groundwater samples, soil vapor sampling was conducted at the location where the highest concentrations were detected. The soil vapor samples were analyzed for xylenes (m,p- and total) and TPH-GRO by Method TO-3 and TO-15. The TPH-GRO results were further quantified for aliphatics C_8-C_{10} fractions. The soil vapor results for xylenes and TPH fractions (aliphatics C_8-C_{10}) were compared to the calculated soil gas standards using the method outlined in the RECAP Frequently Asked Questions found on the LDEQ RECAP website. The calculations utilize the soil gas standard presented in RECAP Table H5.

The Soil Gas Standard value (RECAP Table H5) for aliphatics C_8-C_{10} (1,100 micrograms per cubic meter [ug/m^3]) was multiplied by the EPA recommended alpha value (attenuation factor) of 100 which totaled 110,000 ug/m^3. When compared to the maximum C_8-C_{10} concentration (SVI-1B of 12,466.70 ug/m^3), the result was below the applicable Soil Gas Standard. Based on the xylenes and TPH C_8-C_{10} calculations, the measured concentrations were protective of human health and as such, no further evaluation of the soil vapor intrusion pathway at the site was requested.

4.4 Attainment of Remedial Action Goals

As stated in Section 4.3, groundwater and soil vapor analytical data collected during the CSI were used to evaluate the vapor intrusion pathway at the OSBR site. Although groundwater concentrations for aliphatics C_8-C_{10} were above the MO-2 RECAP Standards previously developed at the site, further evaluation utilizing soil vapor sampling indicated that the subsurface hydrocarbon concentrations do not present a risk to enclosed structures. The report of CSI activities was submitted to the LDEQ on June 29, 2010. A copy of the report is included as Appendix G. The LDEQ approved the findings of the CSI in a letter dated July 23, 2010. A copy of the LDEQ letter is included as Appendix H.

5.0 Certificate of Completion

This VRAR demonstrates that the objectives/requirements of the approved VRAP have been met. The subject site meets residential (non-industrial) RECAP Standards and is eligible for closure without restriction. Shaw respectfully requests that a Certificate of Completion should be issued to OSBR upon approval of this VRAR.

PROVIDENCE
ENGINEERING

P.O. Box 31
Sulphur, LA 70664-0031
(337) 528-0066

P.O. Box 84380
Baton Rouge, LA 70884-4380
(225) 766-7400

450 E. Pass Road, Suite 106
Gulfport, MS 39507
(228) 897-7676

December 7, 2005

Remediation Services Division
Manager: Hahn
Team Leader:
AI #: 93917
TEMPO Task #:
Desk Copy File Room: RAS

Louisiana Department of Environmental Quality
Remediation Services Division
Post Office Box 4314
Baton Rouge, Louisiana 70821-4314
Attn: Mr. Keith Casanova

Ref: VRP Application Forms/Remedial Investigation Work Plan
HOPE VI – 1705 Highland Road, Baton Rouge, Louisiana
Agency Interest # 93917 (Personal Touch Car Wash and Used Tire)
Providence Engineering's Project No. 146-003

Dear Mr. Casanova:

Providence Engineering and Environmental Group LLC (Providence Engineering) is hereby submitting in triplicate this Voluntary Remedial Investigation Application Form, Partial Voluntary Remedial Action Supplemental Application Form, and Remedial Investigation Work Plan for the HOPE VI – 1705 Highland Road site for your review and approval. As described in this Remedial Investigation Work Plan, soil and groundwater samples will be collected to define site characteristics and to determine the nature and extent of contaminants for closure of the site under the Louisiana Department of Environmental Quality's (LDEQ's) Voluntary Remediation Program (VRP) and the Risk Evaluation/Corrective Action Program (RECAP), as applicable. The site investigation activities will be funded under a grant from the Baton Rouge Brownfields Program (#BR-113), which is administered by the City-Parish Planning Commission.

Sampling activities will be initiated upon receipt of LDEQ approval of this Remedial Investigation Work Plan. Providence Engineering will notify LDEQ in advance of mobilization to the site to allow a representative to be present, if desired. If you have any questions regarding this Remedial Investigation Work Plan, please contact Mike Purdom or me at 225-766-7400.

Sincerely,
Providence Engineering

Melanie Hanks

Melanie M. Hanks
Senior Risk Assessor

RECEIVED
DEC 14 2005
LA DEPT. OF ENV. QUALITY
REMEDIATION SERVICES DIVISION

RECEIVED
DEC 13 2005
LDEQ

cc: Ms. Beth Hughes – City-Parish Planning Commission (4 copies)

VOLUNTARY REMEDIAL INVESTIGATION APPLICATION FORM

Voluntary Remediation Program
Louisiana Department Of Environmental Quality

I. APPLICANT INFORMATION

A. Applicant

1. Name/Company Name	Richard, Murray, East Baton Rouge Housing Authority, HOPE VI Office
2. Mailing Address	
P.O. Box or No. & Street	4731 North Blvd.
City	Baton Rouge
State	LA
Zip Code	70806
3. Contact Person	
Phone	225-923-8150
Fax	225-923-8109
Email	rmurray@ebrpha.org
4. Interest in Property	Owner

B. Co-Applicant

1. Name/Company Name	N/A
2. Mailing Address	
P.O. Box or No. & Street	
City	
State	
Zip Code	
3. Contact Person	
Phone	
Fax	
Email	
4. Interest in Property	

C. Co-Applicant

1. Name/Company Name: N/A
2. Mailing Address
   - P.O. Box or No. & Street:
   - City:
   - State:
   - Zip Code:
3. Contact Person
   - Phone:
   - Fax:
   - Email:
4. Interest in Property:

D. Current Property Owner (if different from applicants)

1. Name/Company Name: East Baton Rouge Housing Authority, HOPE VI Office
2. Mailing Address
   - P.O. Box or No. & Street: 4731 North Blvd
   - City: Baton Rouge
   - State: LA
   - Zip Code: 70806
3. Contact Person: Richard Murray
   - Phone: 225-923-8150
   - Fax: 923-8109
   - Email: rmurray@ebrpha.org

II. SITE INFORMATION

A. Agency Interest Number (if exists) 93917

B. Site Name HOPE VI

C. Parish East Baton Rouge

D. Property Size (acres): 0.6

E. Physical Address or Direction and Distance from Nearest Intersection

1705 Highland Road, Baton Rouge, LA

F. Latitude/Longitude: Lat.- 91° 10' 59" W Lon.- 30° 25' 56" N NAD 83 DMS

G. Section/Township/Range (attach legal property description.)

Section 52 / Township 7S / Range 1W

H. Adjacent Property Owners (persons listed as owners of the adjacent properties on the rolls of the parish tax assessor as of the date on which the voluntary remediation application is submitted)

North – HOPE VI

South – HOPE VI

West – WBRZ Televesion

East – HOPE VI

I. Current Property Use (Describe in detail. Use percentages if more than one use.)

Currently the property supports two abandoned buildings. The buildings previously held Auto detailing and repair shops.

J. Past (historical) Property Use (Describe in detail.)

According to Polk's city directory of Baton Rouge, South End Service Station first appear in the 1955 city directory. During the review of the city directories, several businesses have occupied the space at 1705 Highland Road. These include Personal Wash & Detail Shop, Clearance Crystal Car Wash & Barber Shop, Baton Rouge Recycling, Louis Tire Center, Mister Cles Auto & Tire, and Williams Garage (Tire dealer).

K. Future Property Use (Describe in detail. Use percentages if more than one use.)

The proposed use of the property is as mixed use facility with office/commercial and residential units.

L. Current Land Use Surrounding Property

The property located to the west of the site is commercial, to the north is vacant, to the east and south is residential

M. Contaminant Type(s) and Affected Media

Soil – 2-methylnaphthalene, benzene, TPH-DRO, TPH-GRO.
Groundwater – TPH-DRO, TPH-ORO.
Lead Based Paints, Asbestos Containing Material

Applicant(s) must also attach to this form all available historical assessment and or investigation information available for the site, including Phase 1 and 2 Assessments, analytical data, etc.

III. ELIGIBILITY INFORMATION

A. Permitted Hazardous Waste Unit(s) on site?	____ Yes	X No
B. Site Proposed for Listing on the NPL?	____ Yes	X No
C. Site Listed on the NPL?	____ Yes	X No
D. Any Pending Federal Environmental Enforcement Actions Associated with the Site?	____ Yes	X No

If yes, explain ____

E. Any portion of site UST Trust Fund Eligible?	____ Yes	X No

If yes, explain ____

IV. *Type of Voluntary Remedial Action Proposed*

____ Voluntary Remedial Action

X Partial Voluntary Remedial Action

If Partial Voluntary Remedial Action is checked, the applicant and co-applicants must each complete and attach a Partial Remedial Action Supplemental Application Form.

V. CERTIFICATION

All applicants must certify the following with their signature below:

I (we) certify that all of the information I (we) have provided in this Voluntary Remedial Investigation Application is true and correct to the best of my information, knowledge, and belief. I (we) understand and agree that I (we) am obligated to update and modify this application if I (we) learn that information that I (we) have provided is misleading or no longer correct. I (we) further certify that I (we) understand I (we) am responsible for and agree to reimburse the Louisiana Department of Environmental Quality for all actual direct costs associated with reasonable and appropriate oversight activities of the Department conducted pursuant to LAC 33:VI.Chapter 9, including, but not limited to, review, supervision, investigation, and monitoring activities.

Primary Applicant Signature/Date Richard L. Murray 12-7-05

Co-Applicant Signature/Date _____

Co-Applicant Signature/Date _____

THE REMEDIAL INVESTIGATION WORKPLAN FOR THIS SITE AND THE APPLICATION REVIEW FEE MUST BE INCLUDED WITH THIS VOLUNTARY REMEDIAL INVESTIGATION APPLICATION FORM, AS PROVIDED IN LAC 33:VI.911.A, OR THIS VOLUNTARY REMEDIAL INVESTIGATION APPLICATION WILL BE CONSIDERED INCOMPLETE AND NOT BE ACCEPTED FOR REVIEW.

VCP003 4/01 Rev. 1

PARTIAL VOLUNTARY REMEDIAL ACTION SUPPLEMENTAL APPLICATION FORM

Voluntary Remediation Program
Louisiana Department Of Environmental Quality

If a partial remediation is to be performed, one each of this form must be completed by the applicant and by each co-applicant and attached to the Voluntary Remedial Investigation Application Form and the Voluntary Remediation Application Form.

A. Check One:	X Applicant ____ Co-Applicant
B. Name/Company Name:	Richard, Murray, East Baton Rouge Housing Authority, HOPE VI Office
C. Agency Interest Number (if one exists)	93917
D. Site Name	HOPE VI
E. Interest in Property	Mixed use property

Answer the following questions by checking the appropriate answer

F. Were you a generator who generated a hazardous substance that was disposed of or discharged at the site? ____ Yes X No

G. Were you a transporter who transported a hazardous substance that was disposed of or discharged at the site? ____ Yes X No

H. Were you a disposer who disposed of or discharged a hazardous substance or hazardous waste at the site? ____ Yes X No

I. Did you contract with someone for transportation or disposal at the site? ____ Yes X No

J. Are you or were you an owner or operator of the site subsequent to the disposal of hazardous waste? ____ Yes X No

If you own or have an interest in the property (site), answer the following questions by checking the appropriate answer

K. Were you engaged in the business of generating, transporting, storing, treating, or disposing of a hazardous substance or hazardous waste on or in the site? ____ Yes X No

L. Did you knowingly permit any person to make regular use of the property for disposal of waste? ____ Yes X No

M. Did you knowingly permit any person to use the site for disposal of a hazardous substance? ____ Yes __X__ No

N. Did you knowingly permit any person to use the site for disposal of a hazardous substance? ____ Yes __X__ No

O. Did you know or should you have reasonably known that a hazardous substance was located in or on the site at the time right, title, or interest in the site was first acquired by the person and engaged in conduct associating that person with the discharge or disposal? ____ Yes __X__ No

P. Did you take action that significantly contributed to the discharge or disposal after that person knew or reasonably should have known that a hazardous substance was located in or on the site? ____ Yes __X__ No

RECEIPT OF CHECK

AI Number	**93917**
Company Name	**Providence Engineering and Environmental**
Site Name/	**Personal Touch Car Wash & Used Tires**
Phone	**(225) 766 - 7400**
Date Received	**12/14/05**
Date on Check	**12/7/05**
Check Number	**6707**
Amount Received	**$500.00**

Check one Media:

☐ Accident Prevention	☐ Ground Water	☐ Radiation
☐ Air Quality	☐ Hazardous Waste	☐ Solid Waste
☐ Air Toxics	X Inactive and Abandoned Sites	☐ Underground Storage Tanks
☐ Asbestos and Lead	☐ Multi-Media	☐ Water Resources

Comments:

Voluntary remediation application fee

Initials:

vrt

HOPE VI – 1705 Highland Road
Baton Rouge, Louisiana

Remedial Investigation Work Plan

December 2005

PROVIDENCE

ENGINEERING & ENVIRONMENTAL GROUP LLC

HOPE VI – 1705 HIGHLAND ROAD
BATON ROUGE, LOUISIANA

REMEDIAL INVESTIGATION WORK PLAN

DECEMBER 2005

PREPARED BY:

PROVIDENCE ENGINEERING AND ENVIRONMENTAL GROUP LLC
6160 PERKINS ROAD, SUITE 100
BATON ROUGE, LA 70808
(225) 766-7400

PROVIDENCE ENGINEERING PROJECT NUMBER 145.003

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Appendix

1.0 INTRODUCTION

This Remedial Investigation Work Plan describes field sampling activities to be conducted in support of an assessment of the HOPE VI site located at the corner of Highland Road and Mary Street (1705 Highland Road) in Baton Rouge, Louisiana. The location of the site is shown on **Figure 1**. During prior ownership, the site was occupied by a number of different tenants/businesses; including several tire dealerships, a service station, an auto detailing business, and a recycling center. Currently, two abandoned buildings exist at the property.

As described in this Remedial Investigation Work Plan, soil and groundwater samples will be collected to define site characteristics and to determine the nature and extent of contaminants under the Louisiana Department of Environmental Quality's (LDEQ's) Voluntary Remediation Program (VRP) and the Risk Evaluation/Corrective Action Program (RECAP), as applicable. The site investigation activities will be funded under a grant from the Baton Rouge Brownfields Program (#BR-113), which is administered by the City-Parish Planning Commission.

The specific methods and protocol for collecting samples, the analytical procedures and parameters of interest, the field and laboratory Quality Assurance/Quality Control (QA/QC) protocol that will be followed, and the estimated schedule to complete the proposed field sampling activities are presented herein. All site investigation activities will be conducted in accordance with this Remedial Investigation Work Plan as approved by the LDEQ and applicable VRP/RECAP site investigation requirements.

2.0 SITE DESCRIPTION

2.1 Site Location

The subject property is located at 1705 Highland Road in Baton Rouge, Louisiana. The location of the property is shown on **Figure 1**. The current layout of the property is shown on **Figure 2**.

2.2 Current/Intended Future Use of the Property

The subject tract currently supports two buildings. The buildings are currently not being used, and will be demolished prior to redevelopment of the site. As part of the demolition activities, a hydraulic lift located at the site will also be removed. HOPE VI intends to develop the property for primarily residential use.

2.3 Current Uses of Adjoining Properties

Surrounding land use supports a television broadcasting to the west. Vacant lots are located immediately to the south, east, and across Mary Street to the north.

3.0 PREVIOUS SITE INVESTIGATION ACTIVITIES

On behalf of the City-Parish Planning Commission, Providence Engineering and Environmental Group LLC (Providence Engineering) conducted a Phase I Environmental Site Assessment (ESA) of the site in April 2004. As documented in the April 26, 2004 Phase I ESA Report, a number of areas were identified as possible environmental liability hazards. These areas included abandoned 55-gallon drums, hydrocarbon staining around the abandoned drums, a potential underground storage tank (UST), and potential lead-based paint and asbestos-containing materials.

Based on the results of the Phase I ESA, Providence Engineering collected soil and groundwater samples as part of a Phase II ESA to determine whether or not impacts from previous operations at or near the property were present prior to redevelopment of the site. The Phase II ESA report in its entirety is provided herein as **Appendix A**. A total of six borings were advanced and sampled at the site in accordance with the LDEQ's RECAP and the July 2004 Quality Assurance Project Plan (QAPP). The boring locations are shown on **Figure 2**. Groundwater was encountered at approximately 10 feet below ground surface (ft bgs). The boring logs completed for borings advanced during the Phase II ESA are provided in Appendix D of the Phase II ESA Report (see **Appendix A**).

Soil samples were collected from all six borings, and groundwater samples were collected from the five borings at which groundwater was encountered. Additionally, floor and wall mortar samples were collected for laboratory analyses for asbestos, and multiple paint samples were collected for lead analyses. The results of the Phase II ESA are summarized in the following sections.

3.1 Soil Analytical Results

Soil analytical results are summarized in **Table 1**. All soil samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons – gasoline range organics (TPH-GRO), total petroleum hydrocarbons – diesel range organics (TPH-DRO), and total petroleum hydrocarbons – oil range organics (TPH-ORO).

Soil analytical results were compared to the soil limiting Screening Standards (LSS) for non-industrial land use based on the intended future residential use of the property. The soil LSS applied were the lower of the RECAP Non-Industrial Soil Screening Standards ($Soil_{SSni}$) and the Soil

Protective of Groundwater Screening Standards ($Soil_{SSGW}$) provided in Table 1 of RECAP (LDEQ 2003).

As shown in **Table 1**, soil concentrations were below the RECAP LSS at five of the six borings (B-2 – B-6). However, soil concentrations in samples collected from boring B-1 exceeded the soil LSS applied for 2-methylnaphthalene, naphthalene, benzene, TPH-DRO, and TPH-GRO. In addition, detection limits for certain PAHs reported as not detected by the laboratory ("non-detects") had sample quantitation levels (SQL) that exceeded the applicable LSS.

3.2 Groundwater Analytical Results

Groundwater analytical results are summarized in **Table 2**. Groundwater samples were collected from five of the six borings. Groundwater could not be collected from boring B-1, as groundwater was not encountered at this location. In addition, due to insufficient groundwater yield, samples collected from boring B-4 were only analyzed for BTEX, TPH-GRO, and TPH-DRO.

The LSS applied for groundwater were the Groundwater Screening Standards (GW_{ss}) provided in Table 1 of RECAP (LDEQ 2003). As shown in **Table 2**, TPH-DRO was reported above the GW_{SS} at borings B-2, B-4, B-5, and B-6. TPH-ORO concentrations were reported above the GW_{ss} in groundwater samples collected from B-2, B-3, B-5 and B-6. Concentrations of BTEX and PAHs did not exceed the GW_{SS} in any of the samples colleted.

3.3 Lead Sampling Results

Asbestos Consulting Services, Inc. (ACSI) collected 26 samples of suspected lead-based paints. The Consumer Product Safety Council has established a standard of 0.06% by weight, while the Housing and Urban Development's (HUD) standard is 0.5% by weight. 19 of the 26 samples exceeded the Consumer Product Safety Council standard, while 7 of the 26 samples exceeded the HUD standard. The highest reported percent by weight concentration was 12.2% collected from the multi-coats of paint on the outside canopy. The complete ACSI report can be found in Appendix B of the Phase II ESA report provided in **Appendix A** herein.

3.4 Asbestos Sampling Results

Providence Engineering contracted ACSI to collect samples of suspected asbestos-containing materials. ACSI collected a total of 36 samples from selected floor tiles and wall mortars from both buildings. A total of 17 samples tested positive for asbestos. The complete ACSI asbestos report can be found in Appendix C of the Phase II ESA report provided in **Appendix A** herein.

4.0 PROPOSED SOIL AND GROUNDWATER SAMPLING

The following site investigation activities are proposed, and will be conducted after the on-site buildings and other structures (including the hydraulic lift) have been demolished in preparation for redevelopment of the site:

- Boring B-1 will be readvanced for further characterization of groundwater impacts at the source and to collect soil samples for vertical extent delineation. A soil sample will also be collected from B-1 (7-8 ft bgs) for PAH analysis to attempt to obtain SQL below the applicable RECAP standards.

- Soil samples for Synthetic Precipitation Leaching Procedure (SPLP) analysis will be collected from B-1 to attempt to increase applicable clean-up standards to minimize (or possibly eliminate) the need for remediation of soils.

- Soil samples will be collected from boring B-1 for fractionation of aliphatics and aromatics petroleum hydrocarbon ranges. If possible, groundwater TPH fractionation samples will also be obtained from this location.

- Boring B-4 will be readvanced for collection of TPH-ORO and PAH groundwater samples, which were not able to be collected during the July 2004 sampling event due to insufficient water yield from the temporary piezometer installed at this location. These samples are required for further characterization of the source and to meet RECAP site investigation requirements.

- Four borings would be advanced as shown in **Figure 2** to delineate the extent of contamination in groundwater in accordance with VRP/RECAP requirements.

- An additional delineation boring will be advanced on the vacant lot north of Mary Street (see **Figure 2**) for the collection of soil and groundwater samples. Analytical parameters will include constituents of concern (COC) analyzed at borings B-1 – B-6 during the previous Phase II investigation activities, including TPH-GRO, TPH-DRO, TPH-ORO, BTEX, and PAHs.

- Soil samples will also be collected from the delineation boring to be installed to the west of B-1 (see **Figure 2**) for delineation of soils.

- Soil and groundwater samples will be collected by Providence Engineering at the bottom of the excavation from one borehole (HL-1) for delineation/source characterization purposes after the demolition contractor removes the hydraulic lift. Samples will be collected for analysis of TPH-DRO and TPH-ORO per Appendix D of RECAP (LDEQ

Shaw™ Shaw Environmental, Inc

A World of Solutions™

September 19, 2008

Project No 108704

RECEIVED
SEP 22 2008
LA DEPT OF ENV QUALITY
REMEDIATION SERVICES DIVISION
LOG # FY2009-180

Remediation Services Division
Manager
Team Leader
AI # 93917
TEMPO Task #
Desk Copy File Room IAS

Mr Keith L Casanova, Administrator
Environmental Technology Division
Office of Environmental Assessment
Louisiana Department of Environmental Quality
P O Box 4314
Baton Rouge Louisiana 70821-4314

Re **Voluntary Remedial Action Report**
H O P E VI Property
1705 Highland Road
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest No 93917

Dear Mr Casanova

On behalf of the East Baton Rouge Parish Housing Authority (EBRHA), Shaw Environmental Inc (Shaw) is submitting the attached Voluntary Remedial Action Report (VRAR) for the above referenced site The successful completion of remedial actions has resulted in the subject site meeting residential RECAP Standards Accordingly, the site is eligible for closure without restriction Shaw respectfully requests that a Certificate of Completion should be issued to EBRHA pending the approval of the VRAR

If you have any questions regarding this attached report, or any aspect of this project, please contact me at (225)987 7323, or Chris Johnson at (225)987-7427

Sincerely,
Shaw Environmental, Inc

Tyson N Hackenberg
Client Program Manager

RECEIVED
SEP 19 2008
LDEQ

cc Mr Samuel Reynolds – USEPA Region 6
Ms Patricia Robinson – EBRHA H O P E VI

Enclosure

VOLUNTARY REMEDIATION PROGRAM (VRP)
REMEDIAL ACTION REPORT

H.O.P.E. VI
1705 Highland Road
Baton Rouge, Louisiana

September 2008

Prepared for

East Baton Rouge Housing Authority
4731 North Boulevard
Baton Rouge, Louisiana

Prepared by

Shaw Environmental, Inc
4171 Essen Lane
Baton Rouge, Louisiana 70809

Table of Contents

List of Figures

List of Appendices

Acronyms and Abbreviations

AOI	Area of Investigation
bgs	Below ground surface
BTEX	Benzene Toluene, Ethylbenzene, and Total Xylenes
COC	Constituent of Concern
EBRHA	East Baton Rouge Housing Authority
ESA	Environmental Site Assessment
GPR	Ground Penetrating Radar
LAC	Louisiana Administrative Code
LDEQ	Louisiana Department of Environmental Quality
MO 1	Management Option 1
MO 2	Management Option 2
MTBE	Methyl tert Butyl Ether
PAH	Polynuclear Aromatic Hydrocarbons
PID	Photoionization Detector
REC	Recognized Environmental Condition
RECAP	Risk Evaluation/Corrective Action Program
RS	RECAP Standard
Shaw	Shaw Environmental Inc
$Soil_{esni}$	Non Industrial Soil beneath Enclosed Structures
$Soil_{ni}$	Non Industrial Soil Protective of Human Health
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank
VRAP	Voluntary Remediation Action Plan
VRIR	Voluntary Remedial Investigation Report
VRP	Voluntary Remediation Program

1 0 Introduction

This Voluntary Remediation Program (VRP) Remedial Action Report (VRAR) has been prepared for the East Baton Rouge Parish Housing Authority (EBRHA), to document the closure of underground storage tanks (USTs) and remediation of impacted soils at the H O P E VI site at 1705 Highland Road, Baton Rouge, Louisiana (Figures 1 and 2) The VRAR has been prepared pursuant to Louisiana Administrative Code (LAC) Title 33, Part VI, Chapter 9

1 1 Site Description

The subject site is located at 1705 Highland Road in Baton Rouge, East Baton Rouge Parish, Louisiana (Figure 1) The site is currently a vacant lot, subsequent to the demolition of on-site structures in December 2005 Figure 2 presents a facility map with locations of pertinent former site features, including boring locations from previous site investigations

Historically and prior to the EBRHA's acquisition of the property, businesses that operated at the subject site included tire dealerships, a service station, an automobile detailing business, and a recycling center During the time of operation as a service station, at least six underground storage tanks (USTs), two fuel dispensers, and one hydraulic lift were operated on-site The hydraulic lifts and piping were previously removed During site demolition activities in December 2005, six USTs of various sizes were discovered in the northwest portion of the property adjacent to the intersection of Mary Street and Highland

The site is proposed for residential redevelopment by the EBRHA H O P E VI program Accordingly, the remedial action reported herein utilized site clean up goals based on non-industrial standards, pursuant to guidance included in the Louisiana Department of Environmental Quality's (LDEQ's) Risk Evaluation / Corrective Action Program (RECAP) document, dated October 2003

2 0 Previous Activities

2 1 Phase I Environmental Site Assessment

A *Phase I Environmental Site Assessment Report*, dated April 2004, was prepared by Providence Engineering & Environmental Group, LLC (Providence) Findings of the Phase I Environmental Site Assessment included recognized environmental conditions (RECs) associated with former uses of the subject site

2 2 Voluntary Remedial Investigation

The site was entered into the LDEQ's Voluntary Remediation Program (VRP), and a Voluntary Remedial Investigation Work Plan (Work Plan) was prepared and submitted to the LDEQ in December 2005 The Work Plan was approved by the LDEQ with modifications in correspondence dated April 28, 2006 The investigation was implemented in May and June 2006, and a Voluntary Remedial Investigation Report (VRIR), which included a RECAP assessment, was submitted to LDEQ in May 2007 The VRIR was approved by the LDEQ in correspondence dated October 19, 2007

The results of the site investigations performed in July 2004 and September 2006 indicate that petroleum impacts were present in soil, predominantly at the northwest corner of the property, near the intersection of Mary Street and Highland Road Figure 2 depicts the sample locations from the Voluntary Remedial Investigation The highest concentrations of petroleum hydrocarbon compounds in soil were detected in soil boring B-1, located in the northwest area of the site

As presented in the May 2007 Voluntary Remedial Investigation Report (VRIR), all soil and groundwater constituents of concern (COC) detected during site assessment activities were below the applicable Management Option 2 (MO-2) Limiting RECAP Standards (RS) However, six abandoned USTs were observed in the northwestern portion of the subject site during demolition activities in December 2005 These USTs were presumed to be associated with the former use of the subject property as an automotive fuel retail facility, and constituted a risk to human health and the environment

2 3 Voluntary Remedial Action Plan

A Voluntary Remedial Action Plan (VRAP) was prepared by Shaw and submitted to the Louisiana Department of Environmental Quality (LDEQ) in November 2007 The proposed remedial action activities included proper closure of USTs and excavation and disposal of impacted soil in the area of the USTs The VRAP also included a Sampling and Analysis Plan, Quality Assurance Plan, and Voluntary Remedial Action application The LDEQ approved the VRAP and Voluntary Remedial Action application in correspondence dated January 8, 2008 (Appendix A)

2 4 Waste Characterization Sampling and Profile

Prior to beginning remediation activities, hand augered borings were advanced to collect samples for waste characterization The characterization samples were analyzed for reactivity, corrosivity, and ignitability (RCI), metals by Toxicity Characteristic Leaching Procedure (TCLP), and benzene by TCLP Upon receipt of the laboratory analytical data (Appendix B), a waste profile form (Appendix A) was completed and submitted to the Allied Waste/BFI landfill for pre-approval of soil disposal

3 0 VRP Remedial Actions and Results

3 1 Public Notice

Public notice and direct notification to adjacent landowners was made in accordance with LAC Title 33, Part VI, Chapter 9 D & E The public notice was published in the Daily Advocate on January 14, 2008, followed within five days by certified letters to adjacent landowners Following the prescribed 30 day period with no comments from the public or adjacent landowners, Shaw submitted public notice documentation to the LDEQ In correspondence dated May 1, 2008 (Appendix A), the LDEQ approved implementation of the VRAP

3 2 Tank Registration and Closure Notification

Prior to beginning remediation activities, required forms for tank registration and advance notification of UST closure were completed and submitted to the LDEQ Copies of these documents are included in Appendix A

3 3 Underground Storage Tank Removal and Soil Excavation

On May 12, 2008, Shaw and its subcontractor SEMS, Inc (SEMS) mobilized equipment and personnel to the site to initiate the remediation activities Prior to beginning site work, a public meeting was held on May 12, 2008 to discuss the remediation activities and planned redevelopment of the site

A back hoe excavator was used to uncover the USTs As work proceeded, it was discovered that the six USTs contained residual fluids, which were removed by a vacuum truck The residual tank fluids and wash water were transported by vacuum truck to an LDEQ-approved disposal/recycling facility Volumes of recovered fluid and other waste materials are summarized in Section 3 7, and copies of disposal manifests are included in Appendix C

Removal of the six USTs and surrounding soil was performed on May 13 and 14, 2008 In accordance with the LDEQ's *Underground Storage Tank Closure/Change-In-Service Guidance Document* (October 2003), two soil samples were collected beneath each tank at depths of approximately 10 feet below ground surface (bgs) To determine the appropriate extent of excavation, sidewall samples were also collected at nine locations at depths of approximately 7 8 feet bgs at the perimeter of the excavation It was not necessary for samples of excavated material to be collected, as all excavated soil was placed into roll off containers and subsequently transported for offsite disposal No excavated soil was used to backfill the excavation

The tank bottom and sidewall samples were delivered to Southern Petroleum Laboratories, Inc (SPL) for analysis of the following constituents identified in the VRAP

- Benzene, toluene, ethylbenzene and xylenes (BTEX) and methyl tert butyl ether (MTBE) by SW-846 Method 8260B,
- Total petroleum hydrocarbons (TPH) – C_6-$C_{>28}$ aliphatic and aromatic fractions by the Massachusetts VPH/EPH Method,
- Polycyclic aromatic hydrocarbons (PAHs) by SW-846 Method 8270C, and
- RCRA metals by SW-846 Method 6000/7000 Series

Figure 3 depicts the locations of USTs, the bottom and sidewall samples, and the extent of the excavation Photographs of the remediation activities are included in Appendix D

Following a heavy rainfall event on the afternoon of May 14, 2008, site work resumed on May 18, 2008 A temporary discharge permit was submitted to and approved by the LDEQ, and approximately 1,500 gallons of rainwater in the excavation was pumped into the adjacent storm sewer Based on the results of water samples collected from the excavation, no treatment of the water was necessary prior to discharge

Additional excavation of impacted soil continued on May 19, 2008, with the limits of excavation determined by visual evidence (stained soil) and screening for organic vapors with a photoionization detector (PID) As shown in Figure 3, two separate areas were excavated to an approximate depth of 10 feet bgs, including a relatively large area surrounding Tanks 1, 2, 3, 4, and 5 near the western boundary of the site, and a smaller area around Tank 6 near the northern boundary of the site A third area to the west of Tank 6 was excavated, based on ground penetrating radar (GPR) survey that indicated the possibility of a buried tank However, after excavating to approximately 6 feet bgs, no USTs were found in this area (Figure 3 – Exploratory Excavation Area)

Sidewall samples were collected at approximately 7 – 8 feet bgs at 11 locations (Figure 3) on the perimeter of the excavation at May 20, 2008 The locations of the samples and the excavated area were surveyed on May 21, 2008 (Appendix E)

All excavated soils were first placed on plastic sheeting and covered when necessary to protect from rainfall and run-off The excavated soils were then temporarily stored onsite in roll-off containers prior to transport to Allied Waste/BFI in Sorrento, Louisiana The total amount of disposed soil and other waste materials are summarized in Section 3 7, and copies of transport and disposal manifests are included in Appendix C

3 4 Initial Soil Analytical Results

Laboratory analytical reports, including Quality Assurance/Quality Control (QA/QC) results are presented in Appendix B Based on Shaw's data usability review, the laboratory analytical data is valid and can be used to determine if site concentrations meet remedial action goals

As shown in Table 1, analytical results of the tank bottom soil samples collected on May 13-14, 2008 indicated no exceedances of RECAP Screening Standards (SS) The sidewall sample results, which determined the appropriate aerial extent of the excavations, are presented in Table 2 The sidewall sample results revealed one sample location (NSW-1) with COC concentrations above applicable SS and MO-2 Limiting RS This sample was collected at the northwest extent of the large excavation and abutted a concrete slab at the corner of Highland Road and Mary Street As shown in Table 1, the RECAP exceedances in sample NSW-1 were as follows

- Benzene concentration of 2 6 milligrams per kilogram (mg/kg) exceeded the Limiting MO-2 RS of 1 01 mg/kg,
- Total xylenes concentration of 48 4 mg/kg exceeded the Limiting MO-2 RS of 2 47 mg/kg,
- Naphthalene concentration of 18 mg/kg exceeded the Limiting MO-2 RS of 10 3 mg/kg,
- C_6-C_8 Aliphatics concentration of 570 mg/kg exceeded the Limiting MO 2 RS of 362 mg/kg,
- C_8-C_{10} Aliphatics concentration of 1,200 mg/kg exceeded the Limiting MO 2 RS of 86 mg/kg, and
- C_8 C_{10} Aromatics concentration of 950 mg/kg exceeded the Limiting MO-2 RS of 146 mg/kg

A review of the surveyed property boundaries (Appendix E) indicated that a portion of the aforementioned concrete slab was located within the subject property and further excavation in this area could be performed Accordingly, to remove all impacted soil on the property, the concrete slab was saw cut and removed along the property boundary line to enable additional excavation to the property boundary

3 5 Additional Excavation and Underground Storage Tank Closure-in-Place

Shaw and SEMS remobilized to the site on June 5, 2008 to perform the additional excavation While performing the excavation work, another UST was encountered at the property boundary (Figure 3) The UST was longitudinally parallel to, and approximately bisected by, the northern property boundary (Appendix D – Photographs 18 and 19) As the location of the tank in proximity to underground utilities presented a safety risk for tank removal, subsequent to

consultation and approval by the LDEQ, a decision was made to close the tank in place Accordingly, the appropriate tank registration and closure forms were immediately submitted to the LDEQ

Residual fluids were removed by a vacuum tank, and the tank was washed and rinsed prior to closure in place As agreed by the LDEQ, on June 6, 2008 one closure in-place sample was collected at approximately 8 feet bgs near the east end of Tank 7, which also corresponded to the northern property boundary Another sample near the west end of the tank could not be safely collected, because of the presence of underground utilities Remaining impacted soil at the northwest corner of the property was excavated to the property boundary line (the edge where the concrete slab was cut) On June 9, 2008, the tank was closed in place using flowable fill sand (Appendix D – Photograph 20)

As required by the LDEQ, SEMS submitted an Underground Storage Tank Closure Assessment report (Appendix A) to the LDEQ's UST Division on June 19, 2008 This report included documentation of the removed USTs (Tanks 1 – 6) and the tank closed in place (Tank 7)

3 6 Attainment of Remedial Action Goals

As noted in Section 3 4, the previously collected closure samples demonstrated that remediation goals were met at all sample locations, with exception of the northwest corner of the excavation encompassing Tanks 1 – 5 By performing the additional excavation to the property boundaries at the northwest corner of the site, remedial action goals have been successfully attained for the subject property in accordance with VRP regulations (LAC Title 33, Part VI, Chapter 9)

Analysis of the closure-in place sample NSW-1a did indicate COC concentrations above applicable SS and MO-2 Limiting RS (Table 2), however, this sample was collected immediately beyond the subject property boundary and is representative of offsite soil concentrations within the Mary Street right-of-way, not within the subject property boundaries It should be noted that the COC concentrations at the NSW-1a location were less than the concentrations from the previous NSW-1 location, approximately 10 feet to the south

3 7 Waste Disposal

During the course of remedial activities, the following waste material was generated and properly disposed offsite

- 379 67 tons of excavated soil (including some concrete rubble) were transported to Allied Waste/BFI's landfill in Sorrento, Louisiana,
- 3,030 gallons of residual tank fluids and wash water were transported to Gator Environmental's recycling facility in Baton Rouge, Louisiana

- The purged and cleaned tanks were transported to Southern Scrap Recycling in Port Allen, Louisiana

Disposal documentation and manifests are included in Appendix C

3 8 Excavation Backfill and Site Restoration

The excavation was filled with clean imported silty clay (CL) material on June 5 – 10, 2008 The specifications for backfilling and compaction were as follows

1 The Proctor, Grain Size, Atterberg Limits, Moisture Content test results were submitted for approval by Shaw and Jerry Watts Architects prior to use for backfilling

2 For the top four feet of the excavation, backfill and compaction were performed in 6- to 8-inch lifts with compaction meeting the requirements for a 95 standard Proctor Nuclear Density field tests were performed on each lift above 4 feet bgs

3 No testing was performed on lifts with top of lift below 4 feet bgs, due to excavation safety concerns, so one of the following methods was used

- backhoe bucket tamping for 6 inch (or less) lifts,
- machine compactor for 6-18 inch lifts, and
- no lift exceeded 18 inches in thickness

3 9 Certificate of Completion

This VRAR demonstrates that the objectives/requirements of the approved VRAP have been met The subject site meets residential RECAP Standards and is eligible for closure without restriction Shaw respectfully requests that a Certificate of Completion should be issued to EBRHA pending the approval of the VRAR

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL ASSESSMENT

APR 02 2009

CERTIFIED – RETURN RECEIPT REQUESTED 7004 1160 0000 3794 6633

Mr. Richard Murray
East Baton Rouge Housing Authority
4731 North Boulevard
Baton Rouge, LA 70806

RE: Voluntary Remedial Action Report Approval/Certificate of Completion
H.O.P.E. VI; **AI Number 93917**
1705 Highland Road
Baton Rouge, East Baton Rouge Parish, Louisiana

Dear Mr. Richard Murray:

The Louisiana Department of Environmental Quality (LDEQ), Remediation Services Division (RSD) has completed its review of all of the relevant documents submitted on your behalf by Shaw Environmental, Inc. for the successful completion of the Voluntary Remediation Program (VRP). Thank you for providing this information.

This report concludes the tasks that were required to be performed by the VRP Remedial Action Plan submitted to the Louisiana Department of Environmental Quality (LDEQ) dated September 2008. The LDEQ approves the Voluntary Remedial Action Report and hereby certifies that H.O.P.E VI has completed the approved remedial action work plan in accordance with La. R.S., Title 30, Chapter 12, Part II.

This letter serves as your Certificate of Completion for the H.O.P.E. VI site. This Certificate of Completion is subject to the terms and conditions of the Voluntary Remediation Program. This Certificate of Completion exempts H.O.P.E.VI, its successors and assigns from liability under LSA-R.S., Title 30, Chapter 12, Part I.

The exemption from liability is also subject to all applicable exceptions and limitations set forth in the above mentioned statutes.

The LDEQ appreciates your effort in working on, and concluding this project. Please contact Rashaunda Johnson at 225-219-0875 for any questions concerning site issues.

Sincerely,

Paul D. Miller, P.E.
Assistant Secretary

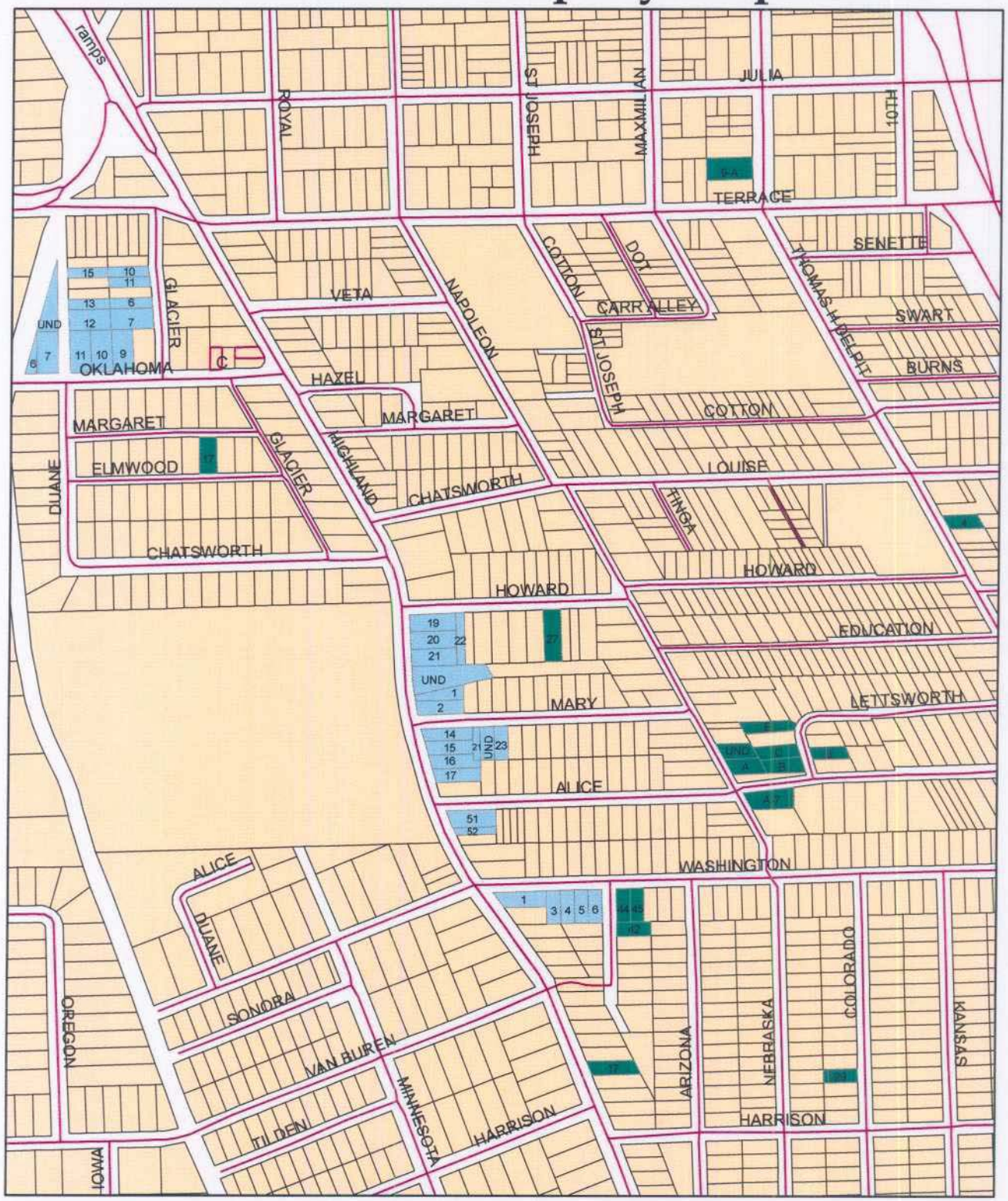
PDM:rmj

c: Imaging Operations-IAS
B. Keith Boeneke, Project Manager, Shaw Environmental

HOPE VI Properties

East Baton Rouge Parish Housing Authority

EBRHA HOPE VI Property Disposition



Legend

10/1/2008

- Streets
- OSBR Land, LLC Parcels -- HOPE VI Disposition
- LRA Parcels -- HOPE VI Disposition
- Land Parcels

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Center for Planning Excellence

0 35 70 140 210 280 Feet

CONCEPTUAL CLEAN-UP STRATEGY
AND ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES

Lincoln Theater
Louisiana Black History Hall of Fame
1305 Myrtle Walk
Baton Rouge, Louisiana 70802

Agency Interest No. 169406

Project Number: 133340

July 2011

Submitted to:

Louisiana Department of Environmental Quality
Remedial Services Division
P.O. Box 4314
Baton Rouge, LA 70821

Submitted by:

Shaw™ Shaw Environmental, Inc.

4171 Essen Lane
Baton Rouge, Louisiana 70809

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1.0 Introduction

1.1 Introduction

The Lincoln Theater is a vacant historic building near downtown Baton Rouge at 1305 Myrtle Walk, Baton Rouge, Louisiana (Figure 1.1). The Lincoln Theater was formally a thriving historic performing arts venue. The current owner, the Louisiana Black History Hall of Fame, is currently restoring and redeveloping the Theater. The two-story building includes the main theater and projector room, a concessions area, a retail area, a former barber shop, five offices, and associated lavatories and storage areas. A mechanical/electrical room is included in a sublevel. The total occupiable area is approximately 9,300 square feet.

The environmental work conducted includes a Phase I Environmental Site Assessment (ESA), dated January 2009, completed by MEL, Inc. and Quaternary Resource Investigations, Inc. (QRI). This ESA identified suspected asbestos containing materials (ACM), possible lead based paint, and the potential for lead in the potable water system.

Concurrent with the Phase I ESA, QRI and their subcontractor Advanced Environmental Consulting, Inc. (AEC) also performed a limited asbestos survey, a lead paint survey, and sampling and lead analysis of potable water in the building. On April 12, 2010, Shaw Environmental, Inc. (Shaw) performed an initial site inspection of the building and property in part to visually assess the presence of confirmed and suspected ACM. During the reconnaissance Shaw walked along the outside of the building and visually surveyed the rooftop and all accessible interior areas of the building. The barbershop, attic areas, first floor restrooms, and some second floor offices were not accessible during this initial reconnaissance. During this inspection, Shaw identified additional materials that were suspected of containing asbestos but that were not sampled in the February 2009 investigation. These materials included wall paper/coverings through the interior of the building, carpeting in the theater area and second floor offices, flooring in the second floor bathrooms, backstage ceiling insulation, HVAC duct insulation, suspended ceiling in the retail area and projector room, and the exterior roofing material. Although the barber shop, first floor restrooms, and some second floor offices were not accessible during the reconnaissance, it was presumed that these areas included materials similar to those observed in the rest of the building.

Based on these findings and the plans for renovation of the Theater, additional investigation and sampling was performed. This additional investigation included a mold inspection and additional sampling of suspect ACM to sufficiently address the remediation needs of the Theater. Specifically, each material that was suspected of containing asbestos, as described above, was to

be sampled to determine whether or not each of the materials was asbestos-containing or non-asbestos-containing.

This report provides a summary the results of the previous and more recent environmental investigations, presents an Analysis of Brownfields Cleanup Alternatives, proposes the selected cleanup strategy, and estimates costs for the cleanup of the confirmed contaminants present at the Theater.

2.0 Investigation/Survey

2.1 Asbestos Surveys

On February 9, 2009 Advanced Environmental Consulting, Inc. (AEC) collected samples of suspect ACM on behalf of QRI. During the investigation four (4) bulk samples were collected from the stage floor, theater area walls and ceiling, and second floor corridor floor. These samples were sent to CA Labs, L.L.C. in Baton Rouge, Louisiana and analyzed for asbestos content utilizing polarized light microscopy as described in "Interim Method for Determination of Asbestos Bulk Insulation Samples" (EPA600/R-93/116). The methodology and results were initially reported in the QRI Phase I Environmental Site Assessment Report, addressed to MEL, Inc., and dated February 19, 2009.

On February 15 and 16, 2011 Shaw performed an expanded asbestos survey to identify, label, and catalog all asbestos containing material/presumed asbestos containing material (ACM/PACM) at the Lincoln Theater. During the sampling for ACM at the Lincoln Theater, a total of 206 samples were collected from 172 locations. The sample locations were selected so that the samples were representative of each homogenous area (HA) of suspected ACM. There were a total of 37 homogenous areas in all. Each sample location and description was logged and photographed to assist with future ACM management activities. The samples were placed in sealed plastic bags, labeled with the sample sequence number, and then transported to EMSL in Baton Rouge, Louisiana for testing under proper chain of custody. Inaccessible items, including piping and insulation contained inside of building walls that could not be reached without destructive means were not inspected or sampled. Items that were previously sampled for asbestos content by AEC on February 9, 2009 were not re-sampled during this event. Each sample was analyzed by polarized light microscopy as described in "Interim Method for Determination of Asbestos Bulk Insulation Samples" (EPA600/R-93/116). Sample locations are shown on Figures 2.1 through 2.4.

2.2 Lead Based Paint Survey

On February 9, 2009, AEC utilizing the services of Lanny J. Herring of New Iberia, Louisiana, at the direction of QRI, performed a lead based paint survey. Mr. Herring, utilizing a portable, handheld X-Ray Fluorescence (XRF) Analyzer performed direct readings on a total of fifty-six (56) data points suspected of containing lead based paint. These data points included all painted surfaces throughout the Theater both interior and exterior regardless of the substrate. The methodology and results were initially reported in the QRI Phase I Environmental Site Assessment Report, addressed to MEL, Inc., and dated February 19, 2009.

2.3 Lead In Drinking Water Investigation

On February 9, 2009, AEC at the direction of QRI collected potable water samples for laboratory testing to determine the total concentrations of lead in potable water in the Theater. Samples were collected from the drinking fountain located in the barbershop area as well as the sink in the lobby snack bar area. Samples were collected from each source point in four (4) separate cuts/draws in an attempt to isolate the four (4) distinct sections of the water line system. Samples were collected from the following cuts/draws:

1. Water in direct contact with the water dispensing fixture,
2. Water in the lines under the sink and in the walls immediately adjacent to the dispensing fixtures,
3. Water in the lines between the structure and the city water main,
4. and water in the city water main.

Samples were collected in laboratory supplied containers, preserved as necessary, and then transported to EMSL Analytical in Westmont, New Jersey for testing under proper chain of custody. The methodology and results were initially reported in the QRI Phase I Environmental Site Assessment Report, addressed to MEL, Inc., and dated February 19, 2009

2.4 Mold Assessment

On February 15 and 16, 2011, Shaw conducted a visual mold assessment to confirm the presence of microbial growth in and on all visible internal building components and systems at the Lincoln Theater.

No intrusive methods were used during the mold assessment. The confirmatory list of mold growth locations included in this report is not intended to be all inclusive since further verification may not be possible until renovation and restoration activities commence.

3.0 Investigation/Survey Results

3.1 Asbestos Surveys

The results derived from the limited asbestos survey conducted on February 9, 2009 by Advanced Environmental Consulting, Inc. (AEC), confirmed the presence of ACM. Four (4) bulk samples were collected from the stage floor, theater area walls and ceiling, and second floor corridor floor. As described in the QRI Phase I Environmental Site Assessment Report dated February 19, 2009 and addressed to MEL, Inc., of the four homogenous areas sampled, only the 9 inch floor tile and associated mastic located in the second floor offices was found to positively contain asbestos greater than 1%. This data is summarized in Table 3.1. The CA Labs, L.L.C analytical report is included in Appendix A. Figure 3.1 illustrates the area with a confirmed ACM presence resulting from the Limited Asbestos Survey.

On February 15 and 16, 2011 Shaw performed an expanded asbestos survey that investigated all previously un-sampled media with the potential to contain asbestos. A total of 206 samples were collected from 172 locations. The sample locations were selected so that the samples were representative of each homogenous area (HA) of suspected ACM. Shaw sampled a total of 37 homogenous areas.

Samples that contain greater than 1% asbestos by weight are considered asbestos-containing. Of the 206 samples collected, the following materials were identified as asbestos-containing:

- Approximately 420 square feet of black and white floor tile in the Barber Shop.
- Approximately 20 linear feet of piping insulation in the mechanical/electrical room.

A summary of the expanded survey sample results are included in Table 3.2. The EMSL laboratory analytical report is included as Appendix B. Photographs of sample locations have also been provided on the enclosed CD as Appendix E. Figure 3.2 illustrates the areas that were confirmed to contain asbestos discovered in the Expanded Asbestos Survey.

3.2 Lead Based Paint Survey

On February 9, 2009, Lanny J. Herring on behalf of AEC performed a lead based paint survey utilizing a portable, handheld X-Ray Fluorescence (XRF) Analyzer. A total of fifty-six (56) data points suspected of containing lead based paint were collected. These data points included all painted surfaces throughout both the interior and exterior areas of the Theater regardless of the substrate. As reported in the QRI Phase I Environmental Site Assessment Report dated February 19, 2009 and addressed to MEL, Inc., of the 56 data points collected, the only ones to confirm the presence of lead were the painted exterior metal entry doors and associated door facings

(Table 3.3). The doors coated with lead based paint are shown in Figure 3.3. The lead paint inspection report is included in Appendix C.

3.3 Lead In Drinking Water Investigation

On February 9, 2009, AEC, at the direction of QRI, collected potable water samples for laboratory testing to determine lead concentrations. Samples were collected from the drinking fountain located in the barbershop area as well as the sink in the lobby snack bar area. Samples were collected from each source point in four (4) separate cuts/draws in an attempt to isolate the four (4) distinct sections of the water line system.

As reported in the QRI Phase I Environmental Site Assessment Report (February 19, 2009), of the four samples collected and analyzed from the drinking fountain located in the barber shop area, the sample from cut/draw No. 4 was found to contain lead below the Safe Drinking Water Act (SDWA) limit of 15 parts per billon (ppb). All four cuts/draws from the sink in the lobby snack bar area exceeded the SDWA limit. These results confirm that the elevated lead concentrations are attributable to the building piping systems and not the local supply. A summary of these results can be found in Table 3.4. The EMSL Analytical report is included as Appendix D.

3.4 Mold/Microbial Growth

On February 15 and 16, 2011, concurrent with asbestos survey activities, Shaw conducted a visual mold assessment to confirm the presence of microbial growth in and on internal building components and systems at the Lincoln Theater. Shaw also noted potential sources of moisture intrusion into the building. Due to compromised structural systems within the Lincoln Theater, such as broken windows and window frames as well as breaches in the roof, allowing the intrusion of moisture into the building envelope, numerous areas of suspected microbial growth were identified (Figures 3.4 and 3.5). These areas included the following.

- Sheetrock and ceiling materials in the projector room, main Theater area, and second floor offices,
- Seat cushions in the Theater area,
- Carpeting in the Theater area and second floor offices,
- Areas behind the wall coverings in the lobby area and the 2nd floor offices,
- and HVAC ductwork.

There are obvious points of moisture intrusion into the building envelope. Specifically, there are numerous broken windows and window frames across the front of the building along with roof leakage from not only a deteriorating roofing surface but holes from a fallen tree. Furthermore, in humid climates, like those in which the Theater exists, merely a lack of air circulation in a building can support mold growth on rough, porous, and permeable surfaces. Figures 4.4 and 4.5 illustrate the areas of the Theater structure with compromised structural systems allowing the entry of moisture.

4.0 Conceptual Clean-Up Strategy and Analysis of Brownfields Cleanup Alternatives

4.1 Introduction

The Louisiana Black History Hall of Fame is currently in the process of planning and preparing for the restoration and redevelopment of the Theater and Theater property. As such, certain building systems and components will need to be replaced or restored in order to bring the Theater structure and building systems up to a functional standard meeting current building and environmental codes and regulations, all the while preserving the historically significant attributes within. The environmental concerns include Asbestos Containing Materials, Lead Based Paint, Lead in Drinking Water, and Mold/Microbial Growth. After sufficient investigation was conducted, as described in the following sections, several cleanup alternatives were evaluated in order to achieve the remediation and renovation goals of the Theater, including no-action alternative. Based on the nature of the impact and the plans for renovation of the historic Theater, the no-action alternative was not deemed reasonable or adequately protective of the future use. Further discussion of the selected cleanup alternatives is included in this conceptual clean-up strategy in the following sections.

4.2 Asbestos Containing Materials

Asbestos inspections revealed a limited amount of ACM within the Theater structure. These materials include the following.

- Approximately 420 square feet of black and white floor tile in the barber shop.
- Approximately 260 square feet of floor tile in the second floor hallway adjacent to the offices and in the bathrooms on the second floor.
- Approximately 20 linear feet of piping insulation in the mechanical/electrical room.

Asbestos containing floor coverings and mastic totaling approximately 680 square feet in two distinct areas are in poor condition given the age of the materials. Although these materials are not friable, they are broken, chipped, displaced, and in a state of disrepair, thus necessitating complete remediation. Per The Louisiana Air Quality Regulations (LAC 33:III.Chapter 51. Subchapter M), asbestos containing floor coverings and mastic are classified as a Category I Nonfriable Asbestos-Containing Material and must be abated per this Code by a State of Louisiana Licensed Asbestos Abatement Contractor employing State of Louisiana Accredited Asbestos Workers. Furthermore, State-licensed abatements contractors must comply with OSHA Inspection Procedures for Occupational Exposure to Asbestos Final Rule 29 CFR Parts

1910.1001, 1926.1101, and 1915.1001. Areas containing ACM that require abatement are shown on Figures 4.1 and 4.2.

Approximately 20 linear feet of piping insulation exist in the mechanical/electrical room. This material is in very poor condition and can easily become airborne and requires complete remediation. Per The Louisiana Air Quality Regulations (LAC 33:III.Chapter 51. Subchapter M), piping insulation is classified as Thermal System Insulation (TSI) and must be abated per this Code by a State of Louisiana Licensed Asbestos Abatement Contractor employing State of Louisiana Accredited Asbestos Workers. Furthermore, State-licensed abatements contractors must comply with OSHA Inspection Procedures for Occupational Exposure to Asbestos Final Rule 29 CFR Parts 1910.1001, 1926.1101, and 1915.1001.

Upon successful completion of abatement activities, the concrete substrate underlying the tile flooring in the barber shop and second floor corridor can be replaced with new flooring or stained and scorned to match the planned new décor. The water piping in the mechanical/electrical room can be reinsulated utilizing a non-asbestos containing insulation such as foam, fiberglass or rubber.

4.3 Lead Based Paint

The painted exterior metal entry doors and associated door facings in the Theater were found to contain lead. Since these doors and door facings are not necessarily historically significant, a complete replacement of these fixtures may be favorable in lieu of remediation via sand-blasting or encapsulation due to the cost-prohibitive nature of small-scale lead paint abatement activities. However, if an abatement is chosen, all applicable rules and regulations including those found in the Louisiana Air Quality Regulations (LAC 33:III.Chapter 28) and OSHA Lead in Construction Standard (29 CFR 1926.62) must be abided by utilizing a State of Louisiana Licensed Lead Abatement Contractor employing State of Louisiana Accredited Lead Workers. Areas coated with Lead Based Paint are shown on Figure 4.3.

4.4 Lead in Drinking Water

Water samples collected from the piping system show that potable water in the Theater contain lead concentrations in excess of the SDWA limit of 15 parts per billion (ppb). To reduce the lead concentrations in the potable water to below 15 ppb, remedies include, but are not limited to, the following:

- Onsite treatment/removal of lead prior to consumption and use; or
- Capping-in-place or removal of the existing potable water system and installing a new piping system according to the specifications of future renovation plans and future planned configurations and locations of fixtures and lavatories.

Based on feasibility and cost, considering the planned renovation, the recommended cleanup alternative is removal and replacement the existing potable water system.

4.5 Mold/Microbial Growth

Mold spores are present in most interior building spaces under normal conditions and are usually non-hazardous unless mold spores land on wet or damp surfaces and begin propagating. Breaches in building envelopes often cause wet and damp conditions in building interiors, particularly in humid climates, that facilitate mold and microbial growth. In the case of the Lincoln Theater, there are obvious points of moisture intrusion into the building envelope. Specifically, there are numerous broken windows and window frames across the front of the building along with roof leakage from not only a deteriorating roofing surface but holes from a fallen tree. Furthermore, in humid climates, like those in which the Theater exists, merely a lack of air circulation in a building can support mold growth on rough, porous, and permeable surfaces.

During the February 2011 inspections, Shaw visually confirmed mold/microbial growth on the carpeting, seat cushions, sheetrock, suspended ceiling tiles, HVAC ductwork and areas behind wall coverings (Figures 3.4 and 3.5. Figures 4.4 and 4.5 illustrate the areas of the Theater structure with compromised structural systems allowing the entry of moisture.

Since there are no promulgated regulations/standards for the remediation of mold impacted media, ultimately any decision dealing with impacted media should be based on professional judgment. However, certain measures can be taken to remediate existing mold/microbial growth and deter future growth, as described in the United States Environmental Protection Agency (EPA)-issued guidance document: "Mold Remediation in Schools and Commercial Buildings" (EPA 402-K-01-001) (March 2001. These measures include, but are not limited to, the following:

- Elimination of sources of moisture intrusion;
- Removal and disposal of impacted media;
- Thorough cleaning of non-removable, non-replaceable media with water and suitable antimicrobial detergent followed by desiccation with a functional HVAC system, dehumidifiers, heaters, and/or fans; and
- Maintaining indoor humidity levels below 60% relative humidity by replacing HVAC systems and/or increasing air circulation.

Considering the plans for renovation of the Theater, the recommended cleanup alternative includes a combination of the above methods depending on the specific media. Work should be performed in connection with building renovations to allow for utilization of the new HVAC system for building conditioning after the mold remediation is complete.

5.0 Discussion of Costs

Shaw worked with the architect of record for the Theater renovation, Chenevert Architects (Baton Rouge, Louisiana), to develop a unit-price-based estimate for the remediation of environmental concerns at the Lincoln Theater. As part of the renovation and redevelopment of the Theater, a portion of the costs of the remediation efforts are eligible for EPA Cleanup Grant and Brownfields Revolving Loans Funds (RLF). Remediation elements that are eligible for Grant and/or RLF funding are those that are direct costs associated with the cleanup of a Brownfield site. Generally, the proposed cleanup is eligible since the environmental investigations have confirmed the presence of hazardous substances, pollutants, or contaminants (CERCLA 104(k)). Grant and RLF funding may also be available to partially or fully fund the replacement of certain building components when replacement is either necessary as a direct cleanup expense, favorable in lieu of abatement (on an evaluation cost basis), or necessary to maintain structural and/or environmental integrity after or during cleanup (i.e. a direct cleanup cost). A summary of the costs associated with remedial efforts is presented in Table 5.1 and described below.

Based on our professional opinion and the investigations conducted at the Lincoln Theater, the total estimated direct cleanup cost eligible for CERCLA 104(k) funding is **$259,210**. The components of these costs are discussed below.

5.1 Asbestos

The recommended cleanup strategy for ACM includes the abatement, or removal and disposal, of approximately 687 square feet of asbestos-containing floor tile and associated mastic. The location and estimated quantity are shown on Figures 4.1 and 4.2. A cost estimate for this work was developed using the following assumptions:

- In our experience, removal and disposal of 687 square feet of ACM floor tile should cost approximately $10.00 per square foot after a mobilization/preparation cost of approximately $500, for a total cost of **$7,370**;

- Since the building will be renovated (and not demolished) the ACM tile will be replaced with suitable flooring. Replacement will also serve as an encapsulation of any remaining mastic not removed during abatement. Based on experience and our discussions with the architect, replacement costs are estimated at $4.00 per square foot, for a total cost of **$2,748**.

- Due to the nature of this work we anticipate that 100% of the removal, disposal, and replacement costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for removal, disposal, and replacement is estimated as **$10,118**, refer to items 5.1 and 5.1.A on Table 5.1.

5.2 Mold and Moisture Intrusion

The abatement and prevention of mold/microbial growth includes the removal and disposal of impacted media, the cleaning of non-removable, non-replaceable media, and the elimination of sources of moisture intrusion. The location and estimated quantities of compromised building materials allowing moisture intrusion and mold impacted building materials are shown on Figures 4.5 and 4.8.

5.2.1 Demolition of Mold-Impacted Walls/Wall Coverings

Mold-impacted walls are found throughout the structure. The locations and estimated quantities are shown on Figure 4.7 and Figure 4.8. A cost estimate for this work was developed using the following assumptions:

- 299 linear feet of walls/wall coverings with 10-foot ceilings,
- the unit price of demolition is $2.00 per square foot,
- $500.00 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for demolition is estimated as **$6,480**, refer to item 5.2.1 on Table 5.1.

5.2.2 Replacement of Mold-Impacted Walls/Wall Coverings

Replacement of the mold-impacted walls will be required after removal. A cost estimate for this work was developed using the following assumptions:

- 299 linear feet of walls/wall coverings with 10-foot ceilings,
- the unit price of replacement is $6.00 per square foot,
- $500.00 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for replacement is estimated as **$18,440**, refer to item 5.2 on Table 5.1.

5.2.3 Demolition of Mold-Impacted Ceiling Materials

Mold-impacted ceilings are found throughout the structure. The locations and estimated quantities are shown on Figure 4.7 and Figure 4.8. A cost estimate for this work was developed using the following assumptions:

- 5,225 square feet of ceiling materials,
- the unit price of demolition is $2.00 per square foot,
- $500.00 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for demolition is estimated as **$10,950**, refer to item 5.2.3 on Table 5.1.

5.2.4 Replacement of Mold-Impacted Ceiling Materials in Theater/Auditorium

Replacement of the mold-impacted ceiling in the Theater/Auditorium will be required after removal. A cost estimate for this work was developed using the following assumptions:

- 4,717 square feet of ceiling,
- the unit price of replacement is $9.00 per square foot,
- $500.00 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for replacement is estimated as **$21,476**, refer to item 5.2.4 on Table 5.1.

5.2.5 Replacement of Mold-Impacted Ceiling Materials in Offices and Projector Room

Replacement of the mold-impacted ceiling in the offices and projector room will be required after removal. A cost estimate for this work was developed using the following assumptions:

- 508 square feet of ceiling,
- the unit price of replacement is $4.00 per square foot,
- $500.00 of other costs associated with mobilization and preparation, and

- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for replacement is estimated as **$2,532**, refer to item 5.2.5 on Table 5.1.

5.2.6 Demolition of HVAC Ductwork

The HVAC ductwork is impacted with mold and should be cleaned or replaced. The location and estimated quantity are shown on Figure 4.8. In our experience and professional opinion the cost for demolition and replacement would be less expensive and more effective than cleaning. A cost estimate for this work was developed using the following assumptions:

- 239 linear feet of ductwork,
- plus the addition of 10% (24 linear feet) of connective ductwork to connect to air conditioning unit (air handling unit),
- the unit price of demolition is $5.00 per linear foot,
- $500.00 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for demolition is estimated as **$1,815**, refer to item 5.2.6 on Table 5.1.

5.2.7 Replacement of HVAC Ductwork

A cost estimate for the replacement was developed using the following assumptions:

- 239 linear feet of ductwork,
- plus the addition of 10% (24 linear feet) of connective ductwork to connect to air conditioning unit
- the unit price of replacement is $10.00 per linear foot,
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for replacement is estimated as **$2,629**, refer to item 5.2.7 on Table 5.1.

5.2.8 Removal of Mold-Impacted Carpet in Theater Area and Offices

Mold-impacted carpeting is found throughout the structure. The locations and estimated quantities are shown on Figure 4.7 and Figure 4.8. A cost estimate for this work was developed using the following assumptions:

- 3,162 square feet of carpet,
- the unit price of removal is $2.00 per square foot,
- $500.00 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for removal is estimated as **$6,824**, refer to item 5.2.8 on Table 5.1.

5.2.9 Replacement of Mold-Impacted Carpet

The underlying floor surface is not suitable as flooring so replacement would be required. A cost estimate for this work was developed using the following assumptions:

- 3,162 square feet of carpet,
- the unit price of replacement is $3.33 per square foot,
- $500.00 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for replacement is estimated as $11,040 refer to item 5.2.9 on Table 5.1.

5.2.10 Removal of Mold-Impacted Theater Seats

The fabric and filling in theater seats are mold-impacted as shown on Figure 4.7. It is not feasible to clean or cost effective to remove and replace only the seat cushions. A cost estimate for this work was developed using the following assumptions:

- 516 seats,
- the unit price of removal is $10.00 per seat,
- $500.00 of other costs associated with mobilization and preparation, and

- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for removal is estimated as **$5,660**, refer to item 5.2.10 and on the Table 5.1.

5.2.11 Replacement of Mold-Impacted Theater Seats

A cost estimate for replacement was developed using the following assumptions:

- 516 seats,
- the unit price of replacement of similar type is $250.00 per seat,
- $500.00 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for replacement is estimated as **$64,750**, refer to item 5.2.11on Table 5.1.

5.2.12 Removal of Damaged Windows and Frames

Certain windows are damaged and have allowed water to leak into the building. The locations and estimated quantities are shown on Figure 4.5. Repairs may be possible rather than removal or replacement, but current renovations expect to replace all of the windows with more energy efficient and suitable window. To account for this cost difference the eligible costs have been factored as described below. A cost estimate for this work was developed using the following assumptions:

- 29 window and frames,
- the unit price of removal is $500.00 per window and frame,
- $2,000 of other costs associated with mobilization and preparation, and
- 10% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for removal is estimated as **$1,650**, refer to item 5.2.12 on Table 5.1.

5.2.13 Replacement of Damged Windows and Frames

A cost estimate for this replacement was developed using the following assumptions:

- 29 window and frames,

- the unit price of replacement is $1,500.00 per window and frame,
- $2,000 of other costs associated with mobilization and preparation, and
- 10% of the costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for replacement is estimated as **$4,550**, refer to item 5.2.13 on Table 5.1.

5.2.14 Demolition of Damaged Roof

The roof is damaged and has allowed water to leak into the building. The location and estimated damaged area are shown on Figure 4.6. Repairs may be possible rather than removal or replacement, but current renovation plans include replacement of the entire roof. To account for this cost difference the eligible costs have been factored as described below. A cost estimate for this work was developed using the following assumptions:

- 7,342 square feet of rooftop
- the unit price of demolition is $5.00 per square foot,
- $5,000 of other costs associated with mobilization and preparation, and
- 20% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for demolition is estimated as **$8,342**, refer to item 5.2.14 on Table 5.1.

5.2.15 Replacement of Damaged Roof

A cost estimate for replacement (factored as described above) was developed using the following assumptions:

- 7,342 square feet of rooftop
- the unit price of replacement is $11.00 per square foot, and
- 20% of the costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for replacement is estimated as **$16,152**, refer to item 5.2.15 on Table 5.1.

5.3 Lead Based Paint

The locations of the lead paint coated surfaces are shown on Figure 4.4. The abatement of lead based paint on some of the Theater doors would includes sandblasting of approximately 120 square feet of impacted media. An alternative remedy to sandblasting that was also considered was the removal and replacement of the doors. It was assumed, however, that the cost of the removal and replacement of the doors would exceed that of abatement. Therefore, in our opinion, regardless of the remedy selected, the total estimated eligible costs would be based on the lower cost option, sandblasting, for a total estimated cost of $6,200.00. A cost estimate for this work was developed using the following assumptions:

- the unit price of abatement is $10.00 per square foot,
- $5,000 of other costs associated with mobilization and preparation, and
- 100% of the demolition costs would be deemed eligible cleanup expenses under CERCLA §104(k).

The total cost for abatement is estimated as **$6,200**, refer to item 5.3 on Table 5.1.

5.4 Lead In Drinking Water

The locations of the potable fixtures in the building are shown on Figure 4.2. The abatement of the water piping system and fixtures in the Theater includes the removal of lead-impacted piping and fixtures and the replacement of only the piping system. It was assumed that the cost of new water fixtures is not an eligible cleanup expense. Therefore the costs of 1 urinal at a unit price of $1,100.00, 6 lavatories at a unit price of $1,000.00, and 5 water closets at a unit price of $1,300.00 were deducted from the total of eligible expenses. A cost estimate for this work was developed using the following assumptions:

- a lump sum of $30,000.00 to remove and replace the entire water piping system and fixtures
- less the cost of new fixtures (estimated $13,600); and
- 100% of the costs would deemed eligible cleanup expenses under CERCLA §104(k) with the exception of the replacement of fixtures.

The total cost for replacement is estimated as **$16,400**, refer to item 5.4 on Table 5.1.

5.5 Grant Management

The cost of programmatic grant management is expected to be at least 10% of the cost of the remediation work. Total grant management costs are estimated to be **$21,601**.

5.6 Engineering Oversight

The cost of direct cleanup costs to provide engineering oversight is expected to be 10% of the cost of the remediation work. Total engineering oversight costs are estimated to be **$21,600.84**.

6.0 Conclusion

After sufficient investigations were conducted to identify and quantify environmental impacts to the Lincoln Theater, Shaw met with the Louisiana Black History Hall of Fame and Chenevert Architects to develop a Cleanup Strategy and an Analysis of Brownfields Cleanup Alternatives suitable for the future renovation efforts of the Theater. The cleanup options were evaluated based on cost and practicality and the selected remedies are presented herein.

Based on our professional opinion and the investigations conducted at the Lincoln Theater, the total estimated direct cleanup cost eligible for CERCLA 104(k) funding is **$259,210**.

TABLES

TABLE 3.1
LIMITED ASBESTOS SURVEY SUMMARY TABLE
LINCOLN THEATER
LOUISIANA BLACK HISTORY HALL OF FAME
1305 MYRTLE WALK
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
AGENCY INTEREST NO. 169406

Sample No.	Date Collected	Layer No.	Location	Description	Asbestos Containing (Y/N)	Type of Asbestos	% Asbestos	Method
1	2/9/2009	1	Stage	Black Floor Tile	N	n/a	n/a	EPA600/R-93/116
1	2/9/2009	2	Stage	Tan Mastic	N	n/a	n/a	EPA600/R-93/117
2	2/9/2009	1	Stage	Gray/Black Tile Material	N	n/a	n/a	EPA600/R-93/116
3	2/9/2009	1	Theater Ceiling	Gray Fire Proofing	N	n/a	n/a	EPA600/R-93/116
4	2/9/2009	1	2nd Floor Offices	Tan Floor Tile	Y	Chrysotile	3	EPA600/R-93/116
4	2/9/2009	2	2nd Floor Offices	Black Mastic	Y	Chrysotile	4	EPA600/R-93/117
4	2/9/2009	1	2nd Floor Offices	Tan Floor Tile	Y	Chrysotile	3	EPA600/R-93/118
4	2/9/2009	2	2nd Floor Offices	Black Mastic	Y	Chrysotile	4	EPA600/R-93/119

TABLE 3.2
EXPANDED ASBESTOS SURVEY SUMMARY TABLE
LINCOLN THEATER
LOUISIANA BLACK HISTORY HALL OF FAME
1305 MYRTLE WALK
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
AGENCY INTEREST NO. 169406

Sample ID	Date Collected	Date Analyzed	Lab Sample ID	Location	Description	Result	Asbestos Containing (Y/N)	Type of Asbestos	% Asbestos	Method	Quantity	Condition	Friable (Y/N)	Disturbance Potential
1A	2/15/2011	3/1/2011	041103907-0001	Concession Area	Wall Paper & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
1B	2/15/2011	3/1/2011	041103907-0002	Concession Area	Wall Paper & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
1C	2/15/2011	3/1/2011	041103907-0003	Concession Area	Wall Paper & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
2A	2/15/2011	3/1/2011	041103907-0004	Concession Area	Underside Coating of Sinks	None Detected	No	n/a	n/a	EPA600/R-93/116				
2B	2/15/2011	3/1/2011	041103907-0005	Concession Area	Underside Coating of Sinks	None Detected	No	n/a	n/a	EPA600/R-93/116				
2C	2/15/2011	3/1/2011	041103907-0006	Concession Area	Underside Coating of Sinks	None Detected	No	n/a	n/a	EPA600/R-93/116				
3A	2/15/2011	3/1/2011	041103907-0007	Concession Area	Ceiling Coating & Substrate	None Detected	No	n/a	n/a	EPA600/R-93/116				
3B	2/15/2011	3/1/2011	041103907-0008	Concession Area	Ceiling Coating & Substrate	None Detected	No	n/a	n/a	EPA600/R-93/116				
3C	2/15/2011	3/1/2011	041103907-0009	Concession Area	Ceiling Coating & Substrate	None Detected	No	n/a	n/a	EPA600/R-93/116				
4A	2/15/2011	3/1/2011	041103907-0010	Lobby	Wall Paper & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
4B	2/15/2011	3/1/2011	041103907-0011	Lobby	Wall Paper & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
4C	2/15/2011	3/1/2011	041103907-0012	Lobby	Wall Paper & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
5A	2/15/2011	3/1/2011	041103907-0013	Lobby	Floral Border Wall Paper	None Detected	No	n/a	n/a	EPA600/R-93/116				
5B	2/15/2011	3/1/2011	041103907-0014	Lobby	Floral Border Wall Paper	None Detected	No	n/a	n/a	EPA600/R-93/116				
5C	2/15/2011	3/1/2011	041103907-0015	Lobby	Floral Border Wall Paper	None Detected	No	n/a	n/a	EPA600/R-93/116				
6A	2/15/2011	3/1/2011	041103907-0016	Retail Area	Wall Covering & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
6B	2/15/2011	3/1/2011	041103907-0017	Retail Area	Wall Covering & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
6C	2/15/2011	3/1/2011	041103907-0018	Retail Area	Wall Covering & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
7A	2/15/2011	3/1/2011	041103907-0019	Retail Area	Electrical Panel Partition	None Detected	No	n/a	n/a	EPA600/R-93/116				
7B	2/15/2011	3/1/2011	041103907-0020	Retail Area	Electrical Panel Partition	None Detected	No	n/a	n/a	EPA600/R-93/116				
7C	2/15/2011	3/1/2011	041103907-0021	Retail Area	Electrical Panel Partition	None Detected	No	n/a	n/a	EPA600/R-93/116				
8A	2/15/2011	3/1/2011	041103907-0022	Retail Area Closet	Suspended Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
8B	2/15/2011	3/1/2011	041103907-0023	Retail Area Closet	Suspended Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
8C	2/15/2011	3/1/2011	041103907-0024	Retail Area Closet	Suspended Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
9A	2/15/2011	3/1/2011	041103907-0025	Retail Area Closet	Wall Covering & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
9B	2/15/2011	3/1/2011	041103907-0026	Retail Area Closet	Wall Covering & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
9C	2/15/2011	3/1/2011	041103907-0027	Retail Area Closet	Wall Covering & Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
10A	2/15/2011	3/1/2011	041103907-0028	Retail Area Closet	Wall Board	None Detected	No	n/a	n/a	EPA600/R-93/116				
10B	2/15/2011	3/1/2011	041103907-0029	Retail Area Closet	Wall Board	None Detected	No	n/a	n/a	EPA600/R-93/116				
10C	2/15/2011	3/1/2011	041103907-0030	Retail Area Closet	Wall Board	None Detected	No	n/a	n/a	EPA600/R-93/116				
11A	2/15/2011	3/1/2011	041103907-0031	Concession Area	Outer vertical counter cover	None Detected	No	n/a	n/a	EPA600/R-93/116				
11B	2/15/2011	3/1/2011	041103907-0032	Concession Area	Outer vertical counter cover	None Detected	No	n/a	n/a	EPA600/R-93/116				
11C	2/15/2011	3/1/2011	041103907-0033	Concession Area	Outer vertical counter cover	None Detected	No	n/a	n/a	EPA600/R-93/116				
12A	2/15/2011	3/1/2011	041103907-0034	Concession Area	Countertop	None Detected	No	n/a	n/a	EPA600/R-93/116				
12A	2/15/2011	3/1/2011	041103907-0034A	Concession Area	Countertop Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
12B	2/15/2011	3/1/2011	041103907-0035	Concession Area	Countertop	None Detected	No	n/a	n/a	EPA600/R-93/116				
12B	2/15/2011	3/1/2011	041103907-0035A	Concession Area	Countertop Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
12C	2/15/2011	3/1/2011	041103907-0036	Concession Area	Countertop	None Detected	No	n/a	n/a	EPA600/R-93/116				
12C	2/15/2011	3/1/2011	041103907-0036A	Concession Area	Countertop Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
13A	2/15/2011	3/1/2011	041103907-0037	Barber Shop	Black floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
13A	2/15/2011	3/1/2011	041103907-0037A	Barber Shop	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
13A	2/15/2011	3/1/2011	041103907-0037B	Barber Shop	Red floor tile	Positive	Yes	Chrysotile	3%	EPA600/R-93/116	420 ft^2	Good	No	Low
13B	2/15/2011	3/1/2011	041103907-0038	Barber Shop	Black floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
13B	2/15/2011	3/1/2011	041103907-0038A	Barber Shop	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
13B	2/15/2011	3/1/2011	041103907-0038B	Barber Shop	Tan floor tile	Positive	Yes	Chrysotile	3%	EPA600/R-93/116	420 ft^2	Good	No	Low
13C	2/15/2011	3/1/2011	041103907-0039	Barber Shop	Black floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
13C	2/15/2011	3/1/2011	041103907-0039A	Barber Shop	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
13C	2/15/2011	3/1/2011	041103907-0039B	Barber Shop	Red floor tile	Stop positive	Yes	Chrysotile	N/A	EPA600/R-93/116	420 ft^2	Good	No	Low
14A	2/15/2011	3/1/2011	041103907-0040	Barber shop	White floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
14A	2/15/2011	3/1/2011	041103907-0040A	Barber shop	Tan floor tile	Positive	Yes	Chrysotile	6%	EPA600/R-93/116	420 ft^2	Good	No	Low
14A	2/15/2011	3/1/2011	041103907-0040B	Barber shop	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
14B	2/15/2011	3/1/2011	041103907-0041	Barber shop	White floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
14B	2/15/2011	3/1/2011	041103907-0041A	Barber shop	Tan floor tile	Stop positive	Yes	Chrysotile	N/A	EPA600/R-93/116	420 ft^2	Good	No	Low
14B	2/15/2011	3/1/2011	041103907-0041B	Barber shop	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
14C	2/15/2011	3/1/2011	041103907-0042	Barber shop	White floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
14C	2/15/2011	3/1/2011	041103907-0042A	Barber shop	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
15A	2/15/2011	3/1/2011	041103907-0043	First floor bathrooms and ticket office	Wall Coating	None Detected	No	n/a	n/a	EPA600/R-93/116				
15B	2/15/2011	3/1/2011	041103907-0044	First floor bathrooms and ticket office	Wall Coating	None Detected	No	n/a	n/a	EPA600/R-93/116				
15C	2/15/2011	3/1/2011	041103907-0045	First floor bathrooms and ticket office	Wall Coating	None Detected	No	n/a	n/a	EPA600/R-93/116				
16A	2/15/2011	3/1/2011	041103907-0046	Theater Area	Seat Padding	None Detected	No	n/a	n/a	EPA600/R-93/116				
16B	2/15/2011	3/1/2011	041103907-0047	Theater Area	Seat Padding	None Detected	No	n/a	n/a	EPA600/R-93/116				
16C	2/15/2011	3/1/2011	041103907-0048	Theater Area	Seat Padding	None Detected	No	n/a	n/a	EPA600/R-93/116				
16D	2/15/2011	3/1/2011	041103907-0049	Theater Area	Seat Padding	None Detected	No	n/a	n/a	EPA600/R-93/116				
16E	2/15/2011	3/1/2011	041103907-0050	Theater Area	Seat Padding	None Detected	No	n/a	n/a	EPA600/R-93/116				
17A	2/15/2011	3/1/2011	041103907-0051	Theater Area	Red Carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				

TABLE 3.2
EXPANDED ASBESTOS SURVEY SUMMARY TABLE
LINCOLN THEATER
LOUISIANA BLACK HISTORY HALL OF FAME
1305 MYRTLE WALK
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
AGENCY INTEREST NO. 169406

Sample ID	Date Collected	Date Analyzed	Lab Sample ID	Location	Description	Result	Asbestos Containing (Y/N)	Type of Asbestos	% Asbestos	Method	Quantity	Condition	Friable (Y/N)	Disturbance Potential
17A	2/15/2011	3/1/2011	041103907-0051A	Theater Area	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
17B	2/15/2011	3/1/2011	041103907-0052	Theater Area	Red Carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
17B	2/15/2011	3/1/2011	041103907-0052A	Theater Area	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
17C	2/15/2011	3/1/2011	041103907-0053	Theater Area	Red Carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
17C	2/15/2011	3/1/2011	041103907-0053A	Theater Area	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
17D	2/15/2011	3/1/2011	041103907-0054	Theater Area	Red Carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
17D	2/15/2011	3/1/2011	041103907-0054A	Theater Area	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
17E	2/15/2011	3/1/2011	041103907-0055	Theater Area	Red Carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
17E	2/15/2011	3/1/2011	041103907-0055A	Theater Area	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
18A	2/15/2011	3/1/2011	041103907-0056	Back stage Area	Plaster Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
18A	2/15/2011	3/1/2011	041103907-0056A	Back stage Area	Plaster Ceiling Liner	None Detected	No	n/a	n/a	EPA600/R-93/116				
18B	2/15/2011	3/1/2011	041103907-0057	Back stage Area	Plaster Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
18B	2/15/2011	3/1/2011	041103907-0057A	Back stage Area	Plaster Ceiling Liner	None Detected	No	n/a	n/a	EPA600/R-93/116				
18C	2/15/2011	3/1/2011	041103907-0058	Back stage Area	Plaster Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
18C	2/15/2011	3/1/2011	041103907-0058A	Back stage Area	Plaster Ceiling Liner	None Detected	No	n/a	n/a	EPA600/R-93/116				
19A	2/15/2011	3/1/2011	041103907-0059	Projector room	Suspended Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
19B	2/15/2011	3/1/2011	041103907-0060	Projector room	Suspended Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
19C	2/15/2011	3/1/2011	041103907-0061	Projector room	Suspended Ceiling	None Detected	No	n/a	n/a	EPA600/R-93/116				
20A	2/15/2011	3/1/2011	041103907-0062	Projector room	Ceiling Surfacing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
20B	2/15/2011	3/1/2011	041103907-0063	Projector room	Ceiling Surfacing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
20C	2/15/2011	3/1/2011	041103907-0064	Projector room	Ceiling Surfacing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
21A	2/16/2011	3/1/2011	041103907-0065	Mechanical/electrical room	Water Pipe Insulation	Positive	Yes	Chrysotile	50%	EPA600/R-93/116	20 linear feet	Poor	Yes	High
21B	2/16/2011	3/1/2011	041103907-0066	Mechanical/electrical room	Water Pipe Insulation	Stop positive	Yes	Chrysotile	N/A	EPA600/R-93/116	20 linear feet	Poor	Yes	High
21C	2/16/2011	3/1/2011	041103907-0067	Mechanical/electrical room	Water Pipe Insulation	Stop positive	Yes	Chrysotile	N/A	EPA600/R-93/116	20 linear feet	Poor	Yes	High
22A	2/16/2011	3/1/2011	041103907-0068	Mechanical/electrical room	HVAC External Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
22B	2/16/2011	3/1/2011	041103907-0069	Mechanical/electrical room	HVAC External Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
22C	2/16/2011	3/1/2011	041103907-0070	Mechanical/electrical room	HVAC External Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
23A	2/16/2011	3/1/2011	041103907-0071	Mechanical/electrical room	HVAC Access Panel Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
23B	2/16/2011	3/1/2011	041103907-0072	Mechanical/electrical room	HVAC Access Panel Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
23C	2/16/2011	3/1/2011	041103907-0073	Mechanical/electrical room	HVAC Access Panel Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
24A	2/16/2011	3/1/2011	041103907-0074	Mechanical/electrical room	HVAC Ductwork Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
24B	2/16/2011	3/1/2011	041103907-0075	Mechanical/electrical room	HVAC Ductwork Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
24C	2/16/2011	3/1/2011	041103907-0076	Mechanical/electrical room	HVAC Ductwork Insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
25A	2/16/2011	3/1/2011	041103907-0077	Roof	Roofing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
25B	2/16/2011	3/1/2011	041103907-0078	Roof	Roofing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
25C	2/16/2011	3/1/2011	041103907-0079	Roof	Roofing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
25D	2/16/2011	3/1/2011	041103907-0080	Roof	Roofing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
25E	2/16/2011	3/1/2011	041103907-0081	Roof	Roofing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
25F	2/16/2011	3/1/2011	041103907-0082	Roof	Roofing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
25G	2/16/2011	3/1/2011	041103907-0083	Roof	Roofing Material	None Detected	No	n/a	n/a	EPA600/R-93/116				
26A	2/16/2011	3/1/2011	041103907-0084	Second floor restrooms and landing	Black floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
26A	2/16/2011	3/1/2011	041103907-0084A	Second floor restrooms and landing	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
26B	2/16/2011	3/1/2011	041103907-0085	Second floor restrooms and landing	Black floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
26B	2/16/2011	3/1/2011	041103907-0085A	Second floor restrooms and landing	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
26C	2/16/2011	3/1/2011	041103907-0086	Second floor restrooms and landing	Black floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
26C	2/16/2011	3/1/2011	041103907-0086A	Second floor restrooms and landing	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
27A	2/16/2011	3/1/2011	041103907-0087	Second floor hallway	Black baseBoard	None Detected	No	n/a	n/a	EPA600/R-93/116				
27A	2/16/2011	3/1/2011	041103907-0087A	Second floor hallway	BaseBoard Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
27B	2/16/2011	3/1/2011	041103907-0088	Second floor hallway	Black baseBoard	None Detected	No	n/a	n/a	EPA600/R-93/116				
27B	2/16/2011	3/1/2011	041103907-0088A	Second floor hallway	BaseBoard Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
27C	2/16/2011	3/1/2011	041103907-0089	Second floor hallway	Black baseBoard	None Detected	No	n/a	n/a	EPA600/R-93/116				
27C	2/16/2011	3/1/2011	041103907-0089A	Second floor hallway	BaseBoard Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
27D	2/16/2011	3/1/2011	041103907-0090	Second floor hallway	Black baseBoard	None Detected	No	n/a	n/a	EPA600/R-93/116				
27D	2/16/2011	3/1/2011	041103907-0090A	Second floor hallway	BaseBoard Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
27E	2/16/2011	3/1/2011	041103907-0091	Second floor hallway	Black baseBoard	None Detected	No	n/a	n/a	EPA600/R-93/116				
27E	2/16/2011	3/1/2011	041103907-0091A	Second floor hallway	BaseBoard Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
27F	2/16/2011	3/1/2011	041103907-0092	Second floor hallway	Black baseBoard	None Detected	No	n/a	n/a	EPA600/R-93/116				
27F	2/16/2011	3/1/2011	041103907-0092A	Second floor hallway	BaseBoard Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
27G	2/16/2011	3/1/2011	041103907-0093	Second floor hallway	Black baseBoard	None Detected	No	n/a	n/a	EPA600/R-93/116				
27G	2/16/2011	3/1/2011	041103907-0093A	Second floor hallway	BaseBoard Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
28A	2/16/2011	3/1/2011	041103907-0094	East stairwell	Gray carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
28A	2/16/2011	3/1/2011	041103907-0094A	East stairwell	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
28B	2/16/2011	3/1/2011	041103907-0095	East stairwell	Gray carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
28B	2/16/2011	3/1/2011	041103907-0095A	East stairwell	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
28C	2/16/2011	3/1/2011	041103907-0096	East stairwell	Gray carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
28C	2/16/2011	3/1/2011	041103907-0096A	East stairwell	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				

TABLE 3.2
EXPANDED ASBESTOS SURVEY SUMMARY TABLE
LINCOLN THEATER
LOUISIANA BLACK HISTORY HALL OF FAME
1305 MYRTLE WALK
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
AGENCY INTEREST NO. 169406

Sample ID	Date Collected	Date Analyzed	Lab Sample ID	Location	Description	Result	Asbestos Containing (Y/N)	Type of Asbestos	% Asbestos	Method	Quantity	Condition	Friable (Y/N)	Disturbance Potential
29A	2/16/2011	3/1/2011	041103907-0097	Second floor men's room	Wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
29B	2/16/2011	3/1/2011	041103907-0098	Second floor men's room	Wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
29C	2/16/2011	3/1/2011	041103907-0099	Second floor men's room	Wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
30A	2/16/2011	3/1/2011	041103907-0100	East stairwell	Wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
30B	2/16/2011	3/1/2011	041103907-0101	East stairwell	Wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
30C	2/16/2011	3/1/2011	041103907-0102	East stairwell	Wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
31A	2/16/2011	3/1/2011	041103907-0103	Second floor offices	Vertical strip wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
31B	2/16/2011	3/1/2011	041103907-0104	Second floor offices	Vertical strip wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
31C	2/16/2011	3/1/2011	041103907-0105	Second floor offices	Vertical strip wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
31D	2/16/2011	3/1/2011	041103907-0106	Second floor offices	Vertical strip wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
31E	2/16/2011	3/1/2011	041103907-0107	Second floor offices	Vertical strip wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
32A	2/16/2011	3/1/2011	041103907-0108	Second floor offices	Marbled wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
32B	2/16/2011	3/1/2011	041103907-0109	Second floor offices	Marbled wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
32C	2/16/2011	3/1/2011	041103907-0110	Second floor offices	Marbled wall covering	None Detected	No	n/a	n/a	EPA600/R-93/116				
33A	2/16/2011	3/1/2011	041103907-0111	Second floor exterior	Window caulking	None Detected	No	n/a	n/a	EPA600/R-93/116				
33B	2/16/2011	3/1/2011	041103907-0112	Second floor exterior	Window caulking	None Detected	No	n/a	n/a	EPA600/R-93/116				
33C	2/16/2011	3/1/2011	041103907-0113	Second floor exterior	Window caulking	None Detected	No	n/a	n/a	EPA600/R-93/116				
34A	2/16/2011	3/1/2011	041103907-0114	Second floor offices	Blue carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
34A	2/16/2011	3/1/2011	041103907-0114A	Second floor offices	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
34B	2/16/2011	3/1/2011	041103907-0115	Second floor offices	Blue carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
34B	2/16/2011	3/1/2011	041103907-0115A	Second floor offices	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
34C	2/16/2011	3/1/2011	041103907-0116	Second floor offices	Blue carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
34C	2/16/2011	3/1/2011	041103907-0116A	Second floor offices	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
35A	2/16/2011	3/1/2011	041103907-0117	Second floor offices	Gray carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
35A	2/16/2011	3/1/2011	041103907-0117A	Second floor offices	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
35B	2/16/2011	3/1/2011	041103907-0118	Second floor offices	Gray carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
35B	2/16/2011	3/1/2011	041103907-0118A	Second floor offices	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
35C	2/16/2011	3/1/2011	041103907-0119	Second floor offices	Gray carpet	None Detected	No	n/a	n/a	EPA600/R-93/116				
35C	2/16/2011	3/1/2011	041103907-0119A	Second floor offices	Carpet Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
36A	2/16/2011	3/1/2011	041103907-0120	Second floor HVAC ductwork	HVAC insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
36B	2/16/2011	3/1/2011	041103907-0121	Second floor HVAC ductwork	HVAC insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
36C	2/16/2011	3/1/2011	041103907-0122	Second floor HVAC ductwork	HVAC insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
36D	2/16/2011	3/1/2011	041103907-0123	Second floor HVAC ductwork	HVAC insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
36E	2/16/2011	3/1/2011	041103907-0124	Second floor HVAC ductwork	HVAC insulation	None Detected	No	n/a	n/a	EPA600/R-93/116				
37A	2/16/2011	3/1/2011	041103907-0124A	Retail Area Closet	Tan floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
37A	2/16/2011	3/1/2011	041103907-0124B	Retail Area Closet	Floor leveler	None Detected	No	n/a	n/a	EPA600/R-93/116				
37B	2/16/2011	3/1/2011	041103907-0124C	Retail Area Closet	Tan Floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
37B	2/16/2011	3/1/2011	041103907-0124D	Retail Area Closet	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				
37C	2/16/2011	3/1/2011	041103907-0124E	Retail Area Closet	Tan floor tile	None Detected	No	n/a	n/a	EPA600/R-93/116				
37C	2/16/2011	3/1/2011	041103907-0124F	Retail Area Closet	Floor leveler	None Detected	No	n/a	n/a	EPA600/R-93/116				
37C	2/16/2011	3/1/2011	041103907-0124G	Retail Area Closet	Floor tile Mastic	None Detected	No	n/a	n/a	EPA600/R-93/116				

TABLE 3.3
LEAD BASED PAINT INSPECTION SUMMARY TABLE
LINCOLN THEATER
LOUISIANA BLACK HISTORY HALL OF FAME
1305 MYRTLE WALK
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
AGENCY INTEREST NO. 169406

Reading No.	Date Analyzed	Room No.	Room Name	Wall	Structure	Location	Member	Paint Condition	Substrate	Color	Lead (mg/cm2)	Mode
1	2/9/2009	n/a	Calibration	N/A	N/A	N/A	N/A	I	N/A	N/A	0.9	TC
2	2/9/2009	n/a	Calibration	N/A	N/A	N/A	N/A	I	N/A	N/A	0.9	TC
3	2/9/2009	n/a	Calibration	N/A	N/A	N/A	N/A	I	N/A	N/A	1.1	TC
4	2/9/2009	001	Building 1	A	Wall	Right	N/A	I	N/A	N/A	-0.1	QM
5	2/9/2009	001	Building 1	A	Wall	Right	N/A	I	Brick	Red	0.0	QM
6	2/9/2009	001	Building 1	A	Wall	Right	N/A	I	Brick	White	-0.1	QM
7	2/9/2009	001	Building 1	A	Door	Right	Door Facing	I	Metal	White	1.1	QM
8	2/9/2009	001	Building 1	A	Door	Right	Left Casing	I	Metal	White	1.1	QM
9	2/9/2009	001	Building 1	A	Wall	Center	Panel	I	Wood	White	0.1	QM
10	2/9/2009	001	Building 1	A	Wall	Center	Panel Trim	I	Wood	White	-0.2	QM
11	2/9/2009	001	Building 1	A	Wall	Center	Gutter	I	Wood	Tan	-0.1	QM
12	2/9/2009	001	Building 1	A	Wall	Center	Gutter	I	Wood	White	0.0	QM
13	2/9/2009	001	Building 1	B	Wall	Right	N/A	I	Brick	Tan	-0.1	QM
14	2/9/2009	001	Building 1	B	Wall	Right	Panel	I	Wood	Tan	0.0	QM
15	2/9/2009	001	Building 1	B	Wall	Right	Panel Trim	I	Wood	White	-0.1	QM
16	2/9/2009	001	Building 1	B	Door	Right	Door Facing	I	Wood	White	0.1	QM
17	2/9/2009	001	Building 1	B	Door	Right	Left Casing	I	Wood	White	0.1	QM
18	2/9/2009	001	Building 1	B	Door	Right	Right Casing	I	Wood	White	2.3	QM
19	2/9/2009	001	Building 1	C	Wall	Right	N/A	I	Brick	White	-0.4	QM
20	2/9/2009	001	Building 1	D	Wall	Right	N/A	I	Brick	Tan	0.2	QM
21	2/9/2009	001	Entry	D	Wall	Right	Gutter	I	Metal	Tan	-0.1	QM
22	2/9/2009	001	Entry	A	Wall	Center	N/A	I	Drywall	White	0.0	QM
23	2/9/2009	001	Entry	B	Wall	Center	N/A	I	Drywall	Tan	0.1	QM
24	2/9/2009	001	Entry	A	Ceiling	N/A	N/A	I	Drywall	White	0.0	QM
25	2/9/2009	001	Entry	A	Baseboard	Center	N/A	I	Wood	White	0.1	QM
26	2/9/2009	001	Entry	B	Door Face	Right	N/A	I	Wood	White	0.0	QM
27	2/9/2009	001	Snack Bar	B	Door	Right	Left Casing	I	Wood	White	1.1	QM
28	2/9/2009	002	Snack Bar	A	Ceiling	N/A	N/A	I	Drywall	White	-0.1	QM
29	2/9/2009	002	Snack Bar	A	Baseboard	Center	N/A	I	Wood	White	-0.1	QM
30	2/9/2009	002	Snack Bar	A	Wall	Center	N/A	I	Drywall	Red	-0.1	QM
31	2/9/2009	002	Snack Bar	B	Wall	Center	N/A	I	Drywall	Red	-0.1	QM
32	2/9/2009	002	Snack Bar	C	Wall	Center	N/A	I	Stucco	Red	0.1	QM
33	2/9/2009	002	Snack Bar	A	Counter Shelf	Center	N/A	I	Wood	White	0.2	QM
34	2/9/2009	002	Snack Bar	D	Counter Shelf	Center	N/A	I	Wood	White	-0.1	QM
35	2/9/2009	002	Snack Bar	D	Trim	Center	N/A	I	Wood	Red	-0.2	QM
36	2/9/2009	003	Mens Bathroom	B	Wall	Center	N/A	I	Stucco	White	0.0	QM
37	2/9/2009	003	Mens Bathroom	C	Wall	Center	N/A	I	Stucco	White	0.4	QM
38	2/9/2009	003	Mens Bathroom	A	AC Vents	Right	N/A	I	Metal	White	0.0	QM
39	2/9/2009	004	Barber shop	A	Ceiling	Center	N/A	I	Drywall	White	-0.3	QM
40	2/9/2009	004	Barber shop	A	Wall	Center	N/A	I	Stucco	White	-0.1	QM
41	2/9/2009	004	Barber shop	B	Wall	Center	N/A	I	Stucco	White	-0.1	QM

TABLE 3.3
LEAD BASED PAINT INSPECTION SUMMARY TABLE
LINCOLN THEATER
LOUISIANA BLACK HISTORY HALL OF FAME
1305 MYRTLE WALK
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
AGENCY INTEREST NO. 169406

Reading No.	Date Analyzed	Room No.	Room Name	Wall	Structure	Location	Member	Paint Condition	Substrate	Color	Lead (mg/cm^2)	Mode
42	2/9/2009	004	Barber shop	C	Wall	Center	N/A	I	Stucco	White	0.2	QM
43	2/9/2009	004	Barber shop	D	Wall	Center	N/A	I	Stucco	White	0.2	QM
44	2/9/2009	004	Barber shop	A	Wall	Center	N/A	I	Stucco	White	-0.1	QM
45	2/9/2009	004	Barber shop	A	Door Face	Center	N/A	I	Wood	Black	0.4	QM
46	2/9/2009	004	Barber shop	A	Door	Center	Left Casing	I	Wood	Black	0.0	QM
47	2/9/2009	004	Barber shop	A	Door Face	Center	N/A	I	Wood	Black	0.5	QM
48	2/9/2009	004	Barber shop	A	Door	Left	Left Casing	P	Wood	Black	0.6	QM
49	2/9/2009	005	Ladies Bathroom	A	Window	Left	Left Casing	P	Stucco	White	0.3	QM
50	2/9/2009	006	Office 5	A	Window	Left	Left Casing	P	Stucco	White	-0.1	QM
51	2/9/2009	007	Theater	C	Window	Center	Left Casing	I	Stucco	White	-0.1	QM
52	2/9/2009	008	Theater	A	Wall	Center	N/A	I	Stucco	White	0.2	QM
53	2/9/2009	008	Theater	A	Wall	Center	N/A	I	Stucco	Red	0.6	QM
54	2/9/2009	008	Theater	B	Wall	Center	N/A	I	Stucco	White	0.2	QM
55	2/9/2009	008	Theater	B	Wall	Center	N/A	I	Stucco	Red	0.1	QM
56	2/9/2009	008	Theater	C	Door	Left	Door Facing	I	Metal	White	0.6	QM
57	2/9/2009	009	Theater	C	Door	Left	Left Casing	I	Wood	White	0.5	QM
58	2/9/2009	008	Theater	C	Door	Right	Door Facing	I	Metal	White	0.7	QM
59	2/9/2009	008	Theater	C	Door	Right	Left Casing	I	Wood	White	0.6	QM
60	2/9/2009	008	Calibration	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.1	TC
61	2/9/2009	008	Calibration	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.1	TC
62	2/9/2009	008	Calibration	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.1	TC

RF Type Analyzer (Serial No. 1387)

TABLE 3.4
LEAD IN WATER SUMMARY TABLE
LINCOLN THEATER
LOUISIANA BLACK HISTORY HALL OF FAME
1305 MYRTLE WALK
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
AGENCY INTEREST NO. 169406

Sample No.	Sample Location	Cut/Draw No.	Date Collected	Date Analyzed	Lead Concentration
W-1-A	Barber Shop Drinking Fountain	1	2/10/2009	2/16/2009	310 ppb
W-2-A	Barber Shop Drinking Fountain	2	2/10/2009	2/16/2009	98 ppb
W-3-A	Barber Shop Drinking Fountain	3	2/10/2009	2/16/2009	23 ppb
W-4-A	Barber Shop Drinking Fountain	4	2/10/2009	2/16/2009	7.3 ppb
W-1-B	Snack Bar Sink	1	2/10/2009	2/16/2009	65 ppb
W-2-B	Snack Bar Sink	2	2/10/2009	2/16/2009	43 ppb
W-3-B	Snack Bar Sink	3	2/10/2009	2/16/2009	21 ppb
W-4-B	Snack Bar Sink	4	2/10/2009	2/16/2009	61 ppb

Lead in water analyzed by Furnace AAS (EPA Method 200.9)
Safe Drinking Water Act (SDWA) limit of 15 parts per billon (ppb)

TABLE 5.1
SUMMARY OF CLEAN-UP COST ESTIMATE TABLE
LINCOLN THEATER
LOUISIANA BLACK HISTORY HALL OF FAME
1305 MYRTLE WALK
BATON ROUGE, EAST BATON ROUGE PARISH, LOUISIANA
AGENCY INTEREST NO. 169406

ID	Element of Cost	Comments	Estimated Quantity	Unit of Measure	Estimated Unit Price	Mob/Surcharge	Total Estimate	Percent Eligible	Eligible Cost
5.1	Removal of Asbestos Floor Tiles	Second floor corridor and barber shop	687	sq ft	$ 10	$ 500	$ 7,370	100%	$ 7,370.00
5.1.A	Replacement Flooring (Stained Concrete)	Second floor corridor and barber shop	687	sq ft	$ 4	$ -	$ 2,748	100%	$ 2,748.00
5.2.1	Demolition of Mold Impacted Walls/Wall Coverings	Assuming 299 linear feet of 10 foot walls	2,990	sq ft	$ 2	$ 500	$ 6,480	100%	$ 6,480.00
5.2.2	Replacement of Ddemolished Mold Impacted Walls/Wall Coverings (without paint)		2,990	sq ft	$ 6	$ 500	$ 18,440	100%	$ 18,440.00
5.2.3	Demolition of Mold Impacted Ceiling Materials		5,225	sq ft	$ 2	$ 500	$ 10,950	100%	$ 10,950.00
5.2.4	Replacement of Demolished of Mold Impacted Ceiling Materials in Theater/Auditorium		4,717	sq ft	$ 9	$ 500	$ 42,953	50%	$ 21,476.50
5.2.5	Replacement of Demolished of Mold Impacted Ceiling Materials in Offices and Projector Room		508	sq ft	$ 4	$ 500	$ 2,532	100%	$ 2,532.00
5.2.6	Demolition of Mold Impacted HVAC Ductwork	Inlcudes 10% addition for ductwork that connects to A/C unit (239 lf plus 10%).	263	linear feet	$ 5	$ 500	$ 1,815	100%	$ 1,814.50
5.2.7	Replacement of Demolished Mold Impacted HVAC Ductwork		263	linear feet	$ 10	$ -	$ 2,629	100%	$ 2,629.00
5.2.8	Removal of Mold Impacted Carpet in Theater Area and Offices	Disinfection of surfaces required prior to completion of work.	3,162	sq ft	$ 2	$ 500	$ 6,824	100%	$ 6,824.00
5.2.9	Replacement of Mold Impacted Carpet in Theater Area and Offices		3,162	sq ft	$ 3.33	$ 500	$ 11,040	100%	$ 11,040.00
5.2.10	Removal of Mold Impacted Theater Seat Cushions		516	Each	$ 10	$ 500	$ 5,660	100%	$ 5,660.00
5.2.11	Replacement of Mold Impacted Theater Seat Cushions		516	Each	$ 250	$ 500	$ 129,500	50%	$ 64,750.00
5.2.12	Removal of Damaged Windows and Frames	Broken windows requiring replacement to prevent water intrusion.	29	Each	$ 500	$ 2,000	$ 16,500	10%	$ 1,650.00
5.2.13	Replacement of Damaged Windows and Frames	Broken windows requiring replacement to prevent water intrusion.	29	Each	$ 1,500	$ 2,000	$ 45,500	10%	$ 4,550.00
5.2.14	Demolition of Damaged Roof	Repair of damaged roof to prevent water intrusion.	7,342	sq ft	$ 5	$ 5,000	$ 41,710	20%	$ 8,342.00
5.2.15	Replacement of Damaged Roof	Repair of damaged roof to prevent water intrusion.	7,342	sq ft	$ 11	$ -	$ 80,762	20%	$ 16,152.40
5.3	Abatement (e.g. sandblasting) of Lead Paint	Doors and door frames	120	sq ft	$ 10	$ 5,000	$ 6,200	100%	$ 6,200.00
5.4	Removal & Replacement of Lead Impacted Piping	Lump sum less cost of replacement fixtures (approx. $13,600)	1	lump sum	-	$ 30,000	$ 16,400	100%	$ 16,400.00
						Subtotal	$ 456,012.50		$ 216,008.40
						Grant Management	$ 45,601.25		$ 21,600.84
						Engineering Oversight	$ 45,601.25		$ 21,600.84
							$ 547,215.00		$ 259,210.08