Appendix M

Hazardous, Toxic, and Radioactive Waste Initial Assessment Documentation

A Summary of the HTRW Initial Assessment Documentation is listed below. Additional technical information and data is on file and available on request.

LCA White Ditch Mississippi River Delta, Louisiana HTRW Initial Assessment (IA) Documentation Prepared by ARDL, Inc. Revised 24 February 2010

8.0 ASSESSMENT FINDINGS

8.1 Summary of Results

ARIDL, Inc., has performed HTRW Initial Assessment documentation for the restoration project to implement a medium diversion at White Ditch in conformance with the scope and limitations of ASTM Practice 1527-05. Exceptions to or deletions from this practice are documented in Section 9.0 of this report. This assessment has revealed no evidence of Recognized Environmental Conditions in connection with the property, except for the following:

- 1. Oil/gas pipeline running through target area
- 2. Oil/gas wells within target boundary and adjoining properties
- 3. Presence of sunken boats in canals within target boundary
- 4. Presence of Petroleum Refining Facility on property within 1 mile of target area
- 5. Presence of ASTs on adjacent property
- 6. Maritime transportation traffic in nearby Mississippi River

8.2 Risk Assessment

The environmental professionals who have conducted the site visit and reviewed the results of the data collection effort have concluded that the following are "Recognized Environmental Conditions" which may have the following range of qualitative impacts on the soil and water resources on the subject properties. It is the responsibility of the user of this report, based on his or her risk tolerance, fiduciary responsibility or the applicable law, to determine the extent of further inquiry.

Recognized Environmental Condition	Potential Environmental Impact
Oil/gas pipeline within target area	Low to Moderate
Oil/gas wells within target area and adjacent property	Low to Moderate
Sunken boats in canals	Low
Presence of refinery within 1 mile of target area	Low to Moderate
ASTs on Adjacent property	Low
Maritime transportation traffic on Mississippi River	Low

8.3 Recommendations

Based upon the data reviewed and observations made within the immediate target area, no further environmental actions are warranted at this time. There was evidence of RECs within the target area as stated in Section 8.1.

According to information collected for this EA, the presence of at least one known pipeline is located within the project target area. A ConocoPhillips pipeline enters the target area from the west, trends to the northeast, and then turns due north towards Lake Borne. Other unreported pipelines are located within the target area, as evidenced by topographic map review and the presence of access canals. The reported oil/gas pipeline poses a low risk of environmental impact on the subject property, as long as the pipeline operates in a secure and environmentally compliant manner. Any reported incident would be required to be fully remediated by the responsible oil and gas well operators/owners as mandated by state and Federal regulations. No such incidents have been reported within or in close proximity to the project area.

The oil and gas wells pose a low risk of environmental impact on the subject property. Any reported incident would be required to be fully remediated by the responsible oil and gas well operators/owners as mandated by state and Federal regulations. No such incidents have been reported within or in close proximity to the project area.

The sunken boats present in the canals within the target property may have potential environmental impact due to the presence of unused or leaking diesel fuel on board. Any accidental release, leak, or rupture would be considered an REC. However, in the event that this should occur, the incident would be fully remediated by the responsible parties, Louisiana Department of Environmental Quality, or the U.S. Coast Guard, according to state and Federal regulations.

The ConocoPhillips refinery located west of the Mississippi River and west of the target areas may have potential environmental impact due to the presence of large capacity ASTs, treatment ponds and other known environmental waste streams. During the course of this BA, no major violations, environmental liens or pending litigation could be found concerning this facility. Although the ConocoPhillips refinery has the potential to be a major REC, research conducted for the purpose of this BA found the refinery to be operating in compliance with state and Federal guidelines. Any accidental release, leak, or rupture would be considered an REC. However, in the event that this should occur, the incident would be fully remediated by ConocoPhillips, other possible responsible parties, Louisiana Department of Environmental Quality, or the U.S. Coast Guard according to state and Federal regulations. Because of the potential for the ConocoPhillips refinery to be a future REC, this facility is considered to be a low to moderate risk.

Aboveground tanks can pose an environmental hazard due to possible leakage, spills or ruptures. The ASTs mentioned by individuals interviewed were also observed during the site visit at the pumping station off of Belair Pump Road. No containment structures were observed around the tanks; thus any leakage, spill or rupture could environmentally impact the surrounding area. Since the tanks appeared to be in proper working order and no spills had been reported, the assignment of low level impact was assigned to this REC.

The maritime barge traffic on the Mississippi River poses a low risk of environmental impact to the subject property. Any reported incident which may occur would be required to be fully remediated by the responsible barge line or U.S. Coast Guard, as mandated by state and Federal regulations.

9.0 LIMITATIONS AND DATA GAPS

9.1 Purpose

The purpose of this report was to assess the physical characteristics of the subject site with respect to the presence in the environment of hazardous waste or material, oil, or petroleum products according to ASTME 1527-05 and 1528.

No specific attempt was made to check on the compliance of present or past owners or operators of the site with Federal, state, or local laws and regulations, environmental or otherwise. Non-ASTM scope issues (i.e., asbestos, lead-based paint, etc.) were not addressed.

The scope of this assessment did not include any additional environmental investigation, which were not outlined herein, or any analysis for the presence or absence of hazardous or toxic materials in the soil, groundwater, surface water, air, in, on, under or above the subject tract.

Specifically, ARDL, Inc., does not and cannot represent that the site contains no hazardous waste or material, oil (including petroleum products), or other latent condition beyond that observed by ARDL, Inc., during its site assessment.

The observations described in this report were made under the conditions stated therein. The conclusions and data presented in the report were based solely upon the services of the time and budgetary constraints imposed by the client. Furthermore, such conclusions are based solely on the site condition, and the rules and regulations in effect, at the time of the study. The findings and conclusions stated herein must be considered not as scientific certainties, but rather as professional opinions regarding the limited data obtained during the course of the environmental site assessment. No other warranty, expressed or implied, is made.

In preparing this report, ARDL, Inc., relied on certain information provided by Federal, state or local officials and other parties referenced therein, and on information contained in the files of Federal, state or local agencies at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, an attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment was not made.

Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the site or to structures on the site was unavailable or limited, ARDL, Inc., renders no opinion as to the presence of indirect evidence relating to hazardous waste or material, oil, or other petroleum products in that section of the site or structure. In addition, ARDL, Inc., renders no opinion as to the presence of hazardous waste or material, oil or other petroleum products or to the presence of indirect evidence relating to hazardous material, oil, or petroleum products where direct observation of the interior walls, roof, or ceiling of a structure on a site was obstructed by objects or coverings on or over these surfaces.

Unless otherwise specified in the report, ARDL, Inc., did not perform testing or analyses to determine the presence or concentration of asbestos, radon, formaldehyde, lead-based paint, lead in drinking water, electromagnetic fields (EMFs) or polychlorinated biphenyls (PCBs) at the site or in the environment at the site.

The ASTM standard requires that the history of the subject property be traced from the present back to when the property first contained structures or was used for residential, commercial, industrial or governmental purposes. This requires the investigator to review sources that are *publicly available, within a reasonable time and cost, reasonably ascertainable and considered practically reviewable*, as defined under the ASTM standard. In addition, these criteria are applied keeping in mind sources that are likely to provide information concerning possible recognized environmental conditions at the subject property. ARDL, Inc., has reviewed all sources of information that are considered to meet these criteria. in cases where history of the property is not traced to a prior or its first developed use, this condition is considered to be a *data gap*, and not an exception to the required scope of work.

In addition, the ASTM standard does not require a search interval of less than 5 years. This search interval is not guaranteed to identify all prior tenants or occupants of the subject property.

9.2 The Degree of Obviousness of the Presence or Likely Presence of Contamination

(a) Persons to whom this part is applicable per 40 CFR§312.1(b) and environmental professionals conducting an inquiry of a property on behalf of such persons must take into account the information collected under §312.23 through 312.30 (historical information, interviews, records search) in considering the degree of obviousness of the presence of releases or threatened releases at the subject property. (b) Persons to whom this part is applicable per §312.1(b) and environmental professionals conducting an inquiry of a property on behalf of such persons must take into account the information collected under §312.23 through 312.30 in considering the ability to detect contamination by appropriate investigation. The inquiry of the environmental professional should include an opinion regarding additional appropriate investigation, if any.

Property Name and Address	Pertinent Information
White Ditch	Property has concerns as to the obvious presence or likely presence of contamination
	as a finding of this investigation.

Environmental Recommendation for Further Action

This Phase I ESA did identify Recognized Environmental Conditions (RECs) associated with the Property.

9.3 Data Gaps

Resource	Pertinent Information	
Neighboring owners Interviews	Multiple attempts, no response within time constraints.	
Owner interview	Multiple attempts, no response.	
City directories	Property not listed.	
Public Health Specialist, Plaquemines Parish, LA	Multiple attempts, no response within time constraints.	
U.S. Department of Transportation, Pipelines Information	Multiple attempts, no response within time constraints.	
Various Plaquemines Parish Agencies Information Request Form	Multiple attempts, no response within time constraints.	
Purchase price comparison, if property was found to be environmentally	Not supplied by User to the Environmental Professional.	
impacted	Property was not found to be environmentally impacted to an extent that the fair market value of the property would be adversely	

affected.

Data Gaps

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