Phase I Environmental Site Assessment
ABC Properties, LLC Facility

123 ABC Ave
XXXXXX, Maryland 21226

Prepared for:

XXXXX Holdings, Inc.

Prepared by:

HDR Engineering, Inc.
701 Xenia Ave S, Suite 600
Minneapolis, MN 55416
89039-164

September 8, 2008

September 8, 2008

XXXXXXX
Vice President Engineering and Operations
XXX Holdings, Inc.

Re: Former General Chemical Property- 123 ABC Ave
Phase I Environmental Site Assessment Report Submittal

Dear Mr. Cherry:

We are pleased to provide you with the above-referenced *Phase I Environmental Site Assessment* (ESA) report. The attached report presents our methodology, findings, opinions, conclusions, and recommendations regarding environmental conditions at the project site.

HDR appreciates the opportunity to serve XXX Holdings, Inc. on this important project. If you have any questions or comments, please feel free to contact Hong Spores at 763-278-5907 or Jim Booty at 763-591-5471.

Cordially,

HDR Engineering, Inc.

Hong T. Spores
Hydrogeologist

Kelly W. Kading CPG CHMM
Senior Professional Associate

Distribution: Electronic Copy

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List of Acronyms

AIRS	Aerometric Information Retrieval System
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CORRACTS	Corrective Action Report
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FINDS	Facility Index System
FRDS	Federal Reporting Data System
FURS	Federal Underground Injection Control
HWS Permit	Active TSD facilities
LUST	leaking underground storage tank
MINES	Mines Master Index File
NFRAP	No Further Remedial Action Planned
NPL	National Priority List
NWI	National Wetlands Inventory
RCRA	Resource Conservation and Recovery Act
RCRIS LQG	Resource Conservation and Recovery Information System Large Quantity Generators
RCRIS SQG	Resource Conservation and Recovery Information System Small Quantity Generators
RCRIS TSD	Resource Conservation and Recovery Information System Treatment, Storage, and Disposal
REC	Recognized Environmental Condition
SI	Site Inspection
Spills	Spills Database
SRP	Site Remediation Program
SWF/LF	Solid Waste Facilities/Landfill
TSCA	Toxic Substances Control Act
USGS	United States Geological Survey
UST	underground storage tank

Note: A more complete acronym list is located in the EDR Report, Appendix C.

Executive Summary

HDR Engineering, Inc. (HDR) has conducted a Phase I Environmental Site Assessment (ESA) of the proposed lease areas for the XXX Holdings, Inc. (XXX) operations at the ABC Properties, LLC (ABC) Property located at 123 ABC Ave in Springfield, Maryland. XXX is proposing to lease the land for the storage and emulsification of plant-based oils for the production of biofuels.

The proposed leased areas, hereto referred to as the Project Area, include two non-contiguous parcels and a narrow pipeline corridor connecting these parcels located on the ABC Property. The northern parcel is irregularly shaped and approximately 0.9 acres in size. Three interconnected small buildings, a brick structure housing an electrical substation, and a large above ground storage tank (AST) are located on this parcel. The pipeline corridor runs from this parcel directly south along an inactive railroad spur to the waterfront, where it proceeds to the west and follows the shoreline approximately 1050 feet to the south parcel. The south parcel is also irregularly shaped and approximately 1.7 acres in size. Six ASTs of varying size and construction are located on this parcel. Please refer to the Site Location Map and Site Layout (Figures 1 and 2, respectively) for further detail.

Land use in the surrounding area is mainly industrial with a mix of residential and commercial businesses. The remainder of the ABC Property is utilized for petroleum product recycling (mainly used oil and anti-freeze) and agricultural storage. The properties to the north of the Project Area and ABC Property include auto part salvage, auto repair, chemical storage/manufacturing, plating, steel yards and recycling operations. To the east is an inactive, former industrial parcel owned by XXX. South of the Project Area is AAA Bay and Hess Oil (across the bay). To the west across ABC Ave are a former landfill site, commercial businesses, and a rendering facility.

According to HDR's review of historical sources, including historical aerial photographs, city telephone directories, fire insurance maps, personal interviews, regulatory file reviews, and former site investigations, the Project Area has developed since the late 1800s for industrial purposes.

This Phase I ESA identifies Recognized Environmental Conditions (RECs) for the Project Area that may adversely affect the proposed site use activities intended by XXX. This ESA was conducted in accordance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E 1527-05. This Phase I ESA includes a summary of the site reconnaissance conducted on August 25 and 26, 2008, a review of environmental databases, a review of historical data sources, and personal interviews. Any exceptions to or deletions from these ASTM practices are described later in this report.

HDR personnel observed the following recognized environmental conditions (RECs), as defined in ASTM Practice E 1527-05, in connection with the Project Area. HDR offers the following description of these conditions as follows:

- Documented exceedances of the EPA non-residential cleanup standards in soil for arsenic, lead, mercury, and designated SVOCs within or in the vicinity of the Project Area.
- Documented detections and elevated concentrations of RCRA metals, PCBs, and pesticides within or in the vicinity of the Project Area.
- Historic land use and adjacent land use relating to documented industrial activities may have resulted in additional impacts to the soil and groundwater

that have not been identified in previous investigations.

- Adjacent properties with documented environmental contamination and industrial practices with associated hazardous materials are located up gradient of the Project Area. These properties have the potential to contaminate the Project Area through migration of contaminated groundwater.
- Likely presence of asbestos and lead-based paint in the improvements at the Project Area, based upon observations by the assessors and the age and construction materials of the onsite structures and tanks.
- The conditions observed surrounding the 100,000-gallon AST in the northern parcel indicate a possible leak of anti-freeze to the underlying soil and groundwater.
- The uncontrolled storage of petroleum products and poor housekeeping practices of the CCC Oil operations located directly adjacent to the Project Area poses a material threat of release that could potentially impact the Project Area.

Based on the RECs that were identified in connection with the Project Area, HDR has concluded that the risk of encountering contamination is high, if subsurface activities were to occur within the Project Area. Because of this conclusion, HDR makes the following recommendations.

1. That XXX avoid soil and groundwater disturbance during construction activities to rehabilitate the Project Area for commercial use. If soil or groundwater disturbance is necessary, HDR recommends that XXX develop a Contingency Plan to deal with the characterization and proper disposal of contaminated materials disturbed during construction. If extensive ground disturbance is planned, a targeted drilling and sampling program (with input from the Maryland Department of the Environment) should be completed to characterize the subsurface prior to disturbance.

2. Based on the age of the facility and its infrastructure, HDR recommends an asbestos and lead survey be conducted by a licensed professional prior to any rehabilitation of the existing tanks, pipelines, and structures located in the Project Area.

3. That XXX work with the existing landowner to address issues regarding the poor housekeeping practices noted on the remaining ABC property and the need to store petroleum products in accordance with applicable laws and regulations.

4. Sample(s) should be collected for laboratory analysis from the pile of orange material removed from the former acid tanks. The material should be disposed of in accordance with applicable laws and regulations if the pile contains materials requiring special handling and disposal.

5. Determine if Polychlorinated Biphenyl (PCB)-containing equipment is located in the Project Area (i.e. electrical transformers in the substation) and remove and dispose of them in accordance with applicable laws and regulations.

6. Remove and properly dispose of spilled materials and impacted soils noted in the Project Area and described in the body of the report.

7. Carefully inspect observed cracks in the 100,000-gallon AST containment basin and determine if anti-freeze may have leaked to the ground below. The containment basin should be rehabilitation to applicable standards prior to use of the AST by XXX.

1.0 Introduction

1.1 Purpose and Involved Parties

This Phase I ESA documents the evaluation of the Project Area for indications of "recognized environmental conditions." A recognized environmental condition (REC) is defined by ASTM Practice E 1527-05 as: "The presence or likely presence of any hazardous substances or petroleum products on a project site under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the project site or into the ground, groundwater, or surface water of the project site. The term includes hazardous substances or petroleum products even under conditions of storage and use in compliance with local and state laws and regulations. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of regulatory governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions."

HDR received authorization from XXX Holdings, Inc. (XXX) to conduct a Phase I ESA of the Project Area, defined as the proposed leased parcels located at 123 ABC Ave in Springfield, Maryland. This Phase I ESA has been prepared for XXX, and only XXX has the right to rely on the contents of this Phase I ESA.

1.2 Scope of Services, Significant Assumptions, and Limitations

The services provided for this project consisted of the following:

- Provide a description of the Project Area including current land uses
- Provide a general description of the topography, soils, geology, and groundwater flow direction
- Review reasonably ascertainable and reviewable regulatory information published by federal, state, local, tribal, health, and/or environmental agencies pertaining to the project area
- Review historical data sources for the Project Area, including aerial photographs, topographic maps, fire insurance maps, city directories, and other readily available development data
- Conduct an area reconnaissance and an environmental review—including a visual inspection of adjoining properties—with a focus on indications of hazardous substances, petroleum products, polychlorinated biphenyls (PCBs), wells, storage tanks, solid waste disposal pits and sumps, and utilities
- Interview current owner of the Project Area and interview other persons with knowledge of the development history of the Project Area
- Prepare a written report of methods, findings, and conclusions

The goal of this scope of services is to assist the user in identifying conditions in the Project Area that may indicate risks regarding hazardous materials storage, disposal, or other impacts. The resulting report may qualify the user for relief from liabilities as one of three "defenses" identified in the 2002 Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 9607 (All

Appropriate Inquiry subsections). XXX should consult legal counsel should it wish to qualify for any of these defenses.

A "user" is defined by ASTM Practice E 1527-05 as the party seeking to use Practice E 1527 to complete an ESA of the project area and may include a potential purchaser of land in the project area, a potential tenant of the project area, an owner of land in the project area, a lender, or a project area manager. Investigative areas not included in the standard ASTM ESA scope include: asbestos, lead-based paint, lead in drinking water, radon or urea formaldehyde, wetland issues, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and high voltage power lines. The scope of services for ESA projects also does not include the completion of soil borings, the installation of groundwater monitoring wells, or the collection of soil or groundwater samples. Likely sources of vapor intrusion, from potential on-site or off-site sources, are identified. State and national policies and standards relevant to vapor intrusion are in flux and subject to change.

HDR has made certain assumptions in preparing the scope of this assessment:

- Data gathered from public information sources (i.e., libraries or public regulatory agencies) are accurate and reliable.
- Site operations reflect site conditions relative to potential releases and no intentional concealment of environmental conditions or releases has occurred.
- Interview information is directly reported as gathered by the assessor and is limited by the accuracy of the interviewee's recollection and experience.
- Published geologic information and site observations made by the environmental professional are used to estimate likely contaminant migration pathways in the subsurface. These estimates by the environmental professional are limited in accuracy and are generally cross-referenced with existing information about similar sites and environmental releases in the area.
- Regulatory information is limited to sites identified after the late 1980s because reliable records were not kept by regulatory agencies prior to that time frame.

Where a REC has resulted from historical uses or conditions, but apparently no longer persists at the site, the term "historical REC" is used.

The findings and conclusions presented in this report are based on the procedures described in ASTM Practice E 1527-05, informal discussions with various agencies, a review of the available literature cited in this report, conditions noted at the time of this Phase I ESA, and HDR's interpretation of the information obtained as part of this Phase I ESA. The findings and conclusions are limited to the specific project and properties described in this report, and by the accuracy and completeness of the information provided by others.

An ESA cannot entirely eliminate uncertainty regarding the potential for RECs. Conducting this assessment is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with a project area within reasonable limits of time and cost. In conducting its services, HDR used a degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same locality. This Phase I ESA conforms to the level of documentation required in ASTM Practice E 1527-05. However, HDR may omit discussion of certain records, i.e., sources deemed, in HDR's professional opinion, to be inapplicable, or of limited value, to the specific needs of

this client. In accordance with ASTM, however, if the lack of available documentation results in a data gap, this data gap is identified herein and its significance is discussed.

2.0 Site Description

2.1 Location and Legal Description

The proposed leased areas, hereto referred to as the Project Area, include two non-contiguous parcels and a narrow pipeline corridor connecting these parcels located on the ABC Property, defined above. The northern parcel is irregularly shaped and approximately 0.9 acres in size. Three interconnected small buildings, a brick structure housing an electrical substation, and a large above ground storage tank (AST) are located on this parcel. The pipeline corridor runs from this parcel directly south along an inactive railroad spur to the waterfront, where it heads west and follows the shoreline approximately 1050 feet to the south parcel. The south parcel is also irregularly shaped and approximately 1.7 acres in size. Six ASTs of varying size and construction are located on this parcel. Please refer to the Site Location Map and Site Layout (Figures 1 and 2, respectively) for further detail.

Land use in the surrounding area is mainly industrial with a mix of residential and retail businesses. The remainder of the ABC Property is utilized for petroleum product recycling (mainly used oil and anti-freeze), ethanol storage, and agricultural storage. The properties to the north of the ABC Property include auto part salvage, auto repair, chemical storage/manufacturing, plating, steel yards and recycling operations. To the east is an inactive, former industrial parcel owned by ABC. South of the Project Area is AAA Bay and Hess Oil Terminal (across AAA Bay). To the west across ABC Ave are a former landfill site, commercial businesses, and a rendering facility.

2.2 Site and Vicinity Characteristics

The United States Geological Survey (USGS) 7.5-minnute quadrangle map for AAA Bay (1969) indicates that the Project Area ranges from 0 to approximately 20 feet above mean sea level (amsl). The topography at the Project Area is relatively flat with a slight slope south towards AAA Bay. According to well data from previous investigations at and in the vicinity of the Project Area, the surficial groundwater flow is southerly towards the bay.

According to the United States Department of Agriculture (USDA) Soil Conservation Service's soil survey soil maps for STATSGO, the soil near the Project Area is mainly composed of urban land (fill) with variable soil textures. The soil is rated as hydrologic group Class D, which is characterized by very slow infiltration rates. The water table is shallow and occurs at less than 10 feet below ground surface (bgs) within the Project Area.

2.3 Description of Structures, Roads, and Other Site Improvements

The Project Area currently contains the following structures:

- Northern Parcel: Three interconnected rectangular buildings (approximately 12,000 square feet total), a 100,000-gallon AST, containment basin, elevated platform, and small rectangular brick building housing an electrical substation (Figure 3).
- Southern Parcel: Two 1,879,927 gallon, heated ASTs; Three 761,344 gallon ASTs; One 10,000 gallon AST with concrete containment basin; and a former pump house (Figure 4).

The northern parcel is bordered to the northwest and east side by railroad tracks (CSX Railroad). ABC Avenue is located along the west side of the southern parcel.

Surrounding structures located on the larger ABC Property include numerous storage buildings located to the east of the northern parcel. Three large ASTs and the remains of a former building currently undergoing demolition (the former General Chemical main building) are located in the area between both lease parcels. Another grouping of six ASTs of varying sizes is located just northwest of the northern parcel adjacent to an administration/warehouse building. An ethanol loading facility is located to the east of the southern parcel. Dilapidated wooden walkways and docks are present along the ABC Property shoreline to the south.

2.4 Area Geology and Hydrogeology

The geology of the region is characteristic of the lowland mid-Atlantic Mesozoic series, with near-horizontal sedimentary layers of Cretaceous rock that has been covered by later Quaternary deposits. Locally, the Cretaceous-age Potomac series rocks are predominant, with late Cretaceous Raritan and Patapsco Formations overlying the Arundel Formation. Each of these formations are primarily low-permeability silts and clays, with intermittent silt and sand layers. In the immediate vicinity of the project, bay sediments from the Chesapeake Bay and (more locally) AAA Creek likely overlie the regional geologic formations. As a drowned valley of the Susquehanna River (a much larger depositional system than AAA Creek), the site is likely underlain by reworked fluvial sediments. Given the highly developed and industrial history of the Project Area and vicinity, observable soil and rocks (within ten to twenty feet of the surface) likely consist of fill materials brought in for site development.

Groundwater flow in the Project Area is estimated to be southerly to southeasterly toward the waters of the AAA Creek based on well elevations reported at the Project Area. Given the average tidal variation of one to three feet in the bay, groundwater likely experiences moderate cycling with the tides. Depth to groundwater is likely in the five to fifteen foot depth range, depending upon the elevation onsite and the proximity to the shore. Further complicating the groundwater environment is the presence of the aforementioned site fill material, which makes for a matrix through which groundwater movement is variable.

3.0 User-Provided Information

The user of the report provided HDR with the following materials:

- a chain of title for the Project Area;
- a letter from Maryland Department of Environment (MDE) regarding acceptance of ABC Partners, LLC for Inculpable Person Status under the MDE Voluntary Cleanup Program (VCP);
- a Phase I ESA Report for the Former General Chemical Property, March 2004.

In response to a request for information on the Project Area, the user of the report stated that besides information in the materials provided to HDR as listed above, the client:

- is unaware of any environmental cleanup liens against the property
- has no specialized knowledge relating to the property or nearby properties
- indicated that the lease price being paid for the property reflects fair market

value

- has no knowledge of past uses of the property
- has no knowledge of any chemicals that are, or were, present on the property
- has no knowledge of any spills or chemical releases on the property
- has no knowledge of any environmental cleanups that may have taken place on the property
- has no knowledge of the presence of contamination on the property

The user questionnaire is attached to this report at Appendix K.

4.0 Records Review

4.1 Environmental Records Review

Environmental Data Resources, Inc. (EDR), was contracted by HDR to complete a database search of federal, state, and tribal environmental records for the Project Area. A computerized environmental information database search was performed for the Project Area by EDR on August 21, 2008. The databases searched included federal, state, local, tribal, and EDR proprietary databases as defined by ASTM E 1527-05. The results of the database search are summarized in the following table and paragraphs. A complete copy of the EDR environmental database report is included in Appendix C.

Table 1 – Summary of Environmental Database Search

Database	Description	Other Facilities Listed	Target Property
Federal			
NPL	The National Priorities List (NPL) is the U.S. EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund program.	0	0
Delisted NPL	The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) established the criteria that the EPA uses to delete sites from the NPL.	0	0
CERCLIS/ NFRAP	The CERCLIS database is a compilation of facilities that the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. No Further Remedial Action Planned (NFRAP) refers to facilities that have been removed and archived from its inventory of CERCLA sites.	4	1
RCRA CORRACTS/ TSD	The EPA maintains a database of Resource Conservation and Recovery Act (RCRA) facilities that are undergoing "corrective action." A "corrective action" order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.	3	0
RCRA INFO	The RCRA INFO database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as large, small, or conditionally exempt. Large quantity generators (LQG) produce at least 1,000 kg/month of nonacutely hazardous waste or 1 kg/month of acutely hazardous waste. Small quantity generators (SQG) produce 100 to 1,000 kg/month of nonacutely hazardous waste. Conditionally exempt small quantity generators (CESQG) are those that generate less than 100 kg/month of nonacutely hazardous waste. Non Generators (NonGen) do not presently generate wastes.	1 (LQG) 3 (SQG) 3 (CESQG) 6 (NonGen)	1 (NONGEN)
RCRA TSDF	The RCRA INFO database also maintains sites and transporters of hazardous waste from generators offsite to a facility that can recycle, treat, store, or dispose of the waste.	1	0
ERNS	Emergency Response Notification System (ERNS) records and stores information on reported releases of oil and hazardous substances.	0	1
HMIRS	Hazardous Materials Information Reporting System (HMIRS) contains hazardous material spill incidents reported to USDOT.	0	0
US ENG Controls	A listing of sites with engineering controls in place.	0	0
US INST Controls	A listing of sites with institutional controls in place.	0	0
PADS	PCB Activity Database System (PADS) identifies generators, transporters, commercial storers, and/or brokers and disposers of PCBs who are required to notify the EPA of such activities.	0	0
RAATS	RCRA Administrative Action Tracking System (RAATS) contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.	0	0

Database	Description	Other Facilities Listed	Target Property
MLTS	MLTS is maintained by the Nuclear Regulatory Commission (NRC) and contains a list of approximately 8,100 sites that possess or use radioactive materials and are subject to NRC licensing requirements.	0	0
TRIS	Toxic Chemical Release Inventory System (TRIS) identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313.	0	0
FINDS	Facility Index System/Facility Registry System (FINDS) contains both facility information and 'pointers' to other sources that contain further detail.	0	1
TSCA	Toxic Substances Control Act (TSCA) identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list.	0	0
FTTS	FIFRA/TSCA Tracking System, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)/Toxic Substances Control Act (SCA). FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA, and EPCRA (Emergency Planning and Community Right-to-Know Act).	0	1
HIST FTTS	Historical FTTP records that includes sites that may not be listed in the newer FTTS database.	0	1
State and Local			
SWF/LF State Landfill/ Historical Landfill	The MDE maintains a list of Solid Waste Facilities/Landfill Sites (SWF/LF) permitted in the state of Maryland.	1	0
SHWS State Hazardous Waste List	MDE's SHWS records are the state version of the federal CERCLIS list. The list includes priority sites that are planned for cleanup using either state funds or private party funds.	8	1
VCP Site Remediation Program	MDE's Voluntary Cleanup Program (VCP) list includes all sites currently enrolled in the MDE Voluntary Cleanup Program.	2	1
OCPCASES	Are cases monitored by the Oil Control Program	25	1
HIST LUST	Historical Leaking underground Storage Database (LUST) sites that are no longer included in the OCPCASES Database.	2	0
UST/HIST UST	Underground Storage Tank (UST) Database – MDE provides a database of registered Underground Storage Tanks within the specified area. Historical UST Database- includes sites were USTs were historically registered.	10 (UST) 7 (HIST UST)	1 (UST) 1 (HIST UST)
AST	MDE listing of above ground storage tanks registered in Maryland.	4	1
INST CONTROLS	Sites included in MDE's VCP program listings that include deed restrictions.	1	0
SWRCY	MDE's list of recycling facilities.	1	0
EDR Proprietary Databases			
Historical Auto Stations	Listing of potential gas stations/filling stations/service station sites collected	3	0

4.2 Summary of Listed Records of Concern to the Project

4.2.1 Site Specific Listings

The following is a list of database results relevant to the Project Area. The Project Area is defined in the EDR detail search map provided in Appendix C.

Table 2 - Summary of Project Area Listings

Listed Party	Database	Comments
Essex Industrial Chemical/Peridot	OCPCASES	The file was opened 5/30/89 and later closed on 5/10/95.
123 ABC, Springfield, MD	ERNS	200 gallons of sulfuric acid was spilled on 9/26/92 when a storage tank was overfilled. Sorbents were used to contain the spill. Responsible Party: Peridot Chemical.
		An unknown amount of thermal oil was discharged due to an equipment failure that resulted in a leak along the thermal heating oil line. The incident was reported 3/26/00. Sorbent was used to contain the material and a contractor was called in.
Peridot Chemical (New Jersey)	UST	Five USTs were listed as "permanently out of use." The USTs ranged in size from 1,000 to 8,000 gallons and contained heating oil, diesel, or gasoline.
	FTTS/HIST FTTS	Violation reported. No date provided. Section 6 PCB state conducted investigation.
	HIST UST	Same as UST
Olin Corp- AAA Bay	CERCLIS	The site is not listed on the NPL. The status is listed as State-Lead Cleanup. The assessment history began on 11/1/79. Varying stages of assessment have been conducted on the site with the last activity documented on 12/17/03 with an expanded site inspection. The site priority is listed as low.
	FINDS	Other pertinent environmental activity at the site not yet listed: AFS, TRIS, MD-EPSC, and MD-PEMIS
	RCRA-Non-Gen	Handler activity includes: used oil processor, used oil fuel marketer to burner, used oil specification marketer, used oil transfer facility, and used oil transporter. No violations were reported for the site.
	SHWS	Status: No further remedial action
	Manifest	Waste Code: Lead 5.0 mg/kg TCLP. Approximately 19 truckloads of material disposed offsite in 1996.
	VCP	Application received 5/1//05. Inculpable person status and no further requirements determination (NFRD) sought. Application approved 11/13/06. (Note: it is unclear if this listing pertains to an adjacent property and not the Project Area or ABC Property.)
General Chemical- Springfield Terminal	VCP	Application received 2/25/04. Applicant listed as ABC Partners, LLC. Inculpable person status sought. Site not eligible for NFRD status.
CCC Oil Refining, LLC	FINDS	Other pertinent environmental activity at the site not yet listed: MD-RCRA

	AST	Four 100,000 gallon used oil ASTs and one 250,000 gallon used oil AST registered
DDD Terminalling, LLC	AST	One 997,000 gallon AST containing ethanol listed.

HDR reviewed the orphan summary of unmappable sites provided by EDR. Based on the information provided, no orphan listings appear to be associated with the Project Area.

Numerous listings were identified within the ASTM search distances surrounding the Project Area. The summary of listings was provided previously in Table 1. RCRA generators, SHWS sites, and OCPCASES are prevalent throughout the area. This is expected given the current and historic industrial nature of the surrounding properties. For further details regarding listed sites, please refer to the EDR Report.

Listings of potential concern to the Project Area included the following sites:

- ABC Ave Landfill (0-1/8 mi NNW) CERCLIS NFRAP
- American Recovery Corp.(1/8-1/4 mi NNW), CERCLIS NFRAP, CORRACTS, RCRA-TSDF, RCRA-Non-Gen, SHWS No Further Remedial Action (NFRA), OCPCASES
- BioChem Management (1/8-1/4mi N), CERCLIS NFRAP, CORRACTS, RCRA-NonGen, SHWS
- Drumco Drum Dump (0-1/8 mi W), SHWS NFRA
- E. Stewart Mitchell Inc. (1/4-1/2 mi NNW), VCP, INST Control , OCPCASES, HIST UST
- Gambel Property (1/8-1/4 mi N), VCP
- Tri-Star Freight (1/8-1/4 mi NNW), OCPCASES
- Abbey Drum Co (1/8-1/4 mi N), OCPCASES
- Huher Paul (0-1/8 mi W), EDR Historical Auto Stations
- Sunco Service Station (0-1/8 mi W), EDR Historical Auto Stations
- Mi & B Garage (1/8-1/4 mi NNW), EDR Historical Auto Stations
- A & A Body Shop (0-1/8 mi W), OCPCASES

This list of sites were considered of potential concern to the Project Area based on several factors that included: upgradient location, proximity to Project Area, active clean up or case status, type of contamination, former/current environmental enforcement, and former/current land use.

4.3 Local Government Information

HDR contacted the MDE regarding the review of project files for some of the listed sites of concern in the EDR Report. MDE was only able to provide VCP project files for the Project Area and the Drumco Drum Dump at the time of the file review on August 26, 2008. The remaining requested files were not available for review by the time this report was issued.

HDR interviewed the VCP project manager for the ABC property during the file review. Details of the interview are provided in Section 5.1.2.

4.4 Historical Use Information

The objective of reviewing historical use information is to develop a history of previous land uses at and in the vicinity of the Project Area and to assess these uses for potential hazardous materials impacts that may affect the Project Area. HDR reviewed those historical sources that were reasonably ascertainable and likely to provide useful information, as defined by the ASTM standard.

For this ESA, HDR has reviewed a prior Phase I assessment performed by TPH Industries in March 2004 (included as Appendix D). This ESA has an excellent compilation of historical sources for the area, therefore HDR will only describe the historical source information in regards to the specific proposed lease parcel, as shown on Figure 2.

4.4.1 Fire Insurance Maps

Fire insurance maps are produced by private fire insurance companies to indicate uses of the project area on specified dates. The TPH report includes Sanborn Maps from 1914, 1936, 1951, 1971, and 1979. The 1914 Sanborn map did not include the proposed lease area, therefore it will not be included in this discussion. HDR also ordered Sanborn Maps, and these are included in Appendix E.

1936 – The 1936 map indicated that the "southern parcel" was operated by Davison Chemical's Insecticide Division, but no ASTs were present. The only building indicated in this area was a boat house, located near Cabin Branch Creek. The "northern parcel" was part of the property operated by Standard Wholesale Phosphate and Acid Works, and includes two of the three current buildings, which are labeled as a machine shop and a welding shop.

1951 – The 1951 map indicated that the "southern parcel" was operated by Matheson Chemical Company, and three large ASTs were located on the parcel. These ASTs correspond to the location of three of the current ASTs. The newer two ASTs and the loading rack were not present on the 1951 Sanborn Map. The boat house indicated on the 1936 map has been removed. The "northern parcel" included the third building, labeled as "lockers". The AST that is present today had been built, and is labeled "acid tank".

1971 – The 1971 map indicated that the "southern parcel" was still operated by Matheson Chemical, and is configured the same as the 1951 map. The "northern parcel" is not clearly marked relative to ownership, but other buildings in the area are listed as "American General Chemical Corp.". The parcel is configured the same as the 1951 map.

1979 – The 1979 map showed no changes to either parcel from the 1971 map.

4.4.2 City Directory Information

HDR obtained city telephone directory information from EDR based on the address of the facility (Appendix F). A review of the list did not provide any new information and served to verify other historical data described elsewhere in the report.

4.4.3 Historical Aerial Photographs

Historical aerial photographs are valuable for the environmental assessor to review features of properties along the project corridor over a long period of time. HDR reviewed historical aerial photographs provided by EDR (Appendix G) for the following years: 1957, 1963, 1971, 1980, 1988, and 2005. Information relating to observed features on the two proposed lease parcels is presented below.

1957 – Resolution of this photograph is poor, but the "southern parcel" included the three western ASTs, and the "northern parcel" included the three buildings described above, and the AST. Other features such as surface staining or waste holding areas could not be determined due to the poor resolution of the photograph.

1963 – Resolution of this photograph is much clearer than the 1957 photograph. The original three ASTs were present on the "southern parcel", and two additional ASTs were located just east of the three prior ASTs. The "northern parcel" showed no additional facilities or features.

1971 – The 1971 photograph mimics the information shown on the 1971 Sanborn Map. No changes from the 1963 photograph were noted, except a building previously located immediately east of the "southern parcel" had been removed.

1980 – Resolution of this photograph is poor, but no changes from the 1971 photograph were noted.

1988 – Resolution of this photograph is excellent, and no changes are noted on the proposed lease parcels from the 1980 photograph except for the addition of the truck loading rack on the northeast part of the "southern parcel".

2005 – This photograph showed no major changes to either parcel from the 1988 photograph.

4.4.4 Historical Topographic Maps

Historical topographic maps provide an overview of the area relative to potential previous land uses. HDR ordered historical topographic maps of the project area from EDR, and they are included in Appendix H. The following years of topographic maps were provided by EDR: 1969 (photorevised in 1974), 1949, 1947, 1908, and 1907. The maps from 1974 and 1969 served to verify the information gathered in the historic aerial photograph review. The following paragraphs describe the features observed on the older historical topographic maps.

1949 – The 1949 "AAA Bay" quadrangle map (scale 1:24,000) showed the building outlines very much as the 1957 aerial photograph and the 1951 Sanborn Map depicted them. The "southern parcel" showed only the three westernmost ASTs on the map, and the scale was too small to include the small buildings and AST located on the "northern parcel". AAA Creek extends west of ABC Avenue, however, which was filled in and developed in later photographs and maps.

1947 – The 1947 map is at a scale of 1:62,500, therefore no specific site features are discernable.

1908 – The 1908 map is at a scale of 1:125,000, therefore no specific site features are discernable.

1907 – The 1907 map is at a scale of 1:62,500, but it is apparent that no large-scale development exists in the immediate vicinity of the proposed lease parcels. Two very small square dots are present, of a size and location that would indicate residences located on AAA Creek. These possible residences are located near the waterfront on the "southern parcel" and just east, possibly somewhere along the pipeline corridor.

4.5 Environmental Liens and Additional Information

According to the Environmental Lien and Title Search conducted by EDR on the project address, no environmental liens or activity use limitations (AULs) are currently recorded for this location. The results also indicated that ABC Properties, LLC is the current deed holder. The deed transfer from the previous owners (General Chemical) was dated April 29, 2004. Results of the search are provided in Appendix I.

4.6 Summary of Previous Environmental Investigations

The following are known previous environmental investigations that have included the Project Area:

MDE Brownfields and Site Assessment Section Investigation, June 2002

Lorie Baker of the MDE led a sampling event that included collection of 4 groundwater samples and 7 surface water and sediment samples from AAA Creek, and 23 soil samples in the Project Area and surrounding properties. Groundwater samples collected were all located outside the Project Area to the east and northeast. Elevated levels of aluminum, iron, lead, manganese, nickel, arsenic, beryllium, and vanadium were identified in the samples. Several pesticides were detected in the groundwater sample collected directly east of the Project Area. Several surface water samples collected were above National Oceanic and Atmospheric Administration's (NOAA's) chronic marine benchmark level for various metals and well above concentrations detected in the background sample collected upgradient. Pesticides and polychlorinated biphenyls (PCBs) were also detected in sediment samples collected. Results of the soil sampling yielded arsenic levels throughout the Project Area and surrounding site above EPA non-residential cleanup standards. Exceedance of the EPA non-residential cleanup standards for lead and mercury were also noted directly east of the Project Area. Pesticides and PCBs were also detected throughout the Project Area and surrounding site, but below their respective EPA non-residential cleanup standards.

Former General Chemical Property Phase I ESA, March 2004

A Phase I ESA and subsurface investigation was conducted by TPH Industries (TPH) for ABC. The subsurface investigation included collection of eleven soil and groundwater samples within the Project Area and adjacent properties. The results of the investigation indicated several SVOCs concentrations above the EPA non-residential cleanup standards for soil and groundwater within the Project Area. Arsenic concentrations were also detected above the EPA non-residential cleanup standards throughout the site in soil and groundwater. Lead was detected above the EPA groundwater cleanup standards in the sample taken from within the southern parcel.

Subsurface Investigation, February 2006.

An additional subsurface investigation was conducted by TPH in February 2006. HDR reviewed this report during its file review at MDE, but did not receive a copy of the report to perform a detailed review by the time this report was issued. Based on HDR's initial review, it does not believe that this report provides any information materially different from the prior assessments. HDR will supplement this Phase I report if needed after it receives and reviews again a copy of this report.

For more detailed information regarding methodologies and results of the above-described assessments, please refer to the specific documents cited. No other previous environmental investigations were reviewed for this report.

5.0 Site Reconnaissance and Interviews

5.1 Interviews

5.1.1 Site Interviews

HDR personnel interviewed Mr. X, President of CCC Oil Refining Co., LLC (CCC) and owner of ABC and DEF Properties, LLC (DEF), prior to conducting the site reconnaissance. Mr. X indicated that he purchased the first 20-acre parcel, which included the Project Area, approximately 4 years ago. He then purchased an additional 20 acres located directly north of the southern parcel, approximately 2-3 years ago. The last acquisition was another 20 acres of land located to the east of these sites and purchased under DEF. This site was the former Du Pont/Gamble property and had recently undergone cleanup due to historic activities on site. Mr. X provided the names and operation locations of the current lessees on its properties: CCC, DDD Farms (DDD), and FFF Terminalling, LLC (FFF).

Mr. X provided additional information specific to the property during the site reconnaissance. That information was detailed below in Section 5.2.

5.1.2 Off-Site Interviews

After the site reconnaissance was completed, HDR personnel conducted a personal interview with Gary Schold, a project manager with the MDE VCP, on August 26, 2008. Mr. Schold was familiar with the Project Area and provided HDR with information on the site's current status. Mr. Schold indicated that ABC had applied for Inculpable Person (IP) status through the MDE VCP and the status was granted to them in 2004 following an initial investigation conducted by an environmental firm hired by ABC. MDE had requested in the letter to Mr. X in February 2006 to submit a Remedial Action Plan (RAP) to them describing how they would address the elevated levels of lead, arsenic, mercury and SVOCs in the soil and groundwater at the site. ABC had followed up the letter with a Notice of Intent to Continue, which was signed by Mr. X in August 2006. To date, MDE has not received a RAP for the site from ABC. Mr. Schold indicated that due to a loophole in the state statutes, no timeframe is given for when a RAP needs to be submitted to the MDE.

5.2 Site Reconnaissance

On August 25 and 26, 2008, HDR conducted a reconnaissance of the Project Area and surrounding properties. The Project Area included three interconnected buildings, seven ASTs of various capacities, a brick structure housing an electrical transformer, and an aboveground pipeline corridor. HDR Environmental Professionals Hong Spores and Kelly Kading performed the site reconnaissance, accompanied by Mr. X of ABC.

The interior of the interconnected buildings were observed during the reconnaissance. The buildings were not currently in use. The exterior appeared to be constructed of cinder block with metal corrugated roofing (the roof was missing on the middle unit). Much of the interior appeared to be previously dedicated for personnel use; showers, lockers, and bathroom facilities were noted. No indications of industrial uses inside the buildings were evident (Photos 1-4), however two of the buildings were shown as a maintenance shop and welding shop in historic Sanborn maps.

The interior of the electrical substation was not observed at the time of the reconnaissance due to personnel safety considerations. A transformer was noted outside the structure on the

east side. No evidence of leaks was seen on the surface of the pad below the unit. Numerous cables and electrical lines were connected to the building. (Photos 5-7).

A 100,000-gallon AST surrounded by a concrete containment basin was located in the northern parcel. Hoses, pumps, and other debris were noted inside the containment basin. Cracking in the concrete was observed near the base of the tank. Pooling of green fluid was observed in the basin below the hose connector and along the cracks. Mr. X indicated that the fluid was antifreeze, which is also reportedly stored in the tank (Photos 8-9). Depending on the thickness of the concrete pad and the vertical extent of the cracks, anti-freeze fluid may be leaking to the underlying ground.

The proposed pipeline corridor was inspected during the reconnaissance. Currently, three separate insulated pipes run along most of the proposed corridor. The pipes are secured several feet off the ground on metal brackets mounted to concrete footings. The insulated covering on the pipes were severely degraded (missing entirely in many areas) along the line. White insulation material was often exposed in areas where the thin metal casing was absent. What appeared to be broken and crushed insulation was observed on the ground below the pipes throughout much of the area. It is possible that this material could contain asbestos. Free product was noted actively discharging at a slow rate from a break in the lower pipe. A pool of product was observed on the ground below the pipe located near the western turn in the pipeline along the shore. The material appeared to be liquid asphalt (Photos 10-12).

Two 1,879,927-gallon insulated ASTs previously containing hot asphalt were located on the east side of the southern parcel. The tanks appeared to be in fair condition with some areas of asphalt staining around the perimeter. Small sections of the tanks' exterior had been removed exposing the underlying metal tank. A strip of thick fibrous padding was observed under the metal exterior along with a granular material near the base of the tank. Mr. X indicated that the base material was likely used for heat transfer from the interior tank (Photos 13-14).

Three 761,344-gallon ASTs previously containing acid were located on the west side of the southern parcel. Large cutouts in the side wall of the tanks were observed. The tanks were empty. A pile of orange material was located on the ground outside the southern most tank (Photos 15-17). Mr. X indicated the material had been removed from the bottom of the acid tanks.

An open concrete drainage sump was observed along the pipeline corridor just south of the heated ASTs, near the AAA Creek shoreline, on the southern parcel. Dark orange water was seen discharging into the sump. Mr. X indicated that the water eventually discharges into the sanitary sewer (Photo 18).

A 10,000-gallon AST labeled as "oil tank" was observed within a larger concrete containment basin. This tank was located in the area between the rows of ASTs in the southern parcel (Photo 19).

Minor soil staining and discarded chemical/petroleum containers were observed throughout the property (Photos 20-21).

The storage of numerous 275-gallon plastic totes and 55-gallon drums were noted adjacent to the Project Area. These containers were associated with the CCC operation. Mr. X indicated that most of the material was waste anti-freeze. Totes were observed stacked 4 high in some areas. Drums were also observed stacked in a similar manner. Storage of these containers was located in the area directly east of the northern parcel and 100,000-

gallon AST. The majority of the containers were stored in the former urea kiln rooms. Exposed ground was noted in this area along with heavy staining and pooling of liquids in some areas (Photos 22-25). A strong odor was present throughout this building. No secondary containment was noted in these areas.

Please refer to Figure 5 for the locations of the aforementioned features noted during the site reconnaissance.

A windshield survey of surrounding businesses was conducted following the site reconnaissance. HDR reviewed properties adjoining the combined ABC and DEF Properties. Figure 6 illustrates the locations of some of the surrounding businesses that were observed. HDR determined that the surrounding area is heavily industrial with a mix of residential properties. Of particular note are properties that are located upgradient that may have a potential to impact the Project Area based on the inferred groundwater flow. These areas include properties located to the north and northwest. A listing of these sites are located in Section 4.1.

During the site reconnaissance, HDR identified a pending VCP site located within 1/8 mile of the Project Area to the northwest. The site consists of the former ABC Avenue Landfill and Parcel 247. Signs were posted with the “Notice of Application Received” outside the entrance to the former landfill. The sign provided information on the application such as the name of the applicant (Glen Abbey III, LLC) and the MDE project manager (Jeff Harp).

5.3 Known Current and Past Uses of the Site and Adjoining Properties

According to HDR’s review of historical sources and information obtained from the MDE files, the Project Area and surrounding properties have been used heavily for industrial purposes dating back to the late1800s. The Project Area and the associated larger parcels owned by ABC had been dedicated to acid production and fertilizer / pesticide sale and storage up to the acquisition in 2004 by ABC.

The history of site ownership at 123 ABC Ave (which includes the Project Area) is documented as follows based on information obtained from the site’s VCP file:

- 1914 - Standard Guano Company
- 1925 - Standard Wholesale Phosphate & Acid Works (sulfuric acid production starts)
- 1949 - Matheson Chemical (which changes to Olin Matheson, then to Olin Chemicals)
- 1982 - Olin Chemicals divides the overall property into 4 parcels, A, B, C, and D. Olin retains Parcels A & B which hasn’t been used for sulfuric acid production since the mid-1960s. Parcels C & D, on which sulfuric acid production continued, was sold to Essex Chemical Corp.
- 1988 - Essex Chemical sells the property to Dow
- 1989 - Dow sells the property to Peridot Chemical
- 1997 - Peridot Chemical sells the property to General Chemical. General Chemical operated as a sulfuric acid & asphalt terminal and transfer facility until January 2003.

The Project Area is located in what is designated as Parcel D. The Project Area is not currently being utilized, but the adjoining properties that border it are currently being leased by multiple parties from ABC. To the north, CCC is operating a used oil and anti-freeze recycling operation. To the east in the former guano storage building, DDD is currently

storing soy beans in stock piles. Located between the northern and southern parcels is FFF Terminalling. Three large ASTs are located on site for their operations. The ASTs are being used to store ethanol. No refining operations in relation to the ethanol were observed on the site. Currently vacant land is located directly north of the southern parcel and east of the building occupied by DDD. The vacant lands to the east are the former Olin (Parcel B) and DuPont properties.

5.4 Utilities and PCBs

According to Mr. X, the overall facility is serviced by municipal utilities such as water, sewer, and electrical. Electrical substations were noted in brick structures in the northern parcel and also adjacent to the building undergoing demolition in the center of the property. HDR did not observe the interior conditions of these structures. Based on information provided by HDR engineers that had inspected the northern substation, the electrical units are estimated to be old, and based upon their age, they potentially contain PCBs. The previous Phase I ESA report conducted by THP also indicated the possibility of PCBs associated with these electrical units.

6.0 Data Gap Analysis

The ASTM E 1527-05 standard requires a listing of "data gaps" encountered during the investigative process that may affect the validity of the conclusions drawn by the environmental professional. The ASTM E 1527-05 standard also requires that the environmental professional estimate the relative importance of the data gaps. Generally, gaps in available data are related to the availability of historical data sources for specific sites of concern. The environmental professional uses multiple historical data sources as a method to provide coverage for data gaps. Historical information is collected on a recurring basis, and the passage of time between data sets may or may not constitute a significant gap in data coverage. For this project, the following items may constitute a data gap as defined by ASTM:

- Review of historical data back to first developed use of the Project Area.
- Completeness of historical data, given the multiple users, length of time in industrial use, and complex ownership history of the area
- Review of regulatory files of adjacent property listings.
- Lack of access to the interior of the electrical substation.

HDR was only able to ascertain historical sources back to 1936 within the scope of this investigation. The first developed use of the area is estimated to be late1800s. Due to the age of the site and the nature of its use since at least the1930s, industrial practices cannot be ascertained fully due to the lack of records. It is HDR's opinion that previous site uses were likely typical of the ones already documented on site, and the lack of complete records does not constitute a significant data gap.

HDR was unable to obtain and review all the state files for adjacent property listings on the EDR report by the time this report was drafted. Based on the industrial nature of the surrounding area and information already provided in the EDR Report, we believe we are able to gauge the risk of adjacent property use on the Project Area, especially considering the limited size and ground disturbance planned by XXX .

HDR personnel was unable to view the interior of the substation during the reconnaissance, but was able to counter this data gap by obtaining additional information regarding the substation from HDR's project engineer and from the TPH Phase I ESA. This aided in the development of the recommendation for the substation, therefore HDR does not consider this a significant data gap.

7.0 Findings and Conclusions

HDR has conducted a Phase I ESA of the Project Area, described as the proposed lease areas by XXX located at 123 ABC Ave in Springfield, Maryland (described in detail in Section 3.1). The ESA was performed in accordance with the scope and limitations of ASTM Practice E 1527-05. Any exceptions to, or deletions from, this practice are described previously in this report.

HDR personnel observed the following recognized environmental conditions (RECs), as defined in ASTM Practice E 1527-05, in connection with the Project Area. HDR offers the following description of these conditions as follows:

- Documented exceedances of the EPA non-residential cleanup standards in soil for arsenic, lead, mercury, and designated SVOCs within or in the vicinity of the Project Area.
- Documented detections and elevated concentrations of RCRA metals, PCBs, and pesticides within or in the vicinity of the Project Area.
- Historic land use and adjacent land use relating to documented industrial activities may have resulted in additional impacts to the soil and groundwater that have not been identified in previous investigations.
- Adjacent properties with documented environmental contamination and industrial practices with associated hazardous materials are located up gradient of the Project Area. These properties have the potential to contaminate the Project Area through migration of contaminated groundwater.
- Likely presence of asbestos and lead-based paint in the improvements at the Project Area, based upon observations by the assessors and the age and construction materials of the onsite structures and tanks.
- The conditions observed surrounding the 100,000-gallon AST in the northern parcel indicate a possible leak of anti-freeze to the underlying soil and groundwater.
- The uncontrolled storage of petroleum products and poor housekeeping practices of the CCC Oil operations located directly adjacent to the Project Area poses a material threat of release that could potentially impact the Project Area.

8.0 Recommendations

Recommendations included in this report have been developed through the investigative procedures described in the *Scope of Services, Significant Assumptions, and Limitations* section of this report. These findings should be reviewed within the context of the limitations provided in the *Limitations* section. Based on the location and specific details of the identified risk sites, HDR has identified "recognized environmental conditions" (RECs) associated with the Project Area. This conclusion has led to the inclusion of the following statement as required by ASTM E 1527-05:

HDR has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E 1527-05 of the proposed lease areas by XXX located at 123 ABC Ave in Springfield, Maryland (the Project Area). Any exceptions to or deletions from these practices are described in previous sections of this report. This report has revealed evidence of RECs (described above) in connection with the Project Area.

Based on the RECs that were identified in connection with the Project Area, HDR has concluded that the risk of encountering contamination is very high if subsurface activities were to occur within the Project Area. Because of this conclusion, HDR makes the following recommendations.

1. HDR recommends that XXX avoid soil and groundwater disturbance during construction activities to rehabilitate the Project Area for commercial use. If soil or groundwater disturbance is necessary, HDR recommends that XXX develop a Contingency Plan to deal with the characterization and proper disposal of contaminated materials disturbed during construction. If extensive ground disturbance is planned, a targeted drilling and sampling program (with input from the Maryland Department of the Environment) should be completed to characterize the subsurface prior to disturbance.
2. Based on the age of the facility and its infrastructure, HDR recommends an asbestos and lead survey be conducted by a licensed professional prior to any rehabilitation of the existing tanks, pipelines, and structures located in the Project Area.
3. That XXX work with the existing landowner to address issues regarding the poor housekeeping practices noted on the remaining ABC property and the need to store petroleum products in accordance with applicable laws and regulations.
4. Sample(s) should be collected for laboratory analysis from the pile of orange material removed from the former acid tanks. The material should be disposed of in accordance with applicable laws and regulations if the pile contains materials requiring special handling and disposal.
5. Determine if Polychlorinated Biphenyl (PCB)-containing equipment is located in the Project Area (i.e. electrical transformers in the substation) and remove and dispose of them in accordance with applicable laws and regulations.
6. Remove and properly dispose of spilled materials and impacted soils noted in the Project Area and described in the body of the report.
7. Carefully inspect observed cracks in the 100,000-gallon AST containment basin and determine if anti-freeze may have leaked to the ground below. The containment basin should be rehabilitation to applicable standards prior to use of the AST by XXX.

9.0 Qualifications of Environmental Professionals

9.1 Signatures and Qualifications

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in Section 312.10 of 40 Code of Federal Regulations [C.F.R.] Part 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquires in conformance with standards and practices set forth in 40 CFR Part 312.

Qualified Environmental Professional
Hong T. Spores
Hydrogeologist

Qualified Environmental Professional
Kelly W. Kading CPG CHMM
Senior Professional Associate

9.1.1 Qualifications of Environmental Professionals

This Phase I ESA was performed by the following HDR personnel.

Ms. Hong T. Spores, HDR's qualified environmental professional, as defined by ASTM Practice E 1527-05, has more than 7 years of experience in the assessment and remediation of impacted properties and compliance with environmental regulations. She has a B.S. in Geology from the University of Minnesota and a Masters in Business Administration from the University of St. Thomas. Ms. Spores specializes in investigations of hazardous materials-impacted properties for public and private sector clients. Her experience covers assessments ranging from agricultural properties to industrial facilities located in over 15 states.

Mr. Kelly W. Kading, CPG CHMM, HDR's qualified environmental professional, as defined by ASTM Practice E 1527-05, has more than 20 years of experience in the assessment and remediation of impacted properties and compliance with environmental regulations. He has a B.S. in Geology from Colorado State University and is a Certified Professional Geologist (#9173), and a Certified Hazardous Materials Manager (#1995). Mr. Kading specializes in the forensic investigation of hazardous materials-impacted properties for municipal and state agencies, as well as for commercial clients. His experience covers the assessment of more than 2,500 properties, ranging from agricultural land to multigenerational industrial properties in 32 states and 2 foreign countries. He is highly knowledgeable of federal, state, and local environmental regulations and standards and has served on the National Board of Directors of the Academy of Certified Hazardous Materials Managers.

10.0 References

ASTM Practice E 1527-05. 2005. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.*

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Interview. August 25, 2008. Alan X, Owner, ABC Properties, LLC.

Interview. August 26, 2008. Gary Schold, Project Manager, Maryland Department Of Environment, Voluntary Cleanup Program.

TPH Industries. *Phase I Environmental Site Assessment Report, Former General Chemical Property*. Baltimore (AAA Bay), MD. March 2004.

Appendix A

Figures

Appendix B

Site Photographs

Appendix C

EDR Information

Appendix D

Previous Environmental Reports

Appendix E

Fire Insurance Maps

Appendix F

City Directory

Appendix G

Historical Aerial Photographs

Appendix H

Historical Topographic Maps

Appendix I

Environmental Lien Search Results

Appendix J

Excerpts From Regulatory Files

Appendix K

User Questionnaire