REPORT ON
ASTM PHASE I ENVIRONMENTAL SITE ASSESSMENT AND LIMITED PHASE II SUBSURFACE SAMPLING
DISTRICT OF COLUMBIA PARCEL AT BUZZARD POINT, SQUARE 0661, LOT 0800
WASHINGTON, DC

by

Haley & Aldrich, Inc.
McLean, Virginia

for

McKissack & McKissack
Washington, DC

File No. 40223-001
8 September 2014

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8 September 2014
File No. 40223-002

McKissack & McKissack
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Attention: James Beall
Senior Project Manager

Subject: ASTM Phase I Environmental Site Assessment and Limited Subsurface Sampling
District of Columbia Parcel at Buzzard Point, Square 0661, Lot 0800
Washington, DC

Ladies and Gentlemen:

The enclosed report presents the results of a Phase I environmental site assessment (Phase I assessment) conducted at the above-referenced District of Columbia property, Square 0661, Lot 0800, in Washington, DC (herein referred to as the "subject site"). A Phase I assessment was conducted by Haley & Aldrich, Inc. (Haley & Aldrich) for seven parcels at Buzzard Point proposed for redevelopment as a professional soccer stadium, in accordance with our proposal to McKissack & McKissack dated 28 June 2013 ("Agreement"). This report was prepared in response to a request from Mr. James Beall of McKissack & McKissack to provide a separate stand-alone Phase I assessment for the subject site. The results of limited Phase II subsurface sampling, performed to evaluate the potential impact of "recognized environmental conditions" (RECs), are also included in this report.

Our conclusions regarding the presence and potential impact of RECs on the subject site are intended to help the user evaluate the "business environmental risk" associated with the subject site, as defined in the ASTM E 1527-05 Standard and discussed in Section 1.1 of this report.

Thank you for the opportunity to perform these services for you. Please do not hesitate to contact us if you have any questions or comments.

Sincerely yours,
HALEY & ALDRICH, INC

Karin S. Holland
Senior Technical Specialist

David A. Schoenwolf, P.E.
Principal Consultant | Senior Vice President

ASTM PHASE I ENVIRONMENTAL SITE ASSESSMENT AND LIMITED SUBSURFACE SAMPLING
DISTRICT OF COLUMBIA PARCEL AT BUZZARD POINT, SQUARE 0661, LOT 0800
WASHINGTON, DC

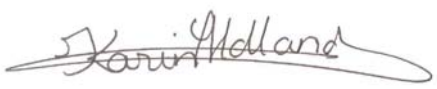
by

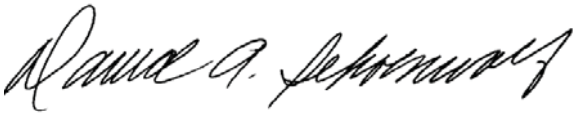
Haley & Aldrich, Inc.
McLean, Virginia

The undersigned declare the following:

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 40 CFR Part 312, §312.10.

We have the specific qualifications based on education, training, and experience to assess the nature, history, and setting of the subject site and "develop opinions and conclusions regarding conditions indicative of releases or threatened releases." We have developed and performed the "all appropriate inquiries" (AAI) in conformance with the standards and practices set forth in 40 CFR Part 312.





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for

McKissack & McKissack, Inc.
Washington, DC

File No. 40223-002
September 2014

EXECUTIVE SUMMARY

Haley & Aldrich, Inc. (Haley & Aldrich) performed a Phase I environmental site assessment and (Phase I assessment) of the District of Columbia (DC) Parcel at Buzzard Point, Square 0661, Lot 0800 (herein referred to as the "subject site") in Washington, DC. The scope of work is described and conditioned by our proposal dated 28 June 2013. As indicated in our proposal, this Phase I assessment was performed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-05 Standard) as referenced in 40 Code of Federal Regulations (CFR) Part 312 [the All Appropriate Inquiries (AAI) Rule]. Deviations from this Standard, and/or data gaps and their significance are described in Section 1.5 of this report. Our conclusions are intended to help the user evaluate the "business environmental risk" associated with the subject site, as defined in the ASTM E 1527-05 Standard and discussed in Section 1.1 of this report.

The subject site is bound by Potomac Avenue, SW, R Street, SW, Half Street, SW and 1st Street, SW, and is currently used for storing sand.

The objective of a Phase I assessment is to identify known and suspect "recognized environmental conditions" (RECs), historical RECs (HRECs), and *de minimis* conditions associated with the subject site, as defined in the ASTM E 1527-05 Standard and in Section 1.1 of this report. The objective of the limited Phase II subsurface sampling is to provide a preliminary evaluation of RECs identified during the Phase I portion of the assessment, including order of magnitude cost and schedule impacts on the proposed development.

The ASTM E 1527-05 Standard requires an environmental professional's opinion of the potential impacts of RECs, HRECs, and *de minimis* conditions identified on a site during a Phase I assessment. Our opinion is rendered with respect to a REC's potential (high, medium, or low) to require remedial response based on prevailing agency requirements and our understanding that the subject site is one of seven parcels being evaluated for potential redevelopment as a professional soccer stadium. Our opinion regarding a REC's potential impact on the subject site (high, medium, low, or unknown) is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, and/or our experience evaluating similar sites, and our understanding of the client's intended use for the subject site.

RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-05 Standard defines an REC as "the presence or likely presence of any hazardous substances or petroleum products on a property 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 property or into the ground, ground water, or surface water of the property." A material threat is defined by the ASTM E 1527-05 Standard as "a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment."

This Phase I assessment has revealed eleven RECs. Details regarding the nature of these RECs and our opinion regarding potential impacts are provided below.

KNOWN OR SUSPECT RECOGNIZED ENVIRONMENTAL CONDITIONS

Consistent with ASTM E 1527-05 Section 12.5 (Report Format), and for the purposes of this assessment, those RECs that have been identified as being present with respect to the subject site are referred to as Known Recognized Environmental Conditions (KRECs), and those RECs that have been identified as being likely present with respect to the subject site are referred to as Suspect Recognized Environmental Conditions (SRECs). KRECs were not identified in this Phase I assessment. The Phase I assessment identified eight SRECs.

The following SREC was identified based on results from limited Phase II subsurface sampling performed on an adjacent property to the south of the subject site in June 2014.

SREC #1: Petroleum impacts in soil at Square 0661, Lot 805, owned by Potomac Electric Power Company (PEPCO)
Potential Impact: Low
Explanation: Total petroleum hydrocarbons–diesel range organics (TPH-DRO) were detected at a concentration of 38.3 mg/kg in a composite soil sample, GTW-661-COMP-805-1, collected at 0-2 feet in the southeastern corner of Square 0661, Lot 805 in June 2014. This concentration exceeds the EPA Regional Screening level (RSL) for Residential Soil of 0.61 mg/kg for TPH-DRO but does not exceed the DC Tier 0 Soil Standard for TPH-DRO of 100 mg/kg. Soil and groundwater were not sampled at deeper levels at this location and therefore the vertical extent of impact in soil is currently not known. A potential therefore exists for hydrocarbons to have migrated into deeper soil and groundwater, and due to the tidal nature of underlying groundwater, to have subsequently migrated under the subject site.

The following SRECs were observed on the adjacent property southwest of the subject site during a site visit by Haley & Aldrich for the comprehensive Phase I assessment of Buzzard Point in August 2013.

SREC #2: Potentially unlined/unpaved sump at Super Salvage Inc., 1711 1st Street SW
Potential Impact: Low
Explanation: On-site stormwater and spills are captured and pumped to a sump in the southwestern portion of the lot before being disposed off-site by a licensed contractor. During a site visit to this property in August 2013, the sump contained large quantities of oily liquid and it was not possible to ascertain whether the sump was lined and/or confirm the integrity of the lining. The site representative could not confirm the status of the sump lining. A potential therefore exists for hydrocarbons to migrate from the sump to the subsurface.

SREC #3: Heavy staining of concrete at Super Salvage Inc., 1711 1st Street SW
Potential Impact: Low
Explanation: During a site visit to this property in August 2013, heavy concrete staining was observed at many locations. The concrete was in moderate to good condition where visible. In other areas, for example the area surrounding the sump's pump, the staining was too thick to confirm the integrity of the concrete. A potential therefore exists for hydrocarbons to migrate to soil and groundwater

under this property, and due to the tidal nature of underlying groundwater, to have subsequently migrated under the subject site.

SREC #4: Oil layer in secondary containment under aboveground storage tanks (ASTs) at Super Salvage Inc., 1711 1st Street SW
Potential Impact: Low
Explanation: A thick layer of oil was observed at the bottom of the AST tanks in the eastern portion of this property during a site visit to this property in August 2013. It is understood that the flooring of the containment is paved with concrete. However, the integrity of the concrete could not be confirmed. A potential therefore exists for hydrocarbons to migrate to soil and groundwater under this property, and due to the tidal nature of underlying groundwater, to have subsequently migrated under the subject site.

SREC #5: Concrete staining in area of an AST at Super Salvage Inc., 1711 1st Street SW
Potential Impact: Low
Explanation: Concrete staining on paving next to an AST was observed in the northern portion of this property during a site visit in August 2013. The concrete paving was in relatively good condition. However a large quantity of waste had been dumped immediately adjacent to the AST preventing Haley & Aldrich representatives from confirming the condition of the concrete beneath this waste. A potential therefore exists for hydrocarbons to migrate to soil and groundwater under this property, and due to the tidal nature of underlying groundwater, to have subsequently migrated under the subject site.

The following SRECs were observed on adjacent properties east of the subject site.

SREC #6: Open Leaking Underground Storage Tank (LUST) case adjacent to subject site at 1601 S. Capitol St., SW
Potential Impact: Low
Explanation: A LUST entry (case # 2013006) for a release listed as heating oil, gasoline, diesel from a UST in April 2013 reported impacts to soil and groundwater. The status of the release is listed as open. No additional information related to this case is available. Haley & Aldrich advanced a monitoring well, GTW-661-800-1, in the southeastern portion of the subject site in June 2014. Petroleum hydrocarbons were not detected in a soil sample collected at 10-15 feet bgs at this location. Groundwater was not encountered at the monitoring well depth of 22 feet bgs; however, there is a potential for deeper groundwater to be present and impacted. Due to the tidal influence of the area, a potential exists for impacted groundwater to have migrated under the subject site.

SREC #7: Open LUST case adjacent to subject site at 1625 S. Capitol St., SW
Potential Impact: Low
Explanation: A LUST entry (case # 2013005) associated with the release of heating oil, gasoline or diesel from a UST in March 2013 reported impacts to soil and groundwater. The status of the release is listed as open. No additional information related to this case is available. As stated above, Haley & Aldrich advanced a monitoring well, GTW-661-800-1, in the southeastern portion of the subject site in June 2014. Petroleum hydrocarbons were not detected in a

soil sample collected at 10-15 feet bgs at this location. Groundwater was not encountered at the monitoring well depth of 22 feet bgs; however, there is a potential for groundwater to be present and impacted. Due to the tidal influence of the area, a potential exists for impacted groundwater to have migrated under the subject site.

SREC #8: Open LUST case adjacent to subject site at 1721 S. Capitol Street, SW
Potential Impact: Low
Explanation: A LUST entry (case # 87012) for a release listed as gasoline/heating oil from the UST was reported in September 1987. The LUST reportedly impacted soil and groundwater. The status of the release is listed as open. No additional information related to this case is available. As stated above, Haley & Aldrich advanced a monitoring well, GTW-661-800-1, in the southeastern portion of the subject site in June 2014. Petroleum hydrocarbons were not detected in a soil sample collected at 10-15 feet bgs at this location. Groundwater was not encountered at the monitoring well depth of 22 feet bgs; however, there is a potential for deeper groundwater to be present and impacted. Due to the tidal influence of the area, a potential exists for impacted groundwater to have migrated under the subject site. In addition, benzene, toluene, xylenes, chloromethane, naphthalene and TPH-GRO were detected in groundwater at levels below applicable regulatory limits at a monitoring well, GTW-661-805-1, advanced in June 2014 and located in the southeastern portion of Square 0661, Lot 0805. This parcel is adjacent to the south of the subject site. Hydrocarbons were not detected in soil at this location. However, due to the tidal influence of the area, a potential exists for impacted groundwater to have migrated under the subject site to the north and south of this monitoring well.

HISTORICAL RECs

The ASTM E 1527-05 Standard defines an HREC as an environmental condition "which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently." This Phase I assessment identified the following three HRECs.

HREC #1: LUST case # 96030 on an adjacent parcel southwest of the subject site at 1711 1st Street SW, owned by Super Salvage, Inc., and related to a tank containing gasoline was reported to be impacting soil and was granted regulatory closure. Based on its status and impacts being limited to soil, impacts from the LUST do not present a threat to human health or the environment under current site conditions and it is unlikely that the LUST will require additional regulatory action.

HREC #2: A LUST case (# 91045) was reported at Metro Building Supply, 50 Q Street, SW, adjacent to the northeast of the subject site. A release from the gasoline UST was reported in June 1991, impacting soil and groundwater. The status of the release is listed as No Further Action (NFA). Based on its status, impacts from the LUST do not present a threat to human health or the environment under current site conditions and it is unlikely that the LUST will require additional regulatory action.

HREC #3: A LUST case(#94012) was reported at Opportunity Concrete Garage, 1601 S. Capitol St., SW, adjacent to the east of the subject site. The LUST entry was associated with the release of gasoline

from a UST in November 1993 reportedly impacted soil. The status of this release is listed as closed. Based on the status of the LUST entry and impacts being limited to soil, the gasoline release does not present a threat to human health or the environment under current site conditions and is unlikely to require additional regulatory action.

DE MINIMIS CONDITIONS

The ASTM E 1527-05 Standard defines *de minimis* conditions as those conditions which "do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies." The ASTM E 1527-05 Standard notes that "conditions determined to be *de minimis* are not recognized environmental conditions."

This Phase I assessment revealed the following *de minimis* condition: minor stains appearing to be caused by hydrocarbons were observed on asphalt in central portion of the subject site and near to the office during the site visits in August 2013 and April 2014.

SUMMARY AND RECOMMENDATIONS

In summary, several SRECs on adjacent properties were identified during the comprehensive Buzzard Point Phase I assessment in August 2013.

Soil was collected from a temporary groundwater monitoring well in the southeastern portion of the subject site and was sampled for potential hydrocarbon impacts in soil during a limited Phase II subsurface sampling program in June 2014. Impacts to soil were not identified. Groundwater was not encountered in the monitoring well that was advanced to a depth of 22 feet. Based on the current activities taking place at the site, it is our opinion that additional regulatory action is unlikely under current subject site conditions. However, if excavation to depths greater than 22 feet and/or construction dewatering are necessary for the subject site development, then proper handling of groundwater may be required. This could include developing a site-specific health and safety plan and a soil management plan that provides proper handling procedures for construction dewatering in case groundwater will be encountered during the proposed development. The potential cost impact for a site-specific health and safety plan and a soil management plan is approximately $10,000.

The remainder of this report contains additional information regarding the Phase I assessment, the limited Phase II subsurface sampling the resulting findings summarized above, and limitations affecting this report.

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1. INTRODUCTION

This report presents the results of a Phase I environmental site assessment (Phase I assessment) and limited Phase II subsurface sampling conducted at the DC parcel at Buzzard Point, Square 0661, Lot 0800 in Washington, DC (herein referred to as the "subject site"). A Phase I assessment was conducted by Haley & Aldrich, Inc. (Haley & Aldrich) for seven parcels at Buzzard Point proposed for redevelopment as a professional soccer stadium, in accordance with our proposal to McKissack & McKissack dated 28 June 2013 ("Agreement", Appendix A). This report was prepared in response to a request from McKissack & McKissack to provide a stand-alone Phase I assessment for the subject site and the other parcels once Limited Phase II subsurface sampling was performed at the different parcels. Limited Phase II subsurface sampling was conducted on the subject site in accordance with our proposal dated 24 September 2013 ("Agreement", Appendix A) to McKissack & McKissack. This Phase I assessment was performed in conformance with the scope and limitations of the American Society of Testing and Materials (ASTM) E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-05 Standard) to comply with 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule).

1.1 Objective

The objective of a Phase I assessment is to identify known and suspect "recognized environmental conditions" (RECs), historical RECs (HRECs), and *de minimis* conditions associated with the subject site by evaluating subject site history, existing observable conditions, current subject site use, and current and former uses of adjoining properties as well as potential releases at surrounding properties that may impact the subject site. RECs are defined in the ASTM E 1527-05 Standard as "the presence or likely presence of any hazardous substances or petroleum products on a property 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 property or into the ground, groundwater, or surface water at the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies." A material threat is defined by the ASTM E 1527-05 Standard as "a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment."

Consistent with ASTM E 1527-05 Section 12.5 (Report Format), and for the purposes of this assessment, those RECs identified as being present with respect to the subject site are referred to as Known Recognized Environmental Conditions (KRECs), and those RECs identified as being likely present with respect to the subject site are referred to as Suspect Recognized Environmental Conditions (SRECs). The ASTM E 1527-05 Standard defines HRECs as environmental conditions "which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently."

The objective of the limited Phase II subsurface sampling was to provide a preliminary evaluation of RECs identified during the Phase I portion of the assessment, including order of magnitude cost and schedule implications on the proposed development. Our conclusions are intended to help the user evaluate the "business environmental risk" associated with the subject site, defined in the ASTM E 1527-05 Standard as "a risk which can have a material environmental or environmentally-

driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations…"

The completion of this Phase I assessment is only one component of the process required to satisfy the AAI Rule. In addition, the user must adhere to a set of user responsibilities as defined by the ASTM E 1527-05 Standard and the AAI Rule. User responsibilities are discussed in Section 5.3 of this report. A user seeking protection from Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability as an innocent landowner, bona fide prospective purchaser, or contiguous property owner must complete all components of the AAI process in addition to meeting ongoing obligations. AAI components, CERCLA liability relief, and ongoing obligations are discussed in the AAI Rule and in Appendix XI of the ASTM E 1527-05 Standard.

1.2 Site Identification

The subject site is owned by the District of Columbia Department of Transportation (DDOT) and is currently used for storing sand. The subject site is surrounded by Potomac Avenue, SW to the northwest, R Street, SW to the south, Half Street, SW to the east and 1st Street, SW to the east to the west.

1.3 Scope of Services

Haley & Aldrich performed the following scopes of service to complete this Phase I assessment. These services were performed either by, or under the direct supervision of, an environmental professional as defined by the AAI Rule.

1. Conducted visual observations of site conditions, and of abutting property use, to evaluate the nature and type of activities that have been or are being conducted at and adjoining to the subject site, in terms of the potential for release or threat of release of hazardous substances or petroleum products.

2. Reviewed federal, state, tribal, and local environmental database information within the ASTM-specified distance from the subject site using a database service to access records. Used 7.5-minute topographic maps to evaluate the subject site's physical setting.

3. Reviewed District environmental files pertaining to the subject site and nearby sites with the potential to impact the subject site.

4. Reviewed previous reports prepared for the subject site.

5. Reviewed the following sources of historical use information: Sanborn maps, aerial photographs and topographic maps.

6. Contacted District agencies regarding the subject site and surrounding properties and structures.

7. Interviewed the key site manager and property tenant representatives.

8. Performed limited Phase II subsurface sampling and analysis.

9. Interpreted the information and data assembled as a result of the above work tasks, and formulated conclusions regarding the potential presence and impact of RECs, including HRECs.

1.4 Non-Scope Considerations

The ASTM E 1527-05 Standard includes the following list of "additional issues" that are non scope considerations outside of the scope of the ASTM Phase I assessment practice: asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, bio-agents, and mold. These items were not included in this Phase I assessment of the subject site.

A limited assessment of the presence of polychlorinated biphenyls (PCBs) is included in the ASTM work scope. Accordingly, our assessment of the presence of PCBs is limited to those potential sources specified in the ASTM E 1527-05 Standard as "electrical or hydraulic equipment known or likely to contain PCBs...to the extent visually and or physically observed or identified from the interview or records review."

1.5 Exceptions and Deviations

1.5.1 Deviations

Haley & Aldrich completed this Phase I assessment in substantial conformance with the ASTM E 1527-05 Standard. In our opinion, no additions were made to or deviations and deletions made from the ASTM work scope in completing this Phase I assessment.

1.5.2 Data Gaps

No data gaps were identified during this Phase I assessment.

1.5.3 Limitations

Our work for this project was performed in accordance with the standards and practices set forth in 40 CFR Part 312 and is consistent with the ASTM E 1527-05 Standard for Phase I Environmental Site Assessments. Several organizations other than ASTM, such as professional associations ASFE and AGWSE, have also developed guidelines or standards for environmental site assessments. The Phase I assessment presented in this report may vary from the specific guidelines or standards required by other organizations.

This Phase I assessment was prepared pursuant to an Agreement dated 22 July 2013 between McKissack & McKissack and Haley & Aldrich, which Agreement is attached hereto and is made a part of this report. The limited Phase II subsurface sampling was performed pursuant to an Agreement dated 30 October 2013 between McKissack & McKissack and Haley & Aldrich (Appendix A). All uses of this report are subject to, and deemed accepting of, the conditions and restrictions contained in these Agreements. The observations and conclusions described in this report are based solely on the Scope of Services provided pursuant to these Agreements. Haley & Aldrich has not performed any additional observations, investigations, studies, or other testing not specified in these Agreements. Haley & Aldrich shall not be liable for the

existence of any condition the discovery of which would have required the performance of services not authorized under these Agreements.

This report is prepared for the exclusive use of McKissack & McKissack and their prime contract holder, the District of Columbia Department of General Services (DGS) in connection with the proposed development of the subject site. There are no intended beneficiaries other than McKissack & McKissack. Haley & Aldrich shall owe no duty whatsoever to any other person or entity on account of the Agreements or the report. Use of this report by any person or entity other than McKissack & McKissack or the DGS for any purpose whatsoever is expressly forbidden unless such other person or entity obtains written authorization from McKissack & McKissack and from Haley & Aldrich. Use of this report by such other person or entity without the written authorization of McKissack & McKissack and Haley & Aldrich shall be at such other person's or entity's sole risk, and shall be without legal exposure or liability to Haley & Aldrich.

Use of this report by any person or entity, including by McKissack & McKissack, for a purpose other than for with the proposed development of the subject site is expressly prohibited unless such person or entity obtains written authorization from Haley & Aldrich indicating that the report is adequate for such other use. Use of this report by any person or entity for such other purpose without written authorization by Haley & Aldrich shall be at such person's or entity's sole risk and shall be without legal exposure or liability to Haley & Aldrich.

This report reflects subject site conditions observed and described by records available to Haley & Aldrich as of the date of report preparation. The passage of time may result in significant changes in subject site conditions, technology, or economic conditions, which could alter the findings and/or recommendations of the report. Accordingly, McKissack & McKissack and any other party to whom the report is provided recognize and agree that Haley & Aldrich shall bear no liability for deviations from observed conditions or available records after the time of report preparation.

Use of this report by any person or entity in violation of the restrictions expressed in this report shall be deemed and accepted by the user as conclusive evidence that such use and the reliance placed on this report, or any portions thereof, is unreasonable, and that the user accepts full and exclusive responsibility and liability for any losses, damages, or other liability which may result.

2. SITE DESCRIPTION

2.1 Site Ownership and Location

2.1.1 Name of Site Owners

The site is owned by the District of Columbia Department of Transportation (DDOT).

2.1.2 Name of Site Operator

The site is operated by DDOT.

2.1.3 Project Locus Map

The United States Geologic Survey (USGS) topographic map for the subject site is the Washington West, District of Columbia Quadrangle, dated 1983 (see Figure 1). The USGS topographic map was used as the source for subject site setting information.

2.2 Site and Vicinity Description

Figure 2 is a Site Plan of the subject site and shows relevant features of the subject site and immediately adjoining properties, as described below. The site is currently used to store sand.

The area in the vicinity of the subject site is generally characterized as urban industrial and commercial.

- **North:** a series of small commercial businesses
- **South:** a parking lot, (this parcel is owned by the Potomac Electric Power Company [PEPCO])
- **West:** a series of small commercial businesses and Super Salvage, Inc. to the southeast
- **East:** A Ready-Mix Concrete plant

2.3 Physical Setting

The subject site geology and hydrology were evaluated based on the results of the limited Phase II sampling (see Section 7 of this report) performed by Haley & Aldrich subsequent to the Phase I assessment, available public information or references, and upon our experience and understanding of subsurface conditions in the subject site area.

2.3.2 Topography

Topographically, the subject site and its vicinity is relatively flat with a gradual downward slope to the south. The subject site is at an elevation of approximately 21 feet above sea level [based on the Environmental Data Resources, Inc. (EDR) report].

2.3.3 Geology

One boring was advanced at the subject site as part of the limited Phase II sampling in June 2014. Soil conditions at the site (to a depth of five feet below ground surface [bgs]) is

generally comprised of sand with some gravel and clay. Below a depth of 5 feet and extending to the depth of the boring at 22 feet, clay was generally encountered.

Soil details in the site vicinity were not available in the EDR report, however, due to the proximity of the Anacostia River, alluvial sediments likely exist above the sedimentary rock. The subject site and vicinity are located in area comprised of urban land characterized by disturbed surface soils covered with structures and other impervious materials (pavement and concrete).

2.3.4 Hydrology

Based on surface topography, surface water from the subject site appears to flow in a southerly direction.

Also based on topography and the location of nearest water bodies (the Anacostia River, located approximately 0.1 miles east and 0.2 miles south and the Potomac River located approximately 0.3 miles west of the subject site), regional groundwater flow is anticipated to be tidally influenced. Hydrogeologic investigations were not performed at the subject site during this Phase I assessment; therefore, it is unknown to what extent localized variations in groundwater depth and flow occur on the subject site.

According to the Flood Insurance Rate Map (FIRM) supplied by EDR, the subject site is located within a floodplain. Potable water is supplied to the subject site by the District of Columbia Water and Sewer Authority (WASA). There is no known monitoring or pumping wells located on the property.

3. PREVIOUS REPORTS

Previous reports have not been prepared for the subject site. The following reports prepared for adjacent properties were reviewed for this Phase I assessment. Information contained in these reports is included herein and summarized below. Copies of pertinent sections of these reports are included in Appendix B.

- "Phase I Environmental Site Assessment, Buzzard Point, Squares 609 & 611, 2nd Street and V Street, SW, Washington, DC," prepared by URS for PEPCO Holdings Inc., dated 4 April 2005. *Note: This report included the multi-lot area located off the subject site, south of T Street, North of V Street, east of 2nd Street, and west of 1st Street. Only findings related to the subject site are discussed herein.*

- "Phase I Environmental Site Assessment, Buzzard Point, 2nd Street and V Street, SW, Washington, DC," prepared by Advantage Environmental Consultants, LLC (AEC), for The John Akridge Companies, Inc., dated 10 June 2005. *Note: This report included the multi-lot area located south of S Street, North of V Street, east of 2nd Street, and west of 1st Street. Only findings related to the subject site are discussed herein.*

Super Salvage, Inc., 1711 1st Street SW: This lot operated as a metal scrap yard since the 1960s. The URS and AEC 2005 Phase Is identified this lot on the RCRA Small Quantity Generator, LUST, and UST databases. One 2,000 gallon UST was reportedly permanently out of use. The LUST case was granted regulatory closure. No additional details were provided.

4. SITE HISTORY

Past usage of the site and/or adjoining properties was assessed through a review of Sanborn maps dated 1928, 1959, 1977, 1984, 1988, 1990, 1991, 1992, 1994, and 1998; a review of aerial photographs dated 1944, 1949, 1951, 1957, 1963, 1968, 1970, 1977, 1983, 1988, 1994, 1998, 2000, 2005, 2007, 2008, 2009, 2011 and 2012; and topographic maps dated 1885, 1894, 1947, 1951, 1956, 1965, 1971, 1972, 1983 and 1994 prepared for the subject site (Appendix C).

By 1944, the site was razed. Site uses did not change until the early 1960s when a commercial/industrial structure was observed at the subject site. This structure was no longer present by 1983. A tank reportedly storing sand was present on the subject site by 1988.

The table below provides a detailed summary of pertinent information from the historical sources reviewed:

Dates	Description of Subject Site	Description of Adjoining Properties	Sources
1944-1962	The subject site was razed.	North: a commercial/industrial structures identified as a warehouse on the 1959 Sanborn map. Grading activities were observed on and surrounding the footprint of the buildings by 1957. South: residential properties were present until the late 1950s, at which time the land immediately south of the subject site was razed. East: razed land beyond which was a commercial/industrial structure. West and southwest: commercial/industrial structures appear to have been developed, identified as a dairy and a warehouse on the 1959 Sanborn map. According to this map, the southern portion of the dairy processed butter, eggs, poultry and produce. Residential structures and a series of small commercial/industrial properties were located south of the dairy by the late 1940s. Grading activities were observed to the southwest by the late 1950s.	1944, 1949, 1951and 1957, 1977 aerial photos, and 1959 and 1984 Sanborn maps

Dates	Description of Subject Site	Description of Adjoining Properties	Sources
1963-1987	Additional residential properties were observed in the western portion of the subject site.	North: PEPCO reportedly owned the northern portion of the site previously occupied by the dairy by 1977. The southern portion of this site was still used as a dairy and was operated by Onec by 1984. By this time, commercial/industrial buildings have also been constructed on the razed areas in the eastern portion of the site immediately to the north. South: no changes in land use immediately adjacent to the subject site. East: no changes in land use. West and southwest:. A scrap metal yard reportedly owned by Onec is located immediately to the southwest.	1949 and 1951 aerial photos and 1959, 1977 and 1984 Sanborn map
1988-2012	A tank reportedly storing sand was present on the subject site by 1988.	North: no changes in land use. South: A parking lot is located on the razed land by 1998. A small structure is located in the southeastern portion of the property immediately south by 2009. East: No changes in land use. West and southwest: No changes in land use.	1988, 1994, 1998, 2000, 2005, 2007, 2008, 2009, 2011 and 2012 aerial photo and 1988, 1990, 1991, 1992, 1994, and 1998 Sanborn maps

Notes:

1. Unless otherwise noted above, per the ASTM standard, sources were reviewed dating back to 1940 or first developed use, whichever is earlier, and at five-year intervals if the use of the property has changed within that time period.

Copies of historical references reviewed are included in Appendix B.

5. ENVIRONMENTAL RECORDS REVIEW

5.1 Standard Environmental Records Review

Haley & Aldrich used the electronic database service Environmental Date Resources to complete the environmental records review. The database search was used to identify properties that may be listed in the referenced agency records, located within the ASTM-specified approximate minimum search distances as shown in the table below. Section 5.1.1 presents a description of each database searched.

Database Searched	Approximate Minimum Search Distance	Subject Site Listed?	Number of Sites within Search Distance
NPL Sites	1 mile	No	1
Delisted NPL Sites	0.5 mile	No	0
CERCLIS Sites	0.5 mile	No	1
CERCLIS-NFRAP Sites	0.5 mile	No	3
Federal ERNS	Site only	No	0
RCRA non-CORRACTS TSD Facilities	0.5 mile	No	0
RCRA CORRACTS TSD Facilities	1 mile	No	1
RCRA Generators	Site & Adjoining	Yes	4
Federal Institutional Controls/Engineering Controls	Site Only	No	0
State and Tribal Equivalent NPL Sites	1 mile	No	0
State and Tribal Equivalent CERCLIS Sites	0.5 mile	No	0
State and Tribal Registered Storage Tanks	Site & Adjoining	No	5
State and Tribal Landfills and Solid Waste Disposal Sites	0.5 mile	No	0
State and Tribal Leaking Storage Tanks	0.5 mile	Yes	33
State and Tribal Institutional Controls/Engineering Controls	Site Only	No	0
State and Tribal Voluntary Cleanup Sites	0.5 mile	No	1
State and Tribal Brownfield Sites	0.5 mile	Yes	13
DC Historical USTs	0.25 mile	Yes	7

The Environmental Data Resources (EDR) report also contains search results of other State environmental databases that are relevant to the subject site.

Haley & Aldrich also searched the Orphan Site List provided in the EDR report for the subject site and sites adjoining the subject site. Orphan sites are those that, due to incorrect or incomplete addresses,

could not be mapped. Neither the subject site not the adjoining properties were identified on the Orphan Site List. The complete environmental database report is provided in Appendix D.

5.1.1 Descriptions of Databases Searched

Numerous regulatory databases were searched during this Phase I assessment. Each database reviewed is described in the EDR report presented in Appendix D. Those databases required by the ASTM E 1527-05 Standard are identified below.

1. **NPL Sites:** The National Priorities List (NPL) is a list of contaminated sites that are considered the highest priority for cleanup by the U.S. Environmental Protection Agency (USEPA).

2. **Delisted NPL Sites:** The Delisted National Priorities List (NPL) is a list of formal NPL sites formerly considered the highest priority for cleanup by the USEPA that met the criteria of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) for deletion from the NPL because a no further response was appropriate.

3. **CERCLIS Sites:** The Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) list identifies sites which are suspected to have contamination and require additional investigation to assess whether they should be considered for inclusion on the NPL.

4. **CERCLIS-NFRAP Sites:** CERCLIS-NFRAP status indicates that a site was once on the CERCLIS List but has No Further Response Actions Planned (NFRAP). Sites on the CERCLIS-NFRAP List were removed from the CERCLIS List in February 1995 because, after an initial investigation was performed, no contamination was found, contamination was removed quickly, or the contamination was not significant enough to warrant NPL status.

5. **Federal ERNS:** The Federal Emergency Response Notification System (ERNS) list tracks information on reported releases of oil and hazardous materials.

6. **RCRA non-CORRACTS TSD facilities:** The Resource Conservation and Recovery Act (RCRA) non-CORRACTS TSD Facilities List tracks facilities which treat, store, or dispose of hazardous waste and are not associated with corrective action activity.

7. **RCRA CORRACTS TSD facilities:** The RCRA CORRACTS TSD Facilities list catalogues facilities that treat, store, or dispose of hazardous waste and have been associated with corrective action activity.

8. **RCRA Generators:** The RCRA Generator list is maintained by the USEPA to track facilities that generate hazardous waste.

9. **Federal Institutional Controls/Engineering Controls:** The Federal Institutional Control list and Engineering Control list are maintained by the USEPA. Some Institutional Control and Engineering Control information may not be made publicly available and therefore will not be included on this registry.

10. **State and Tribal Equivalent NPL/CERCLIS Sites:** The (ASTM E 1527-05 Standard) requires searching "State and Tribal Equivalent NPL Sites." A state equivalent to the Federal NPL list is not maintained in District of Columbia. The subject site is not within tribal jurisdiction.

11. **State and Tribal Equivalent CERCLIS Sites:** The (ASTM E 1527-05 Standard) requires searching "State and Tribal Equivalent CERCLIS Sites." A state equivalent to the Federal CERCLIS list is not maintained in District of Columbia. The subject site is not within tribal jurisdiction.

12. **State and Tribal Registered Storage Tanks:** The District of Columbia Department of the Environment maintains a list of aboveground and underground storage tanks. The subject site is not within tribal jurisdiction.

13. **State and Tribal Landfills and Solid Waste Disposal Sites:** The District of Columbia Solid Waste Disposal Division is responsible for waste disposal at facilities located in Virginia. The subject site is not within tribal jurisdiction.

14. **State and Tribal Leaking Storage Tanks:** The District of Columbia Department of the Environment maintains an inventory of reported leaking underground storage tank incidents. The subject site is not within tribal jurisdiction.

15. **State and Tribal Voluntary Cleanup Sites:** The District of Columbia Department of Health maintains a list of Voluntary Cleanup sites. The subject site is not within tribal jurisdiction.

16. **State and Tribal Brownfield Sites:** The District of Columbia Department of the Environment maintains a list of Brownfield sites which includes properties where redevelopment or re-use may be compromised by the presence or presumed presence of hazardous materials or petroleum. The subject site is not within tribal jurisdiction.

17. **Other Databases Searched (Historical Cleaners and Auto Stations):** EDR Proprietary Records include Historical Cleaners, a database that consists of potential dry cleaner sites; and Historical Auto Stations, available listings of potential gas station/filling station/service station sites.

5.1.2 Detailed Description of Relevant Subject Site Listings

The EDR report did not identify any database listings in searched databases (including more databases than listed above) at the subject site.

5.1.3 Detailed Descriptions of Relevant Nearby Site Listings

The EDR report identified database listings in searched databases (including more databases than listed above) within the prescribed search radii. The majority of the database listings were USTs and LUST sites. Based on the urban area of the site, characterized by subsurface building levels, subway tunnels, and utilities that create barriers to groundwater flow, and based on the assumption that the groundwater under the subject site is tidally influenced, only those sites

immediately adjacent to the subject site would be anticipated to have the potential to affect the subject site. These sites are listed below.

An entry located at 1700 1st Street, SW (Map ID # C10) is listed on the Brownfield database. No additional details are provided.

PEPCO, located at 1st and T Street, SW (Map ID # 7) is listed on the UST database. Two entries are included in this database for tanks of capacity 6,000 gallons and containing diesel. These entries are listed as Permanently Out of Use.

Super Salvage, Inc. located at 1711 1st Street, SW (Map ID # C9, C10 and C11) is listed on the LUST (case # 96030), UST and RCRA-CESQC databases. A tank containing gasoline was reported to be leaking in October 1995 and reportedly impacted soil. The status of this release is listed as Closed. A 2,000-gallon gasoline located at the site is listed as Permanently Out of Use. Additionally, this entity is listed as a Conditionally Exempt Small Quantity Generator for storing ignitable hazardous wastes, as well as waste cadmium, lead, benzene, methyl ethyl ketone, tetrachloroethylene, and trichloroethylene. No violations have been reported associated with this listing. Based on its status and impacts being limited to soil, impacts from the LUST do not present a threat to human health or the environment under current site conditions and it is unlikely that the LUST will require additional regulatory action.

Metro Building Supply, 50 Q Street, SW (Map ID # D13 and D14): The 50 Q Street, SW property, located approximately 100 feet north northeast and upgradient of the subject property, was identified on the UST and LUST (case # 91045) databases. Two 4,000-gallon diesel USTs and one 2,000-gallon gasoline UST are reported, all listed as Permanently Out of Use. A release from the gasoline UST was reported in June 1991, impacting soil and groundwater. The status of the release is listed as No Further Action (NFA). Based on its status, impacts from the LUST do not present a threat to human health or the environment under current site conditions and it is unlikely that the LUST will require additional regulatory action.

USA Motors Inc., 45 Q Street, SW (Map ID # D15 and D16): The 45 Q Street, SW property, located approximately 220 feet north northeast and upgradient of the subject site, was identified on the RCRA-CESQG, NJ Manifest and the US Historical Auto Stat databases. The Conditionally Exempt Small Quantity Generator stored ignitable hazardous wastes, benzene, tetrachloroethylene, and trichloroethylene. No violations have been reported.

Property located at 1620 1st St, SW (Map ID #F19): The property, located 275 feet north and upgradient of the subject property is located on the historical UST database. No additional information is provided related to this entry.

Property located at 1615 1st St., SW (Map ID #F21): The 1615 1st St., SW property, located 325 feet north and upgradient of the subject property is located on the historical UST database. No additional information is provided related to this entry.

Gold Star Services, 39 Q St., SW (Map ID #D20): The 39 Q St., SW property, located 360 feet northeast and upgradient of the subject site is listed on the RCRA-CESQG, FINDS and NJ Manifest databases. This Conditionally Exempt Small Quantity Generator stores corrosive hazardous wastes, lead and non-halogenated solvents. Three violations have been reported. Compliance was achieved for each violation by December 2008. Based on compliance having

been achieved for each violation and distance from the site, it is unlikely that this property is adversely affecting the subject site.

Opportunity Concrete Garage, 1601 S. Capitol St., SW (Map ID # H29 and H30): The 1601 S. Capital St., SW property, located 300 feet northeast and cross-gradient of the subject site is listed on the UST, RCRA NonGen/NLR, FINDS and LUST (case # 2013006) databases. Seven USTs are listed, generally containing used oil, gasoline or heating oil. This Non-Generator stored ignitable hazardous waste, benzene, and tetrachloroethylene. The site received a violation in April 1994 relating to recordkeeping. Compliance was achieved during the same month. A LUST entry (case # 2013006) for the release listed as heating oil, gasoline, diesel from a UST in April 2013 reported impacts to soil and groundwater. The status of the release is listed as open. An additional LUST entry (case #94012) associated with the release of gasoline from a UST in November 1993 reportedly impacted soil only. The status of this release is listed as closed. Based on the status of the open LUST entry and the tidal influence of the area, the release from the UST may be adversely affecting the subject property.

Solon Automated Services, 1625 S. Capitol St., SW (Map ID # H31): The 1625 S. Capitol St., SW property, located 300 feet northeast and cross-gradient from the subject site, is listed on the UST database. A 1,000-gallon tank containing a non-specified hazardous substance is listed as Permanently Out of Use. 625 S. Capitol Street LLC (Map ID # H32) is also listed at this address and is listed on the LUST database. A LUST entry (case # 2013005) associated with the release of heating oil, gasoline or diesel from a UST in March 2013 reported impacts to soil and groundwater. The status of the release is listed as open. Based on the status of the LUST entry and the tidal influence of the area, the release from the UST may be adversely affecting the subject property. Pak-American Corporation (Map ID # H32) is also located at this address and is listed on the RCRA-CESQG and NJ Manifest databases. The property is listed as storing ignitable hazardous wastes, cadmium, lead, mercury, benzene, 1,4-dichloroethylene, tetrachloroethylene, and trichloroethylene. No violations have been reported.

Stuart Petroleum, 1721 S. Capitol Street, SW (Map ID #G25 and G26): The 1721 S. Capital Street property, located 400 feet east northeast and cross-gradient of the subject site is listed on the UST, LUST and RCRA NonGen/NLR databases. The site is listed as a gas station that owned and operated a heating oil UST, listed as Permanently Out of Use. A LUST entry (case # 87012) for a release listed as gasoline/heating oil from the UST was reported in September 1987. The LUST reportedly impacted soil and groundwater. The status of the release is listed as open. The RCRA listing pertains to the storage of ignitable hazardous waste at the property. Two violations are listed related to the site's RCRA permit. Both violations were closed by the mid-1990s. Based on the status of the LUST entry and the tidal influence of the area, this release may be adversely affecting the subject site.

5.2 Additional Environmental Records Review

To supplement the (ASTM E 1527-05 Standard) environmental record sources, we contacted the following state and local government agencies, and/or reviewed the following additional sources:

5.2.1 D.C. Department of the Environment

Additional environmental records were requested for this assessment through a Freedom of Information Act (FOIA) request to the D.C. Department of the Environment. To date, no

response has been received from the FOIA request. Due to the information obtained through interviews with key subject site personnel, and other records reviews, it does not appear that responses to the FOIA requests should affect our conclusions regarding the site. However, if a response is received that affects our conclusions regarding the subject site, we will provide an addendum to this report.

5.2.2 D.C. Fire and EMS Department

Additional environmental records were requested for this assessment through a FOIA request to the DC Fire and EMS Department. This department responded to our request on 27 December 2013. According to the files held by this department, operations taking place at the subject site and adjoining properties are unlikely to be impacting the subject site. A copy of the response from the DC Fire and EMS Department is included in Appendix D.

5.3 User Responsibilities

The AAI Rule requires that the user of the report consider the following:

- Whether the user has specialized knowledge about previous ownership or uses of the subject site that may be material to identifying RECs;
- Whether the user has determined that the subject site's Title contains environmental liens or other information related to the environmental condition of the property, including engineering and institutional controls and Activity and Use Limitations (AULs), as defined by ASTM;
- Whether the user is aware of commonly known or reasonably ascertainable information about the subject site including whether or not the presence of contamination is likely on the subject site and to what degree it can be detected; and
- Whether the user has prior knowledge that the price of the subject site has been reduced for environmentally related reasons.

We requested such information for inclusion in this report. Though neither the AAI Rule nor the ASTM E 1527-05 Standard requires that this information be provided to the environmental professional(s), failure on the part of the user to obtain such information for their own records, should it be reasonably ascertainable, may invalidate the user's compliance with the AAI Rule for CERCLA liability protection in the future.

6. SITE RECONNAISSANCE AND KEY PERSONNEL INTERVIEW(S)

A site visit to observe site conditions was conducted by Karin Holland and Christian-Noel Tschibelu of Haley & Aldrich on 28 August 2013 and by Don Seserko on 8 April 2014. Haley & Aldrich observed the interior and exterior portions of the subject site, including the property boundaries, and observed adjoining property conditions from the subject site boundaries and/or public thoroughfares. No weather-related conditions or other conditions that would limit our ability to observe the subject site or adjoining properties occurred during our subject site visit. Site photographs are provided in Appendix E.

Site representatives were not available to be interviewed during the subject site visit.

ASTM E 1527-05 Standard Section 10.8 requires that, prior to the subject site visit**,** the current site owner or key site manager and user, if different from the current owner or key site manager, be asked if there are any helpful documents that can be made available for review. These consist of environmental site assessment reports, audits, permits, tank registrations, Material Safety Data Sheets, Community Right-to-Know plans, safety plans, hydrogeologic or geotechnical reports, or hazardous waste generator reports. We made such a request but were not provided with any documents.

6.1 Subject Site Observations

6.1.1 Current Use of the Property and General Description of Structures

The subject site appeared to be used for storing sand. A large circular concrete building was observed in the eastern portion of this lot. A small office is located west of the salt dome.

6.1.2 Potable Water Supply and Sewage Disposal System or Septic Systems

It is unlikely that potable water and sewage disposal or septic systems serve the subject site.

6.1.3 Use and Storage of Petroleum Products and Hazardous Materials

Three ASTs of unknown capacity storing magnesium chloride were observed in the northern portion of the subject site. The ASTs appeared to be in good condition at the time of the subject site visit. However, a crack in the secondary containment was noted. Other petroleum/hazardous materials were not observed at the subject site.

6.1.4 Disposal of Petroleum Products and Hazardous Materials

Disposal of petroleum products and hazardous materials were not observed at the subject site.

6.1.5 Odors

No odors were detected at the subject site.

6.1.6 PCBs Associated with Electrical or Hydraulic Equipment

PCBs associated with electrical or hydraulic equipment were not observed at the subject site.

6.1.7 Unidentified Substance Containers

Unidentified substances containers were not observed at the subject site.

6.1.8 Heating and Cooling System

Due to its current use, it is unlikely that the subject site has a heating and/or cooling system.

6.1.9 Stains or Corrosion on Floors, Walls, or Ceilings

During the April 2014 visit, minor stains were observed inside the salt dome. These stains are likely caused by salt and are unlikely to be causing any impacts to the subsurface.

6.1.10 Floor Drains and Sumps

Floor drains and sumps were not observed in the salt dome. Access to the office was not provided during the site visit, and therefore it is unknown whether floor drains and sumps are present inside the office located at the subject site.

A long and narrow sump was observed outside in the southwestern portion of the subject site. Staining was not observed in proximity to this sump.

6.1.11 Hydraulic Elevators

No hydraulic elevators were observed or reported at the subject site.

6.1.12 Vehicle Maintenance Lifts

No hydraulic vehicle maintenance lifts were observed or reported at the subject site.

6.1.13 Emergency Generators and Sprinkler System Pumps

No emergency generators and sprinkler system pumps were observed or reported at the subject site.

6.1.14 Catch Basins

No catch basins were observed or reported at the subject site.

6.1.15 Dry Wells

Dry wells were not observed or reported at the subject site.

6.1.16 Pits, Ponds, Lagoons, and Pools of Liquid

Pits, Ponds, Lagoons, and Pools of Liquid were not observed or reported at the subject site.

6.1.17 Stained Soil or Pavement

A large green spill caused by an unidentified substance was observed in the center of the subject site during the August 2013 visit. The asphalt paving under the spill was not visible during the site visit and therefore its integrity was unknown. During the subsequent visit in April 2014, the staining was no longer present. It is likely that the stain was caused by rainwater and rock salt collecting at the subject site.

Minor stains appearing to be caused by hydrocarbons were also observed on asphalt in central portion of the subject site and near to the office during the site visits. Asphalt was generally observed to be in good condition and it is therefore unlikely that hydrocarbons associated with these stains have migrated to the subsurface.

6.1.18 Stressed Vegetation

The subject site is paved with asphalt. Evidence of stressed vegetation was not observed.

6.1.19 Solid Waste and Evidence of Waste Filling

Solid waste and evidence of waste filling was not observed during the site visit.

6.1.20 Wastewater and Stormwater Discharge

Wastewater and stormwater was not observed at the subject site.

6.1.21 Monitoring, Water Supply, or Irrigation Wells

Monitoring, water supply, and irrigation wells were not observed or reported at the subject site.

6.1.22 Sanitary Sewer and Septic Systems

Septic systems were not observed or reported at the subject site.

6.2 Adjoining Property Observations

Properties adjoining the subject site were generally observed to be light industrial or commercial in nature.

7. SUBSURFACE EXPLORATION

In order to evaluate subsurface conditions and assess whether current and former operation at and adjacent to the subject site are impacting the subject site, Haley & Aldrich conducted a limited Phase II subsurface assessment at the subject site. The approximate location of the exploration is shown on Figure 3.

7.1 Monitoring Well Installation 26 June 2014

On 26 June 2014, Haley & Aldrich monitored the advancement of a temporary groundwater monitoring well (GTW-661-800-1, see Figure 3) at the subject site by Vironex Drilling, Inc. The well was advanced to approximate depth of 22 feet bgs until the Geoprobe hit refusal (i.e. the Geoprobe rod could not be advanced further under full pressure of the Geoprobe rig). The well was dry at 22 feet and therefore no groundwater samples were collected from this monitoring well. The well installation report is included in Appendix F.

7.1.1 Soil Sampling 26 June 2014

Soil samples collected during the advancement of the temporary groundwater monitoring well were screened for Volatile Organic Compounds by exposing a photoionization detector (PID) to vapors accumulated on the Geoprobe sample sleeves. The soil sample corresponding to the highest PID reading was submitted for laboratory analysis. Samples were collected for TPH-DRO, TPH-GRO, benzene, toluene, ethylbenzene, xylenes (BTEX), and naphthalene. The soil samples were placed on ice in the field prior to being shipped via overnight courier to Pace Analytical Services, Inc. (Pace) in Huntersville, North Carolina.

7.2 Subsurface Findings

Subsurface investigations described in this report did not define the lateral extent of petroleum impacts to soil or groundwater at the subject site. The objective was to explore SRECs and KRECs to evaluate current conditions to assess the general magnitude of potential impacts.

7.2.1 Soil Results

Soil analytical results are summarized in Table I, along with regulatory screening levels for comparison. Laboratory analytical reports are included in Appendix G.

Analytical results for a soil sample collected near the southeastern corner of the subject site (GTW-661-800-1) from a depth of 15 to 20 feet bgs were below the laboratory reporting limits for TPH-DRO, TPH-GRO, BTEX, and naphthalene.

8. FINDINGS AND CONCLUSIONS

Haley & Aldrich, Inc. (Haley & Aldrich) performed a Phase I environmental site assessment and (Phase I assessment) of the District of Columbia (DC) Parcel at Buzzard Point, Square 0661, Lot 0800 (herein referred to as the "subject site") in Washington, DC. The scope of work is described and conditioned by our proposal dated 28 June 2013. As indicated in our proposal, this Phase I assessment was performed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-05 Standard) as referenced in 40 Code of Federal Regulations (CFR) Part 312 [the All Appropriate Inquiries (AAI) Rule]. Deviations from this Standard, and/or data gaps and their significance are described in Section 1.5 of this report. Our conclusions are intended to help the user evaluate the "business environmental risk" associated with the subject site, as defined in the ASTM E 1527-05 Standard and discussed in Section 1.1 of this report.

The subject site is bound by Potomac Avenue, SW, R Street, SW, Half Street, SW and 1st Street, SW, and is currently used for storing sand.

The objective of a Phase I assessment is to identify known and suspect "recognized environmental conditions" (RECs), historical RECs (HRECs), and *de minimis* conditions associated with the subject site, as defined in the ASTM E 1527-05 Standard and in Section 1.1 of this report. The objective of the limited Phase II subsurface sampling is to provide a preliminary evaluation of RECs identified during the Phase I portion of the assessment, including order of magnitude cost and schedule impacts on the proposed development.

The ASTM E 1527-05 Standard requires an environmental professional's opinion of the potential impacts of RECs, HRECs, and *de minimis* conditions identified on a site during a Phase I assessment. Our opinion is rendered with respect to a REC's potential (high, medium, or low) to require remedial response based on prevailing agency requirements and our understanding that the subject site is one of seven parcels being evaluated for potential redevelopment as a professional soccer stadium. Our opinion regarding a REC's potential impact on the subject site (high, medium, low, or unknown) is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, and/or our experience evaluating similar sites, and our understanding of the client's intended use for the subject site.

RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-05 Standard defines an REC as "the presence or likely presence of any hazardous substances or petroleum products on a property 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 property or into the ground, ground water, or surface water of the property." A material threat is defined by the ASTM E 1527-05 Standard as "a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment."

This Phase I assessment has revealed eleven RECs. Details regarding the nature of these RECs and our opinion regarding potential impacts are provided below.

KNOWN OR SUSPECT RECOGNIZED ENVIRONMENTAL CONDITIONS

Consistent with ASTM E 1527-05 Section 12.5 (Report Format), and for the purposes of this assessment, those RECs that have been identified as being present with respect to the subject site are referred to as Known Recognized Environmental Conditions (KRECs), and those RECs that have been identified as being likely present with respect to the subject site are referred to as Suspect Recognized Environmental Conditions (SRECs). KRECs were not identified in this Phase I assessment. The Phase I assessment identified eight SRECs.

The following SREC was identified based on results from limited Phase II subsurface sampling performed on an adjacent property to the south of the subject site in June 2014.

SREC #1: Petroleum impacts in soil at Square 0661, Lot 805, owned by Potomac Electric Power Company (PEPCO)
Potential Impact: Low
Explanation: Total petroleum hydrocarbons–diesel range organics (TPH-DRO) were detected at a concentration of 38.3 mg/kg in a composite soil sample, GTW-661-COMP-805-1, collected at 0-2 feet in the southeastern corner of Square 0661, Lot 805 in June 2014. This concentration exceeds the EPA Regional Screening level (RSL) for Residential Soil of 0.61 mg/kg for TPH-DRO but does not exceed the DC Tier 0 Soil Standard for TPH-DRO of 100 mg/kg. Soil and groundwater were not sampled at deeper levels at this location and therefore the vertical extent of impact in soil is currently not known. A potential therefore exists for hydrocarbons to have migrated into deeper soil and groundwater, and due to the tidal nature of underlying groundwater, to have subsequently migrated under the subject site.

The following SRECs were observed on the adjacent property southwest of the subject site during a site visit by Haley & Aldrich for the comprehensive Phase I assessment of Buzzard Point in August 2013.

SREC #2: Potentially unlined/unpaved sump at Super Salvage Inc., 1711 1st Street SW
Potential Impact: Low
Explanation: On-site stormwater and spills are captured and pumped to a sump in the southwestern portion of the lot before being disposed off-site by a licensed contractor. During a site visit to this property in August 2013, the sump contained large quantities of oily liquid and it was not possible to ascertain whether the sump was lined and/or confirm the integrity of the lining. The site representative could not confirm the status of the sump lining. A potential therefore exists for hydrocarbons to migrate from the sump to the subsurface.

SREC #3: Heavy staining of concrete at Super Salvage Inc., 1711 1st Street SW
Potential Impact: Low
Explanation: During a site visit to this property in August 2013, heavy concrete staining was observed at many locations. The concrete was in moderate to good condition where visible. In other areas, for example the area surrounding the sump's

pump, the staining was too thick to confirm the integrity of the concrete. A potential therefore exists for hydrocarbons to migrate to soil and groundwater under this property, and due to the tidal nature of underlying groundwater, to have subsequently migrated under the subject site.

SREC #4: Oil layer in secondary containment under aboveground storage tanks (ASTs) at Super Salvage Inc., 1711 1st Street SW
Potential Impact: Low
Explanation: A thick layer of oil was observed at the bottom of the AST tanks in the eastern portion of this property during a site visit to this property in August 2013. It is understood that the flooring of the containment is paved with concrete. However, the integrity of the concrete could not be confirmed. A potential therefore exists for hydrocarbons to migrate to soil and groundwater under this property, and due to the tidal nature of underlying groundwater, to have subsequently migrated under the subject site.

SREC #5: Concrete staining in area of an AST at Super Salvage Inc., 1711 1st Street SW
Potential Impact: Low
Explanation: Concrete staining on paving next to an AST was observed in the northern portion of this property during a site visit in August 2013. The concrete paving was in relatively good condition. However a large quantity of waste had been dumped immediately adjacent to the AST preventing Haley & Aldrich representatives from confirming the condition of the concrete beneath this waste. A potential therefore exists for hydrocarbons to migrate to soil and groundwater under this property, and due to the tidal nature of underlying groundwater, to have subsequently migrated under the subject site.

The following SRECs were observed on adjacent properties east of the subject site.

SREC #6: Open Leaking Underground Storage Tank (LUST) case adjacent to subject site at 1601 S. Capitol St., SW
Potential Impact: Low
Explanation: A LUST entry (case # 2013006) for a release listed as heating oil, gasoline, diesel from a UST in April 2013 reported impacts to soil and groundwater. The status of the release is listed as open. No additional information related to this case is available. Haley & Aldrich advanced a monitoring well, GTW-661-800-1, in the southeastern portion of the subject site in June 2014. Petroleum hydrocarbons were not detected in a soil sample collected at 10-15 feet bgs at this location. Groundwater was not encountered at the monitoring well depth of 22 feet bgs; however, there is a potential for deeper groundwater to be present and impacted. Due to the tidal influence of the area, a potential exists for impacted groundwater to have migrated under the subject site.

SREC #7: Open LUST case adjacent to subject site at 1625 S. Capitol St., SW
Potential Impact: Low
Explanation: A LUST entry (case # 2013005) associated with the release of heating oil, gasoline or diesel from a UST in March 2013 reported impacts to soil and groundwater. The status of the release is listed as open. No additional information related to this case is available. As stated above, Haley & Aldrich

advanced a monitoring well, GTW-661-800-1, in the southeastern portion of the subject site in June 2014. Petroleum hydrocarbons were not detected in a soil sample collected at 10-15 feet bgs at this location. Groundwater was not encountered at the monitoring well depth of 22 feet bgs; however, there is a potential for groundwater to be present and impacted. Due to the tidal influence of the area, a potential exists for impacted groundwater to have migrated under the subject site.

SREC #8: Open LUST case adjacent to subject site at 1721 S. Capitol Street, SW
Potential Impact: Low
Explanation: A LUST entry (case # 87012) for a release listed as gasoline/heating oil from the UST was reported in September 1987. The LUST reportedly impacted soil and groundwater. The status of the release is listed as open. No additional information related to this case is available. As stated above, Haley & Aldrich advanced a monitoring well, GTW-661-800-1, in the southeastern portion of the subject site in June 2014. Petroleum hydrocarbons were not detected in a soil sample collected at 10-15 feet bgs at this location. Groundwater was not encountered at the monitoring well depth of 22 feet bgs; however, there is a potential for deeper groundwater to be present and impacted. Due to the tidal influence of the area, a potential exists for impacted groundwater to have migrated under the subject site. In addition, benzene, toluene, xylenes, chloromethane, naphthalene and TPH-GRO were detected in groundwater at levels below applicable regulatory limits at a monitoring well, GTW-661-805-1, advanced in June 2014 and located in the southeastern portion of Square 0661, Lot 0805. This parcel is adjacent to the south of the subject site. Hydrocarbons were not detected in soil at this location. However, due to the tidal influence of the area, a potential exists for impacted groundwater to have migrated under the subject site to the north and south of this monitoring well.

HISTORICAL RECs

The ASTM E 1527-05 Standard defines an HREC as an environmental condition "which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently." This Phase I assessment identified the following three HRECs.

HREC #1: LUST case # 96030 on an adjacent parcel southwest of the subject site at 1711 1st Street SW, owned by Super Salvage, Inc., and related to a tank containing gasoline was reported to be impacting soil and was granted regulatory closure. Based on its status and impacts being limited to soil, impacts from the LUST do not present a threat to human health or the environment under current site conditions and it is unlikely that the LUST will require additional regulatory action.

HREC #2: A LUST case (# 91045) was reported at Metro Building Supply, 50 Q Street, SW, adjacent to the northeast of the subject site. A release from the gasoline UST was reported in June 1991, impacting soil and groundwater. The status of the release is listed as No Further Action (NFA). Based on its status, impacts from the LUST do not present a threat to human health or the environment under current site conditions and it is unlikely that the LUST will require additional regulatory action.

HREC #3: A LUST case(#94012) was reported at Opportunity Concrete Garage, 1601 S. Capitol St., SW, adjacent to the east of the subject site. The LUST entry was associated with the release of gasoline from a UST in November 1993 reportedly impacted soil. The status of this release is listed as closed. Based on the status of the LUST entry and impacts being limited to soil, the gasoline release does not present a threat to human health or the environment under current site conditions and is unlikely to require additional regulatory action.

DE MINIMIS **CONDITIONS**

The ASTM E 1527-05 Standard defines *de minimis* conditions as those conditions which "do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies." The ASTM E 1527-05 Standard notes that "conditions determined to be *de minimis* are not recognized environmental conditions."

This Phase I assessment revealed the following *de minimis* condition: minor stains appearing to be caused by hydrocarbons were observed on asphalt in central portion of the subject site and near to the office during the site visits in August 2013 and April 2014.

SUMMARY AND RECOMMENDATIONS

In summary, several SRECs on adjacent properties were identified during the comprehensive Buzzard Point Phase I assessment in August 2013.

Soil was collected from a temporary groundwater monitoring well in the southeastern portion of the subject site and was sampled for potential hydrocarbon impacts in soil during a limited Phase II subsurface sampling program in June 2014. Impacts to soil were not identified. Groundwater was not encountered in the monitoring well that was advanced to a depth of 22 feet. Based on the current activities taking place at the site, it is our opinion that additional regulatory action is unlikely under current subject site conditions. However, if excavation to depths greater than 22 feet and/or construction dewatering are necessary for the subject site development, then proper handling of groundwater may be required. This could include developing a site-specific health and safety plan and a soil management plan that provides proper handling procedures for construction dewatering in case groundwater will be encountered during the proposed development. The potential cost impact for a site-specific health and safety plan and a soil management plan is approximately $10,000.

9. CREDENTIALS

This Phase I assessment report was prepared by Karin Holland under the direct supervision of Gregory Grose, who served as the Project Manager of this project. Qualification information for the project personnel is provided below.

KARIN HOLLAND
Senior Specialist

Ms. Holland received a Bachelor of Arts degree in Natural Sciences from the University of Cambridge, United Kingdom in 2002 and a Master of Science degree in Law and Environmental Science from the University of Nottingham, United Kingdom in 2003. Ms. Holland is involved in a variety of projects including environmental site assessments, soil management, and field sampling events. Her responsibilities with Phase I Environmental Site Assessments include site history research, interaction with clients and state regulatory agencies, interpretation and evaluation of environmental conditions, and development of recommendations for future investigations.

DAVID SCHOENWOLF, P.E.
Principal Consultant | Senior Vice president

Mr. Schoenwolf has over 36 years of experience in the engineering and environmental consulting practice. Mr. Schoenwolf has been an Officer-in-charge and project manager for geotechnical engineering and environmental evaluations for a broad range of projects. His scope of projects has ranged from preliminary feasibility studies, environmental site assessments, and master plan site development studies to complete design investigations for major projects including preparing geotechnical data and interpretive reports; preparing contract documents, technical specifications, and reviewing contractor submittals; instrumentation monitoring; and construction consulting. He is a registered professional engineer in the District of Columbia.

REFERENCES

1. Topographic Map, Washington West, District of Columbia Quadrangle, United States Geological Survey 7.5 minute series, dated 1983.

2. Haley & Aldrich, Inc., site visit conducted by Karin Holland and Christian-Noel Tschibelu on 28 August 2013.

3. Tat-Lin Angus of PEPCO, Terrance Jones of Akridge and John Keller of Super Salvage, Inc. interviews with Haley & Aldrich, Inc., on 28 August 2013.

4. Environmental Date Resources, Database Report, dated July 2013.

5. "Phase I Environmental Site Assessment, Buzzard Point, Squares 609 & 611, 2nd Street and V Street, SW, Washington, DC," prepared by URS, prepared for PEPCO Holdings Inc., dated 4 April 2005.

6. "Phase I Environmental Site Assessment, Buzzard Point, 2nd Street and V Street, SW, Washington, DC," prepared by Advantage Environmental Consultants, LLC (AEC), prepared for The John Akridge Companies, Inc., dated 10 June 2005.