



EXECUTIVE SUMMARY

The designated property is located at 4516 Harrisburg Boulevard in Houston, Harris County, Texas. The designated property consists of a 10.525-acre tract of land that was previously developed as a commercial/industrial facility. Currently, the previous improvements have been demolished and the designated property is being re-developed as a commercial retail shopping center for various tenants. The eastern portion of the designated property has been re-developed with a brand-new CVS Pharmacy store. A map depicting the proposed improvements is included as Figure C-1.

A map depicting the previous site improvements and adjacent properties is presented in Appendix B, Figure 6 (Site Plan). The site has three affected properties. Affected Property #1 is located at the central portion of the site and consisted of lead affected soil in an area approximately 30' x 20' (0.02 acres) to depth of 2 to 3 feet. The lead affected soil has been excavated and the area backfilled with clean fill. The surface soil at this location contained lead at concentrations above the health-based Texas Risk Reduction Program (TRRP) Tier 1 ($^{Tot}Soil_{Comb}$) Protective Concentration Level (PCL); and was subsequently excavated and disposed offsite.

Affected Property #2 consists of an area approximately 3.07 acres in size located at the south central portion of the site, along the driveway between Building 7 and Building 9. Affected Property #2 is located approximately 200 feet south of Harrisburg Boulevard. The surface soil is affected with methylene chloride and vinyl chloride at concentrations above TRRP PCLs; the first groundwater-bearing unit is affected with benzene, methyl tertiary-butyl ether (MTBE), 1,2-dichloroethane (1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-DCE), 1,1-dichloroethene (1,1-DCE), 1,1,2-trichloroethane (1,1,2-TCE), vinyl chloride, and arsenic at concentrations above TRRP PCLs; and the second groundwater-bearing unit is affected with PCE, TCE, cis-DCE, 1,1-DCE, and vinyl chloride at concentrations above TRRP PCLs. The PCLE zone is approximately 1.39 acres in size. The suspected source(s) of contamination are releases from former onsite USTs located along the driveway.

Based on previous groundwater monitoring at the site, all COCs are stable, decreasing, or undergoing dechlorination. Concentrations of MTBE, arsenic, 1,1-DCE, 1,1,2-TCE, and vinyl chloride in the first groundwater-bearing unit appear to be stable. Benzene and cis-DCE appear to be decreasing. Concentrations of 1,2-DCE, PCE, and TCE appear to be decreasing with the exception of concentrations detected in MW-12 where increases reflect evidence of dechlorination processes.

Concentrations of PCE, TCE, cis-DCE, 1,1-DCE and vinyl chloride in the second groundwater-bearing unit are stable and/or appear to be decreasing.

Since all potential onsite sources are no longer present, no continued on-site sources of groundwater contamination will remain onsite, and therefore the groundwater plumes are considered stable, decreasing, or undergoing dechlorination.

Affected Property #3 consists of an area approximately 60 feet by 20 feet. Affected Property #3 is located at the intersection of Harrisburg Boulevard and Eastwood Avenue, approximately 15 east of the intersection and is associated with three former underground petroleum storage tanks (USTs). The subsurface soil is affected with benzene, ethylbenzene, and tetraethyl lead at concentrations above TRRP PCLs. The groundwater is affected with benzene, ethylbenzene, 1,2,4-trimethylbenzene, naphthalene, and arsenic at concentrations above TRRP PCLs. Please note that the sample detection limit for tetraethyl lead in groundwater is above the extremely low TCEQ PCL of 0.0000024 milligrams per liter (mg/l). TPH constituents were detected in groundwater samples at concentrations that exceed their respective screening PCLs; however, the concentrations do not exceed the non-ingestion PCL ($^{Air}GW_{Inh-V}$).

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Concentrations of benzene, ethylbenzene, 1,2,4-trimethylbenzene, and naphthalene are stable and/or decreasing. TPH constituents were detected in groundwater samples at concentrations that exceed their respective screening PCLs; however, the concentrations do not exceed the non-ingestion PCL ($^{Air}GW_{Inh-v}$).

Three groundwater monitor wells MW-18, MW-19, and MW-20 were installed off-site to investigate for potential releases that may have migrated from Affected Property #3 onto off-site properties. Monitor well MW-19 was installed to the west of Affected Property #3. The analytical results from groundwater samples collected from MW-19 did not detect COCs at concentrations above laboratory sample detection limit.

Monitor wells MW-18 and MW-20 were installed at the off-site DJ Foods facility located to the adjacent north of Affected Property #3 and also in a cross-gradient direction. Historically, DJ Foods also operated gasoline USTs. Benzene was the only COC detected in a soil sample collected from MW-18 to exceed the ingestion PCL ($^{GW}Soil_{Ing}$); however, the detected concentrations do not exceed their respective non-ingestion PCL ($^{Air}Soil_{Inh-v}$). Benzene and arsenic were the only COCs detected in groundwater samples collected from MW-18 to exceed their respective ingestion PCLs ($^{GW}GW_{Ing}$). Benzene was the only COC detected in groundwater samples collected from MW-20 to exceed ingestion PCL ($^{GW}GW_{Ing}$).

A "Finger Print" analysis was performed on groundwater samples collected from MW-18 (located on DJ Foods site) and MW-17 (located adjacent to the former UST tankhold within Affected Property #3). The finger print analysis was conducted by two independent consultants, Exploration Technologies, Inc., (ETI) and Worldwide Geosciences, and both consultants concluded that the petroleum hydrocarbon contamination in each well resulted from releases from two separate sources. Thus, prevailing evidence indicates that impacts on the DJ Foods site is not attributable to releases from Affected Property #3.

ETI prepared a report entitled "Surface Geochemical Evaluation for Gasoline Constituents" evaluating soil vapors at Affected Property #3, within Harrisburg Boulevard, and at the offsite property to the north which is occupied by DJ Food. ETI concluded that the different chemical signature in both soil vapor and groundwater, coupled with the mapped soil gas distribution demonstrate that the contamination at DJ Foods resulted from a different source than at the former Stewart & Stevenson facility.

Worldwide Geosciences, Inc. prepared a report entitled "Characterization of Submitted Analytical Results" evaluating groundwater samples collected from monitoring well MW-17 adjacent to the UST tankhold at Affected Property #3 and offsite monitoring well MW-18 installed adjacent to the DJ Foods on the north side of Harrisburg Boulevard. Based on review of the compositional characteristics of the gasoline constituents detected in groundwater from MW-17 and MW-18 Worldwide Geosciences, Inc. concluded that the gasoline constituents detected in groundwater samples from MW-17 and MW-18 are from two different gasoline sources.

The northern extent of gasoline impacted groundwater originating at Affected Property #3 is appears to be commingled with the groundwater plume at DJ Foods. Although the gasoline in groundwater at the DJ Foods property and at the designated property are from different sources, these two groundwater plumes appear to be commingled beneath Harrisburg Boulevard.

The properties within 500 feet of the designated property are commercial/industrial and residential and are described below:

- North: The designated property is bounded by Harrisburg Boulevard to the north followed by commercial retail facilities along Harrisburg Boulevard.
- East: The designated property is bounded by Lockwood Drive followed by commercial retail facilities and residential properties along Lockwood Drive.

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- South: The designated property is bound by a railroad easement followed by residential properties.
- West: The designated property is bound by Eastwood Drive and a commercial facility.

The future use of the designated property will be commercial/industrial. The surrounding properties will most likely remain commercial/industrial and residential.

There are no municipalities, other than the City of Houston, within one-half mile of the designated property boundary.

The applicant's current plan for the designated property is to obtain regulatory closure for groundwater issues through TCEQ Voluntary Clean-up Program (VCP) and the property has been entered to the VCP and assigned a VCP No. 1675. Upon approval of the MSD Ordinance by the City of Houston for this designated property, a TCEQ MSD Application will be completed and submitted to the TCEQ to obtain a VCP Certificate. With an MSD, COCs in the groundwater at all three Affected Properties and at the off-site DJ Food property will not exceed the commercial/industrial assessment level for the groundwater ingestion pathway. An Amended APAR will then be prepared based on MSD applicable PCLs.