



Initial Site Screening (ISS)

Site Name: Metals - Mixed Use Property

Project Manager: Matt Culp Date: 8/7/2020

3931 - Phase II Assessment Review – Brownfield Funded
Phase II submitted as part of standard real estate development, pre-purchase agreement, or other due diligence, not a part of a community grant project, or

3837 - Phase II Assessment – Brownfield Grant Funded
Phase II submitted as part of an EPA grant funded community-wide or targeted assessment project – see Mel Pins if questions on this determination, or

3321 - Phase II Assessment Review – CERCLA Pre-Remedial Funded
Phase II submitted that is not part of a real estate transaction

Location: (Decimal Degree format)

Latitude: 41.5729 Longitude: 93.7084 County: Polk

USGS Quadrant: Des Moines SW

Site Size: 0.333 Site Dimension: Acres Square Feet Feet Square Miles Miles

Site Alias Name(s): Lockard Construction, Standard Forwarding, trucking company, Safe Storage

Congressional District: Iowa 3rd

Grant Recipient Name: NA

Grant Recipient Address: NA

Grant Recipient Phone: NA Grant Recipient Email: NA

Current

Owner(s): Taxium LLC CO Ryan Wiederstein, Manager

Current Owner Address: 5465 Mills Civic Parkway Suite 235 West Des Moines, IA 50266

If different from current owner:

Responsible Party Name(s): Same

Responsible Party Address: same

Site Street Address or Tier, Range, Section & Subsections (if street address is unknown)

309 and 315 5th Street West Des Moines Iowa

Directions to site: The site is located at the given address is West Des Moines Iowa

Summarize the site history (past usages, past ownerships, wastes, known or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, land applications, SW burial, etc.)

Site History:

The site is composed of two parcels addressed 309 and 315 5th Street, located in a commercial area in the Historic Valley Junction Business District of West Des Moines, Iowa. In 1897 the earliest recorded use of the site was as a furniture business with a coal shed, and two residential dwellings. The site was occupied by one or more residential dwellings from 1908 through the 1940s. A laundry/cleaners was also located on the site from 1917 through 1935, and in 1946. Other businesses located on the site included shoe repair, upholstery, bakery, electric service, auto parts, and a church.

The site is currently has a 6,700 square foot one-story commercial building that was constructed in 1946. The building was used as a grocery store from 1949 to 1978. A frame shop, furniture store, interior decorator, flooring company, and a shipping/delivery service were other businesses that have occupied the building. A quilting store has occupied the building since 2012. Only small quantities of paint and ammonia-based household cleaners are stored inside the building today. No 55-gallon drums, above ground storage tanks or evidence of underground storage tanks were observed on the site. There was no report of wells, pits, ponds, sumps, or solid waste disposed of on the property. No private water wells were identified on the site and the water and sewer are provided by the city.

Recognized Environmental Conditions (REC):

- On-site REC: A laundry/cleaners was located on the site from 1917 through 1935, and in 1946. Dry cleaning chemicals could have been used and stored on the site.
- Off-site REC: A filling station was located on the south-adjointing property in the 1930s. A petroleum release was discovered in 1991 that was determined to extend beneath the south portion of the site.

Briefly describe the site assessment that was conducted (number of borings, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)

Three test borings (TB-1, TB-2 and TB-3) were drilled on the site to a depth of 15 feet. No soil staining or unusual odors were noted during drilling. The first 1 to 2 feet of soil consisted of fill with very dark gray sandy clay, gravel and cinders. The fill was underlain by buried topsoil consisting of very dark gray clay with trace roots, extending to a depth of 4.0 feet. The fill and buried topsoil were underlain by alluvium consisting of brown to gray sandy clay. Samples for petroleum hydrocarbon analyses were collected from each soil boring at a depth of 10.0 feet in each test boring. A photoionization detector (PID) was also used to screen soils for the presence of volatile organic compounds (VOCs). After soil samples were collected the soil borings were converted to temporary monitoring wells.

Soil and groundwater samples were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by Iowa Method OA-1, total extractable hydrocarbons (TEH) by Iowa Method OA-2, and RCRA metals by EPA Methods 601 OB and 7471A. The groundwater samples were analyzed for Volatile Organic Compounds (VOCs) by EPA method 8260B and for total extractable hydrocarbons (TEH) by Iowa Method OA-2.

Summarize the findings and conclusions regarding the contaminants found and their extent and concentration. Relate those values to known criteria such as statewide standards, MCLs, water quality standards, background levels or other benchmarks used to determine site priority.

Soil Findings

Metals: RCRA metals: Arsenic, Barium, Cadmium, Chromium, Lead and Mercury were detected in one or more of the soil samples from the test borings. Lead was detected at 808 mg/kg in soil at test boring TB-2 and arsenic was detected at a concentration of 17.3 ppm at soil boring TB-3. These concentrations exceed the Iowa Land Recycling Program (ILRP) statewide standards (SWS) of 400mg/kg for Lead and 1.9mg/kg respectively. The other RCRA metals concentrations in soil were below SWS.

Total Extractable Hydrocarbons (TEH) as Waste Oil: TEH was detected in soil at soil boring TB-2 at a concentration of 6mg/kg which is below the SWS of 9,400mg/kg. No other petroleum hydrocarbons were detected in soil.

Groundwater Findings:

TEH as Waste Oil: TEH as waste oil was detected at a concentration of 600ug/L at test boring TB-1. This concentration exceeds the IDNR Tier 1 action level of 400ug/L, but is less than the ILRP SWS for protected groundwater of 730ug/L. TEH as gasoline was also detected at a concentration of 100ug/L at boring TB-2. However, there are no Tier 1 action levels or ILRP SWS for TEH as gasoline in groundwater. No other petroleum hydrocarbons or VOCs were detected in the groundwater samples. These detections are probably from an off-site source (see below).

Identify on-site or off-site potential and actual receptors and sources (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.

There are no on-site receptors (wells), however there is a potential on-site sources which has already been identified.

Off-Site Source: A potential off-site source includes a former filling station that was located on the south-adjoining property at 301 5th Street in the 1930s. This adjoining property was a former Casey's General Store with underground fuel tanks from which a petroleum release was discovered in 1991 and which was designated a LUST site (#8LT027). A site investigation was conducted from 1993 to 1994 and a Site Cleanup Report was prepared in 1994. The site was initially assigned a High Risk classification and the groundwater petroleum plume from this off-site source extended beneath the south portion of the (309 and 315) site. The LUST site was reclassified to Low Risk in 2005 and classified to No Action Required in 2007 and free product monitoring continued until 2008. A Certificate of No Further Action was issued in 2014.

The site is located in the floodplain of the Raccoon River. This area is characterized by low relief and shallow surface gradients. In general, the site surface slopes gradually from northwest to southeast toward the Raccoon River. The site is also located within the 10-year capture zone of the West Des Moines Water works but does not pose a threat to the wells.

Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.

Priority 3 and deferral from CERCLA

Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.

The priority determination of this site is based on elevated lead and arsenic in soil but does not pose a significant risk to public health or the environment. A risk calculation for exposure to indoor air was not conducted by DNR because the contaminants detected in groundwater (waste oil) is not volatile. Also, a risk calculation for groundwater was not conducted because the groundwater pathway is not a completed risk pathway.

Soil Risk Calculation

A cumulative risk calculation was conducted for contamination in soil that included arsenic, lead and TEH as waste oil. The maximum concentrations for these contaminants were input into the Iowa DNR cumulative risk calculator for exposure for the site resident, site worker and construction worker exposure scenarios. The maximum concentrations used were for lead was 808mg/kg, for arsenic was 17.3mg/kg and for waste oil was 6.0mg/kg. The result of the risk calculation determined that the site passes for the cancer risk for site resident, site worker and the cancer and non-cancer risk for site construction worker but fails for the site resident and site worker non-cancer exposure for lead.

Site recommended for:

- No further action under CERCLA Pre-Remedial
- Additional investigation under state program (activity code 2824)
- Additional investigation under CERCLA (Extended Site Screening)
- Transfer to LUST/UST

Form Reviewed:



Date Reviewed:

8/7/2020