



Extended Site Screening (ESS)

Site Name: Wapello Dollar General

Project Manager: Jake Bucklin Date: 11/18/2024

Location: (Decimal Degree format)

Latitude: 41.1852 Longitude: -91.2014 County: Louisa

USGS Quadrant: Wapello 7.5'

Site Size: 2.76 Site Dimension: Acres Square Feet Feet
 Square Miles Miles

Baxter Bros Canning Factory, Wapello Livestock Sales Inc., Dearmin Trucking, Wapello

Site Alias Name(s): Flea Market

Congressional District: Iowa 2

Grant Recipient Name: NA

Grant Recipient Address: NA

Grant Recipient Phone: NA Grant Recipient Email: NA

Current Owner: First Link 15, LLC C/O Lou Pappan

Current Owner Address: 1300 Freeport Road, Pittsburgh, PA 15238

If different from current owner:

Responsible Party Name(s): _____

Responsible Party Address: _____

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

709 Highway 61 North, Wapello, Iowa 52653

Directions to site: From the north edge of Wapello, drive south on Highway 61 for approximately 0.3 miles and the site is on the right.

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, now owned by First Link 15, LLC, is currently operating as a DG Market grocery store. Historic uses of the site include a canning factory, trucking company, livestock auction house, and flea market. Petroleum contamination was discovered in soil and groundwater on the site when the neighboring residence to the south reported diesel in their drinking water to the city. When the city replaced the water line to the house, the soil on the southeast edge of the site had a petroleum odor and apparent diesel staining. A subsequent Phase I assessment discovered evidence to suggest that a UST was potentially utilized on site by the trucking company, although this was before regulations existed and no documentation exists to confirm the presence of a UST. The investigation also discovered an empty AST on the site at the time of the reconnaissance and historic gasoline storage by the canning company is indicated on a fire insurance map dated 1909.

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.)

Additional assessment at the site was required based on results of the ISS that was conducted in June 2024 that identified the need for additional soil, groundwater, and soil vapor sampling in order to determine the extent of the contamination plume and the potential for soil vapor and indoor air impacts to the site and surrounding properties.

The ESS assessment consisted of collecting 2 soil vapor samples, 7 soil samples, and 7 groundwater samples. Soil and groundwater samples were submitted for laboratory analysis of Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) via Iowa Method OA-1; Total Extractable Hydrocarbons (TEH) via Iowa Method OA-2; and Resource Conservation and Recovery Act (RCRA) Metals via EPA Method 6020B/7470A/7471B and were compared to Iowa statewide standards (SWS) for the applicable analyte and medium. Soil gas samples were submitted for analysis of VOCs via EPA Method TO-15 and were evaluated using the Iowa DNR cumulative risk calculator as well as compared to applicable standards.

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

Soil Results:

The only analyte detected in soil that exceeded the SWS was arsenic, which was detected at concentrations that are consistent with typical background levels found in soil. Barium, chromium, lead, mercury, and diesel were also detected in soil, but at concentrations that did not exceed applicable standards. BTEX was not detected in soil.

Groundwater Results:

Arsenic, barium, cadmium, chromium, lead, selenium, and diesel were all detected in groundwater at concentrations that exceeded the laboratory detection limit but did not exceed applicable SWS. BTEX was not detected in groundwater.

Soil Gas Analytical Results:

Trace concentrations of multiple VOCs were detected in soil gas samples collected from the site, but all detections were at concentrations that did not exceed applicable regulatory thresholds and cumulative risk calculations indicate that inhalation of soil gas is not a significant concern.

Cumulative Risk Evaluation:

The reported concentrations of contaminants detected in each medium were entered into the DNR Cumulative Risk Calculator (Calculator) for a risk evaluation for exposure scenario for site residents, site worker, and construction worker. The estimated non-cancer risk from groundwater to site residents and site workers exceeded the acceptable risk threshold, while all other risk calculations for each medium and receptor did not exceed the unacceptable risk threshold.

Identify on-site or off-site potential and actual targets (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.

As previously identified in the ISS, residential properties are located to the east of the site and the adjacent property to the south is also residential. Additionally, an elementary school is located nearby to the southeast of the site. Neither the city of Wapello nor Louisa County have ordinances preventing the installation of groundwater wells in Wapello, and the Phase I investigation did find multiple wells in place in the vicinity of the site. Because of this, the potential to create an exposure pathway to groundwater or for one to already exist cannot be ruled out. Infiltration into city water lines is also a potential exposure pathway that has already occurred once and been addressed at the neighboring residence to the south as well. Highway 61 is adjacent to the east of the site, and utilities along the right of way can potentially create preferential pathways for the contamination to migrate as well as pose a potential infiltration risk. Furthermore, an elementary school and high school football field are located across the right of way to the southeast of the site, presenting a potential contamination exposure to a vulnerable population.

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

Based on the results of the ESS, DNR concurs that although some contamination does exist at the site it does not appear to present an unacceptable risk to human health and the environment under current conditions. An environmental covenant (EC) has been recorded for the site to prevent the installation of groundwater wells as well as to prevent use of the site for residential purposes. The ESS sampling has provided evidence that the contamination does not appear to have migrated off site and does not present an unacceptable risk to neighboring properties. Soil gas results suggest that vapor intrusion is not a concern at the site as well.

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: November 19, 2024

