

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
INDIANAPOLIS

OFFICE MEMORANDUM

Date: November 21, 2025

To: Breanna Tabor
Brownfields Section

Thru: Steve Buckel  11/21/25

From: Matthew Acker ^{MMA} November 21, 2025
Chemistry Services Section

Subject: Phase II Environmental Site Assessment *, *dated* July 03, 2019
Supplemental Phase II Environmental Site Assessment**, *dated* September 30,
2024
College Square
Bloomington, IN, Monroe County
Site # 4190505
AI # 124066
VFC Document # *83887144, **83887146

The Phase II ESA Reports, prepared by BCA Environmental Consultants and received by Chemistry Services on October 30, 2025, has been evaluated as requested.

Document Summary

This site is comprised of three parcels of land, ~1.7 acres total, that is a mix of commercial and municipal properties. Historically, there are multiple potential sources of contamination surrounding this site. These include a rail spur and coal piles to the west of the site, two petroleum refueling station to the north and northeast of the sites (closed 1940s), two battery and ignition service stations (closed 1940s) to the north of the site, vulcanizing onsite, and a trench drain with a suspected oil/water separator or grease trap on the northwest portion of the site.

In a continuing investigation, a Phase II ESA was performed in May 2019, and then further supplemented with additional data in 2024. Both sampling events followed the same procedures of advancing soil borings and installing temporary monitoring wells. Soil and groundwater samples were collected and analyzed for a mixture of VOCs, PAHs, 2-14 metals, and Chromium (VI). Based on the most recent investigation in 2024, BCA has recommended further investigation to delineate the soil and groundwater for contaminants including metal impacts around SP-10 and SP-11, perform a limited soil gas survey in the northeast where there is potential for a structure to be established, and establish an ERC with a Soil Management Plan/administrative tool to eliminate potential pathways of exposure related to impacted soil and groundwater.

- 5) On July 10, 2024, soil borings SP-3R and SP-6 through SP-11 were advanced using direct push methods and continuous soil collection with PID screening. Soil samples were collected according to EPA method 5035A. Temporary monitoring wells were installed at each location and purged and sampled with low-flow methods or with dedicated, disposable bailers (SP-3R, SP-7, SP-8, and SP-9) if the recharge rate was too slow. Soil samples were analyzed for VOCs (EPA 8260) and PAHs (EPA 8270). Groundwater samples were analyzed for VOCs, PAHs, and/or Arsenic and Lead (EPA 6010) as both unfiltered and field filtered. Sampling and analysis methods are acceptable.
- 6) Summarized on Tables 1 & 2, the results for soil were below their respective R2 PLs and/or non-detect for VOCs and PAHs.
- 7) Summarized on Tables 3-5, the results for groundwater detected the following at levels greater than their respective R2 GWPLs:
- | | | |
|---------------|---------------|--|
| • Benzene | 42.5-540 ppb | SP-7, SP-8, SP-9, SP-10 |
| • 1-MN | 12.5-26.2 ppb | SP-7, SP-8, SP-9, SP-10 |
| • Naphthalene | 2.6-13.7 ppb | SP-8, SP-10 |
| • Arsenic | 11.8-15.3 ppb | SP-7, SP-9, SP-10, SP-10 FF, SP-11, SP-11 FF |
| • Lead | 16.3-118 ppb | SP-7, SP-9, SP-10, SP-10 FF, SP-11, SP-11 FF |
- All other results were below their respective R2 GWPLs and/or non-detect for remaining VOCs, PAHs, Arsenic, and Lead.
- 8) A Level III (MDDR) report was submitted according to R2 guidelines and was acceptable. MS/MSD samples were taken with the soil samples from SP-11 (0-2), and groundwater MS/MSD samples were taken from SP-10 both with good recoveries. A duplicate soil sample was taken with SP-7 at 7' and 10-12', and a duplicate groundwater sample was taken with SP-11, with all results comparable to their respective sources. A Trip blank was included with the groundwater results and was non-detect for VOCs.

Conclusion

Chemistry agrees with the recommendation for further investigation including further soil and groundwater delineation, the soil gas survey in the northeast corner of the property, and establishment of an ERC for restricting soil and groundwater usage. Prior to enacting further investigations, a work plan should be submitted to IDEM for review.

cc: Risk Services
Geological Services