

**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
INDIANAPOLIS**

**OFFICE MEMORANDUM**

Date: November 25, 2025

To: Breanna Tabor  
Brownfields

Thru: Jin Wang, Chief <sup>JW</sup>  
Risk Services Section 11/25/2025  
OLQ Science Services Branch

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Subject: Supplemental Phase II Environmental Site Assessment, September 30, 2024  
College Square  
Bloomington, Indiana, Monroe County  
Site # 4190505 AI # 124066  
VFC # 83887146, 83887144

As requested, I evaluated the above document, prepared BCA Environmental Consultants, LLC (BCA), with particular emphasis on site closure. My comments follow:

**Site Understanding**

The subject property comprises of three parcels of land identified by two parcel numbers totaling approximately 1.7 acres of land. The property is located on the south side of West 4th Street, on the north side of West 3rd Street and on the west side of South College Avenue. The surrounding area is a mix of commercial and municipal properties. The B-Line multi-use trail runs along the western property boundary. The subject property is currently owned by the City of Bloomington Redevelopment Commission. The Subject Site is currently occupied.

A Phase I ESA was completed in May 2019. The Phase I ESA identified the following recognized environmental conditions (RECs) at the Subject Site:

On-site:

- Two (2) former gas stations in the northeast quadrant of the Subject Site.
- A trench-drain with an apparent oil-water separator (or grease trap) located just outside the northwest corner of the onsite building.
- Historical rail spur and coal piles along the western border of the property (mostly beneath the current building).

*This document reflects the opinions of technical staff based on information presented in the report under review addressing the condition of the site, including other relevant information available at the time of the investigation. It is intended for use in agency decision making and does not contain final determinations regarding potential remedial actions. Information in subsequent tech memos may diverge from information contained in this document based on changing site conditions or the discovery of additional relevant information.*

Off-site:

- Former manufactured gas plant (MGP) across the B-Line trail to the west of the Subject Site.
- Former LUST site (currently the Wonderlab museum) diagonally to the northwest of the Subject Site.
- Possible TCE plume that was identified on the 304 Kirkwood property (the Foundry, located approximately 440 feet north-northwest) and may run south to approximately ½ block west of the Subject Site.

A Phase II ESA was subsequently completed in May 2019. The subsurface investigation included advancing five soil and groundwater probes on the Subject Site at locations that were the most likely to be impacted by the RECs identified in the 2019 Phase I ESA. Exceedances were observed in soil and groundwater.

According to the document, another Phase I Environmental Site Assessment (ESA) of a portion of the Subject Property was completed by BCA in May 2023. This Phase I ESA identified:

- The detection of elevated concentrations of petroleum related compounds in the soil and groundwater at the Subject Property during the Phase II ESA in 2019 is a REC and a VEC.
- The historical utilization of the Subject Property as a gasoline filling station that operated on the Subject Property with multiple gasoline tanks from the 1920s through at least the late 1950s with no documentation of proper closure is a REC and a VEC.
- The historical presence of a battery and ignition service station on the Subject Property in the late 1940s, with no information of the operations is a REC.

The purpose of this Supplemental Phase II ESA is to further characterize and delineate impacts to the soil and groundwater in the areas of concern within the Subject Property. According to the document, groundwater ranges between 7 to 10 feet below ground surface (bgs) and flows to the south/southeast.

### **Risk Evaluation**

BCA is using IDEM R2 2024 Published Levels as remediation objectives. This assessment will use IDEM R2 2025 Published Levels as remediation objectives.

The following sections of this memorandum provide an evaluation of risk for the significant exposure scenarios at the site.

#### **Risk Evaluation: Soil Direct Contact Exposure Scenario**

Most recent soil sampling was completed in July 2024. No exceedances were observed. Considering the lack of soil exceedances, no soil direct contact remedy is warranted.

#### **Risk Evaluation: Groundwater Exposure Scenario**

Most recent groundwater sampling was completed in July 2024. Risk driver benzene exceeded its GWPL of 5 µg/L in SP-7, SP-8, SP-9, SP-10; highest in SP-8 at 540 µg/L. Arsenic was encountered in SP-7, SP-8, SP-9, SP-10 and SP-11; highest in SP-10 at 101 µg/L. Lead was encountered at SP-7, SP-8, SP-9, SP-10, and SP-11; highest in

SP-10 at 240 µg/L. Considering these exceedances, a ground water remedy is warranted on-site. At this time, Risk Services cannot determine if a groundwater remedy is warranted off-site. According to BCA, further investigation is planned to delineate petroleum impacts in groundwater, and to confirm the groundwater metal impacts detected at SP-10 and SP-11 are in a dissolved or mobile phase. This is acceptable to Risk Services.

### **Risk Evaluation: Vapor Intrusion Exposure Scenario**

Looking at figure number five, there could be benzene exceedances of greater than 50 µg/L within 6 feet of the current building, considering the presence of a basement was not disclosed in the document. Additional delineation or paired IA/SGss sampling west of the boring SP-8 (benzene, 540 µg/L) will determine if VI is an issue at the current building.

BCA states if future land use includes a building on the northeast corner of the Subject Property, a limited soil gas survey should be conducted in that area. This is acceptable to Risk Services.

### **Remedy Assessment**

#### **Summary Table of Remedy Recommendations**

<b>Exposure Scenario</b>	<b>Remedy Warranted</b>	
	<b>On-Site</b>	<b>Off-Site</b>
Soil	No	No
Groundwater	Yes	Cannot Determine
Vapor	Cannot Determine	Cannot Determine

### **Summary of Recommendations**

1. No soil direct contact remedy is warranted.
2. A ground water remedy is warranted on-site. At this time, Risk Services cannot determine if a groundwater remedy is warranted off-site. According to BCA, further investigation is planned to delineate petroleum impacts groundwater, and to confirm the groundwater metal impacts detected at SP-10 and SP-11 are in a dissolved or mobile phase. This is acceptable to Risk Services.
3. Further groundwater delineation or paired IA/SGss sampling may determine if VI needs to be investigated at the current building.
4. BCA states if future land use includes a building on the northeast corner of the Subject Property, a limited soil gas survey should be conducted in that area. This is acceptable to Risk Services.

### **References Cited**

IDEM 2022 Risk-Based Closure Guide (R2)

IDEM 2025 Risk-Based Closure Guide (R2) Published Level Table(s)

cc: Matthew Acker, Chemistry Services

Scott Johanson, Geological Services