State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
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March 31, 2021

Enbridge Energy, Limited Partnership Karl F. Beaster, P.G. 11 East Superior Street Suite 125 Duluth, MN 55802

Subject: Review of Interim Action and Site Investigation Report

Enbridge Line 13 Blackhawk Valve

Jefferson County, Wisconsin BRRTS# 02-28-586199

Dear Mr. Beaster,

On January 29, 2021 the Wisconsin Department of Natural Resources (the Department) received the Interim Action and Site Investigation Report for Enbridge Line 13 Blackhawk Valve, in Jefferson County, Wisconsin. The report was submitted with fee for the Department's review and response. The submittal of a Site Investigation Report (SIR) is required under Wis. Admin. Code § NR 716.15, as this site is subject to regulation under Wis. Stat. § 292. The Department has reviewed the SIR for compliance with Wis. Admin. Code ch. NR 716, and provides the following comments.

Background

The Enbridge Line 13 Blackhawk Valve (Site) is situated on an approximately 68-acre parcel near the intersection of Blackhawk Island Road and Westphal Lane in Jefferson County. Four pipelines (Lines 6, 14, 13, and 61) are present at the Site. The source of the release was identified as a leaking fitting on a control valve associated with Line 13.

A whistle alarm was reported to Enbridge Environment on April 26, 2019. Following the alarm AECOM, an environmental consulting firm, was contacted to provide environmental support at the Site. The initial screening included sampling of shallow soils and the installation of temporary vapor monitoring points.

Three soil excavation events occurred on Site, using hydro excavation methods. Following each excavation effort, confirmation samples were collected. Analytical results indicate that soil contamination remains beneath the release and, although limited, also in the sidewalls of the final excavation.

Further investigation of site conditions took place from August through October of 2020. During this phase of work, 27 soil borings were advanced, 27 temporary monitoring wells were installed and sampled, 8 permanent monitoring wells were installed and sampled, and the nearest potable well was sampled.

The results of the investigation indicate that most shallow (< 10 feet) impacted soils have been removed and the groundwater plume (area in the aquifer where contaminant concentrations are above the Enforcement Standard) appears to be limited to within approximately 250 feet of the point of release

The investigative work completed to date represents a reasonable start at defining site hydrogeologic conditions and identifying the nature and extent of impacts associated with the release. However, the lateral and vertical extent of impacts to soil requires better definition. Also, an evaluation of contaminant movement along preferred pathways (the pipeline and associated backfill) has not been performed. In addition, an evaluation of the vertical movement of the groundwater plume has not been completed. Therefore, the Department is requiring additional work as outlined below.

Additional Investigative Work

The Department recommends the following investigative work in addition to the actions recommended in the January 29, 2021 SIR.

- 1. Additional soil investigation is needed to more accurately define the nature and extent of remaining soil contamination. Specifically, impacts beneath the release should be further defined, per Wis. Admin. Code. § NR 716.11 (3) (a). All samples should be analyzed for the full suite of volatile organic compounds (VOCs).
- 2. Additional groundwater investigation is needed to evaluate vertical flow and the potential for downward migration of the contaminant plume, per Wis. Admin. Code. § NR 716.11 (5) (f). The Department requests the installation and sampling of four piezometers; one upgradient and three downgradient at the east, southeast and south margins of the plume. All samples should be analyzed for VOCs.
- 3. Potential contaminant migration associated with underground on-site infrastructure should be evaluated. In particular, migration along the outside of the pipelines and associated backfill should be investigated.
- 4. The Department requests the sampling of all private wells within 1,200 feet to the south of the release, per Wis. Admin. Code. § NR 716.13 (15). All samples should be analyzed for VOCs.
- 5. The Department requests that the vapor risk to the on-site buildings be assessed as described within RR-800.

A Supplemental Site Investigation Workplan should be submitted within 60 days of this letter, per Wis. Admin. Code § NR 716.09 (1). The workplan should be submitted prior to initiation of the above referenced field activities. A review fee, in accordance with Wis. Admin. Code ch. 749, should accompany the submittal if a detailed review and written response is requested.

The following attachments should be included within the coming Supplemental Site Investigation Workplan.

- 1. A detailed site plan showing all on-site infrastructure
- 2. A revised cross-section, including an accurate depiction of relevant below ground infrastructure; in particular, the product pipelines and associated valves and controls

The Department appreciates the efforts you are taking to address the contamination at this site. If you have any questions about this letter, please contact me at (608) 219-2182 or at caroline.rice@wisconsin.gov.

Sincerely,

Caroline Rice Hydrogeologist

Remediation and Redevelopment Program

Caroline Pin

Wisconsin Department of Natural Resources

cc: Steve Martin, South Central Region Team Supervisor