INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Eric J. Holcomb Governor Brian C. Rockensuess Commissioner

June 28, 2024

VIA EMAIL <u>kzeth@buckeye.com</u> Ms. Katherine Zeth Sr. Director, Environmental & Remediation Buckeye Partners, L.P. The Buckeye Building 6161 Hamilton Blvd Allentown, PA 18106

Re: Hammond Terminal North Property Storm Water Sewer Closing, and Scope of Work Storm Water Culvert Removal Dated February 21, and May 21, 2024. VFC # <u>83644555</u>, and <u>83643988</u> East Chicago City Dump Lake County SW Program ID 45-UP-018

Dear Ms. Zeth:

We reviewed the Hammond Terminal North Property Storm Water Sewer Closing (Report) and the Scope of Work Storm Water Culvert Removal (Proposal), prepared by Set Engineering LLC (SET). The Report was received by IDEM on May 28, 2024, and describes investigative sewer work conducted to evaluate storm sewers on the Buckeye property, followed by closure of both sewers at Manholes # 1 and # 2. The Proposal was received by IDEM on May 22, 2024, and proposes removal of the headwall for the sewers, along with partial removal of storm sewers and plugging both sewers with flowable fill.

Storm Sewer Evaluation

In June 2023, Buckeye evaluated the storm sewers and concluded there was no flow from the southern Buckey property to the northern Buckey property along the stormwater lines. In July 2023 SET evaluated the wooden storm sewers to determine whether closing the sewers would create flooding on the Buckeye property or surrounding area. Based on the sewer evaluation, the areas along the sewer line were observed to be likely collapsed, and the sewer line appeared to contain infiltrated groundwater. The conclusion was that the sewer has not been functioning as an intact storm sewer and that closing the sewer lines would not result in flooding of upstream areas.





Storm Sewer Abandonment Attempt

In July 2023, SET and Keldorn Trucking, Inc. (Keldorn) attempted to plug manhole # 2 near the northwest corner of the Buckey property. Removal of 10,600 gallons of clear sewer water did not decrease the water level in the manhole, effectively halting the closure of both sewers until September and October 2023.

Manhole # 2 Water Sample

A water sample from Manhole # 2 on August 21, 2023, found 0.37 mg/L Extended Range Organics (ERO). Concentrations of benzene, toluene, ethylbenzene, and total xylenes (BTEX) were not detected.

Historic releases in this area were weathered diesel, gasoline, and jet fuel, based on historic information for the Buckeye North property (Agency Interest # 11991; VFC # 46089703, pfd page 17). Historic groundwater monitoring well NW-10 was located near Manhole # 1 and # 2 (VFC # 36988403, pfd page 4). A sample collected in 2001 from NW-10 contained 3 µg/L xylenes; 2 µg/L naphthalene; 2 µg/L 1,2,4- trimethylbenzene; and 2 µg/L 2-methylnaphthalene, but did not contain detectable concentrations of semi-volatile organic compounds (VFC # 36988403, pdf pages 44 and 49). Groundwater samples from NW-10 collected in 2004 and 2005 did not contain detectable concentrations of polycyclic aromatic hydrocarbons (PAH) (VFC # 45623252, pdf page 85; VFC # 46096591, pdf page 304). Free product thickness in nearby sump S-23 is shown as decreasing in 2006 (VFC # of 45623642, pdf page 2). BTEX concentrations in NW-10 remained low in 2005 (VFC # 45623642, Pdf page 13) with a maximum concentration of 7.99 µg/L total xylenes.

Considering historic sampling information for this area, the sampling constituents for the August 2023 sample from Manhole # 2 appear to be representative of constituents reasonably expected to be encountered in groundwater. The August 2023 concentration of TPH-ERO does not exceed the historic, discontinued Published Level for TPH-ERO of 1,100 µg/L (RISC Default Industrial Closure Levels).

Manhole # 2 Abandonment

In September 2023, SET and Keldorn pumped water and silt from Manhole # 2 to a containment pad, followed by pumping of water and silt to a silt bag to allow water infiltration to the ground. Removal of 200,000 gallons of water lowered the water level in Manhole # 2 to below the storm water sewer inlet. Manhole #2 and associated sewer inlet and outlet was closed with flowable fill up to ground surface on September 22, 2023.

Manhole # 1 Abandonment

In October 2023, SET and Keldorn pumped water and silt from Manhole # 1. Water from Manhole # 1 was recirculated to the manhole to remove solids from the manhole and lateral sewer inlet and outlet. Manhole #1 and associated sewer inlet and outlet was closed with flowable fill up to ground surface on October 3, 2023. The containment pad, silt from Manhole # 1, hay bales, corn cob, and associated plastic were disposed at the

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Waste Management Laraway Landfill in Joliet, Illinois. Waste disposal testing of the silt from Manhole # 1 included RCRA metals and BTEX constituents, which were not found above detectable levels (VFC # <u>83646546</u>).

Proposal for Final Sewer Abandonment

The Proposal proposes the removal of concrete headwall for the culverts, followed by removal of up to 10 feet of the wooden culverts back to the original bank. Brandenburg Industrial Service Company (Brandenburg) will perform the removal work in conjunction with implementation of the approved work plan for the East Chicago Dump (VFC # 83484990). Brandenburg will plug the outlets for both culverts with concrete. The inlets to both culverts were plugged with concrete in September and October 2023.

The Report and Proposal are acceptable. Please note that proposed regrading of the waste slope along the Grand Calumet River must take into account the future final cover slope (between 2-33%).

If you have questions, please contact Ms. Kim Vedder of my staff at kvedder@idem.IN.gov or call (317) 232-8714.

Sincerely,

John A. Guerrettaz, LPG Chief, Geology Section Permits Branch Office of Land Quality

cc: Lake County Health Department Lake County Solid Waste Management District Michael Spinar, Northwest Regional Office Mr. Julio Arichavala, City of East Chicago Ms. Debbra Gritters, City of East Chicago Mr. John Blosky, Amereco Engineering Mr. Dan Sullivan, NIPSCO Mr. Steve Barker, NIPSCO Mr. Fernando Trevino, East Chicago Water Management District