Missouri City Landfill

Clay County, Missouri
October 2024

BFI Waste Systems of North America (BFI) is pleased to provide this update to its Missouri City Landfill (referred to as the Landfill in this newsletter) neighbors describing continuing efforts to maintain the Landfill.

Background

In September 1983, the Missouri City Landfill accepted its last shipment of waste. Immediately after that date, work started to close the Landfill.

Closure work involved constructing an engineered containment system that includes a landfill cap which provides a physical barrier to the waste (the cap is generally constructed of approximately 18 inches of compacted clay, which is covered by a 20 mil PVC liner and geotextile layer, and then approximately 24-inches of vegetative cover layer on top of the PVC liner and geotextile layer); implementing a groundwater monitoring program; developing a post-closure care plan to inspect and repair the engineered systems; and establishing financial assurance instruments to make sure resources are available to pay for post-closure care costs in the future.

BFI Missouri City Landfill Website

BFI developed a Missouri City Landfill website that provides details on the facility activities and links to select documents. The website address is listed below.

https://missouricitylandfill.com/

Water Treatment Plant

The Missouri Department of Natural Resources (MDNR) approved the construction of a state-of-the-art water treatment plant with the renewal of the post-closure care permit in August 2017 (Part I Permit). The water treatment plant treats water that is captured by collection systems installed around the Landfill. Some of this water has come into contact with waste previously disposed of at the Landfill. The water treatment plant only treats water collected at the Landfill. State and federal laws prohibit the treatment plant from accepting water from any other facility.

The water treatment plant became fully operational in October 2018. The treated water is stored in one of the 250,000-gallon storage tanks and sampled prior to discharge. The sampling results must be below the discharge permit limits before BFI can discharge the treated water to Outfall #3. Outfall #3 is located in an unnamed tributary

to the Missouri River and is the MDNR approved discharge location for the treated water (after testing) from the water treatment plant. From October 2018 (the date the water treatment plant became operational) through the end of August 2024, there have been 62 discharges averaging approximately 197,300 gallons per discharge. Samples were collected before each discharge event and the results were below the discharge permit limits.

Semi-Annual Sampling

As part of the post-closure care for the facility, extensive environmental monitoring is required by the post-closure care permit. The monitoring program includes sampling semi-annually at monitoring wells, surface water sampling locations, groundwater discharge locations, one seep, and sumps. The sampling locations that are part of the monitoring program are presented on Figure 1. The results from the February and May 2024 sampling events were summarized in a semi-annual report that was submitted to MDNR on August 28, 2024.

A semi-annual sampling event occurred in August 2024 and a follow-up sampling event will occur in October 2024. The data obtained from these sampling events will be included in an annual report that will be submitted to the MDNR by March 1, 2025.

Operating Permit Renewal

BFI submitted a renewal application for the Missouri State Operating permit to MDNR in July 2024. This permit, also called a National Pollutant Discharge Elimination System (NPDES) permit, allows the Landfill to discharge stormwater and treated water (Outfall #3). The current permit expires on December 31, 2024, and MDNR is reviewing the renewal application.

How Can I Get More Information?

MDNR maintains a facility-specific website for the facility, which is located at the address below.

https://dnr.mo.gov/waste-recycling/sites-regulated-facilities/hazardous-waste-treatment-storage-disposal-tsd/mod000624452

Any records regarding the facility are available from MDNR at the information repository in Jefferson City, Missouri. The public can request to review and copy MDNR's files through a Sunshine Law request. For more information, please visit MDNR's website at the address below.

www.dnr.mo.gov/open-records-sunshine-law-requests

As a good neighbor and responsible landfill operator, BFI would like to hear how we can continue to keep you informed about the Missouri City Landfill. If you have any questions or comments regarding the facility, please contact BFI's Environmental Manager, Brad Zimmerman. Brad can be reached by telephone at (573) 636-1142 or by writing to:

Brad Zimmerman
BFI Waste Systems of North America, LLC
5605 Moreau River Access Road
Jefferson City, MO 65101

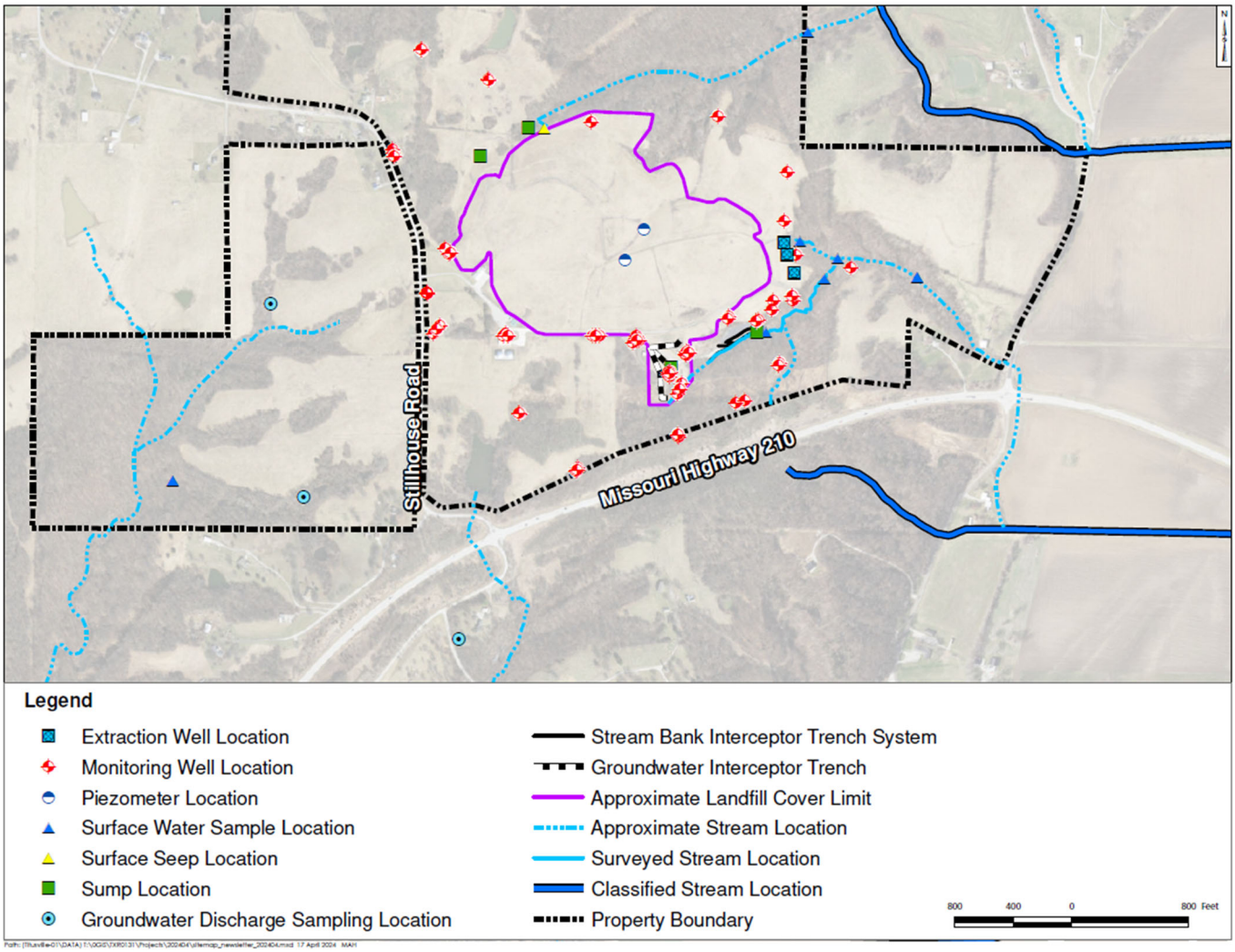

Figure 1 Missouri City Landfill Sampling Locations that are part of the Monitoring Program.