

Missouri City Landfill

Clay County, Missouri

October 2021

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

Background

In September 1983, the Missouri City Landfill accepted its last shipment of waste. Immediately thereafter, 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 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. 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 law prohibits the treatment plant from treating 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 (date the water treatment plant became operational) through the end of August 2021, there have been 35 discharges averaging approximately 206,500 gallons per discharge. Samples were collected before each discharge event and the results were below the discharge permit limits.

The water treatment plant building was expanded to provide additional storage for the water treatment plant operation and maintenance. Construction was completed in May 2020. The *Water Treatment Plant Operation and Maintenance Manual* and the *Water Treatment Plant Construction Completion Report* documents details of the water treatment plant construction, start-up activities, and maintenance procedures; these documents were submitted to MDNR in August and September 2020, respectively.

Semi-Annual Sampling

As part of the post-closure care for the facility, 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 2021 sampling events were summarized in a semi-annual report that was submitted to MDNR on August 30, 2021.

Semi-annual sampling events occurred in August 2021 and will occur in September 2021. The data obtained from these sampling events will be included in an annual report that will be submitted to the MDNR by March 1, 2022.

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 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
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