

# BFI Missouri City Landfill Draft Permit Public Meeting

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Sept. 20, 2016

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Environmental Engineer

# Agenda

- Why Are We Here?
- Historic Landfill Operations
- Landfill Closure and Investigations
- Current Landfill Conditions
- Permit Renewal and Work Required
- Current Practice and Proposed Remedial Action Plan
- Contacts and Questions

# Why Are We Here?

- July 7, 2016: MoDNR announced public comment period on draft hazardous waste permit renewal for BFI, to end Aug. 22, 2016
- Due to public interest, MoDNR decided to hold a public meeting to share information and discuss the draft permit and Remedial Action Plan
- MoDNR extended public comment period to Oct. 4, 2016

# Historic Landfill Operations

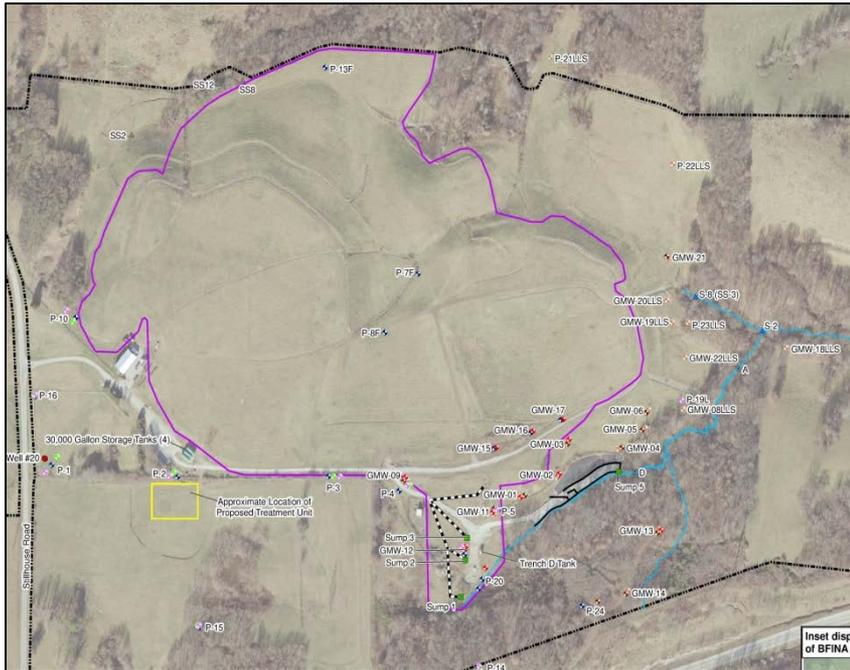


- August 1972: Lincoln Brothers began operating sanitary landfill

# Historic Landfill Operations (cont.)

- November 1972: BFI leased the property
  - Accepted municipal and certain industrial waste (petroleum refining sludge) until 1974
- 1974: BFI also separated and processed industrial wastes
- September 1983: Last shipment of waste accepted at landfill

# Landfill Closure and Investigations



- Landfill closure activities began in 1983, immediately after the last shipment of waste
- Currently owned by BFI and Missouri City Landfill, and maintained by BFI

## Landfill Closure and Investigations (cont.)

- 1981: Site inspection concluded groundwater impacts on-property beyond the waste units
  - BFI required to conduct investigation to evaluate the nature and extent of groundwater impacts
- 1982: Agreement between U.S Environmental Protection Agency (EPA) and BFI to develop a groundwater investigation and monitoring plan



## Landfill Closure and Investigations (cont.)

- 1988: MoDNR agreed BFI appropriately closed landfill
- 1989: BFI agreed to conduct an investigation and implement corrective action, with EPA's oversight, to address releases from landfill

## Landfill Closure and Investigations (cont.)

- 1992: Resource Conservation and Recovery Act (RCRA) Facility Investigation with Public Health and Environmental Assessment
  - To identify what kind and how much contamination
  - Concluded risks at off-property locations were within generally accepted levels established by EPA
- 1995: Corrective Measures Study
  - Concluded investigation and corrective action work provided adequate control of releases from landfill

## Landfill Closure and Investigations (cont.)

- 2000: EPA and MoDNR issued hazardous waste permits
  - Post-closure and corrective action activities
  - Must be renewed every 10 years
  - Administratively “continued” until new permits issued
  - EPA terminated 1989 agreement

# Current Landfill Conditions

- Groundwater flows northeast and southwest
- Contaminants: volatile/semi-volatile organics, metals, herbicides, pesticides, etc.
- Possible exposure routes:
  - Soil or air: Landfill is capped and vegetated
  - Surface water: Surface water location test results suggest levels below risk-based limits
  - Groundwater: Public drinking water from Liberty and Excelsior Springs

# Draft Hazardous Waste Permit Renewal

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES



MISSOURI HAZARDOUS WASTE MANAGEMENT FACILITY  
PART I PERMIT  
PERMIT NUMBER: MOD000624482

PERMITTEE

Owner: Missouri City Landfill, LLC  
8501 Stillhouse Road  
Liberty, MO 64068

Owner and Operator: BFI Waste Systems of North America, LLC  
8501 Stillhouse Road  
Liberty, MO 64068

FACILITY LOCATION

BFI Missouri City Landfill  
8501 Stillhouse Road  
Liberty, MO 64068  
T51N, R30W, Clay County  
North Latitude – 39°15'0"  
West Longitude – 94°17'50"

FACILITY DESCRIPTION

The BFI Missouri City Landfill is a former hazardous waste treatment and disposal facility. American Container Service Company was incorporated in Missouri in 1959, acquired by Browning-Ferris Industries, Incorporated on April 15, 1970, and changed its name to Browning-Ferris Industries (BFI) of Kansas City, Incorporated on December 29, 1972. In August 1972,

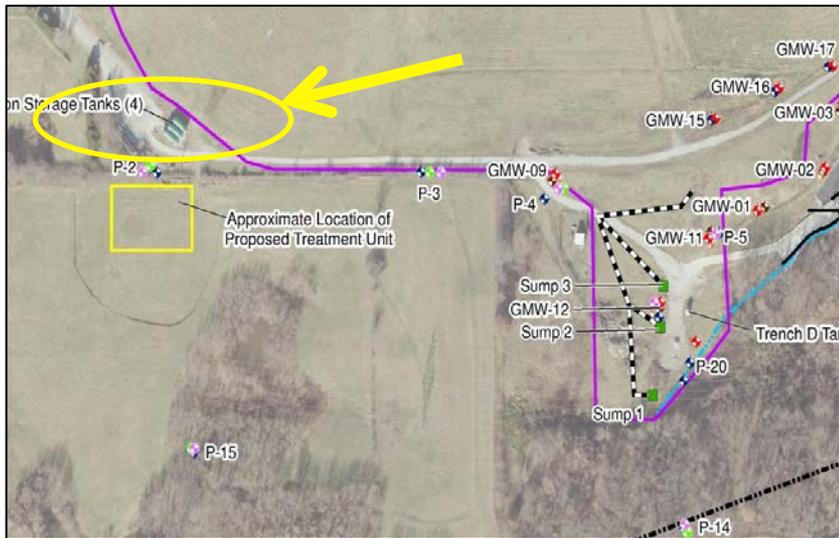
- Mechanism intended to provide continued oversight for groundwater monitoring and corrective action over next 10 years
- Financial assurance updated after permit is issued
  - Provides money to assure site activities continue, even if BFI claims bankruptcy

# Work Required Under Renewed Permit



- Continue monitoring groundwater and surface water, analysis and reporting
- Continue inspection and maintenance activities
  - Security fencing
  - Capped landfill
  - Monitoring wells

# Current Practice

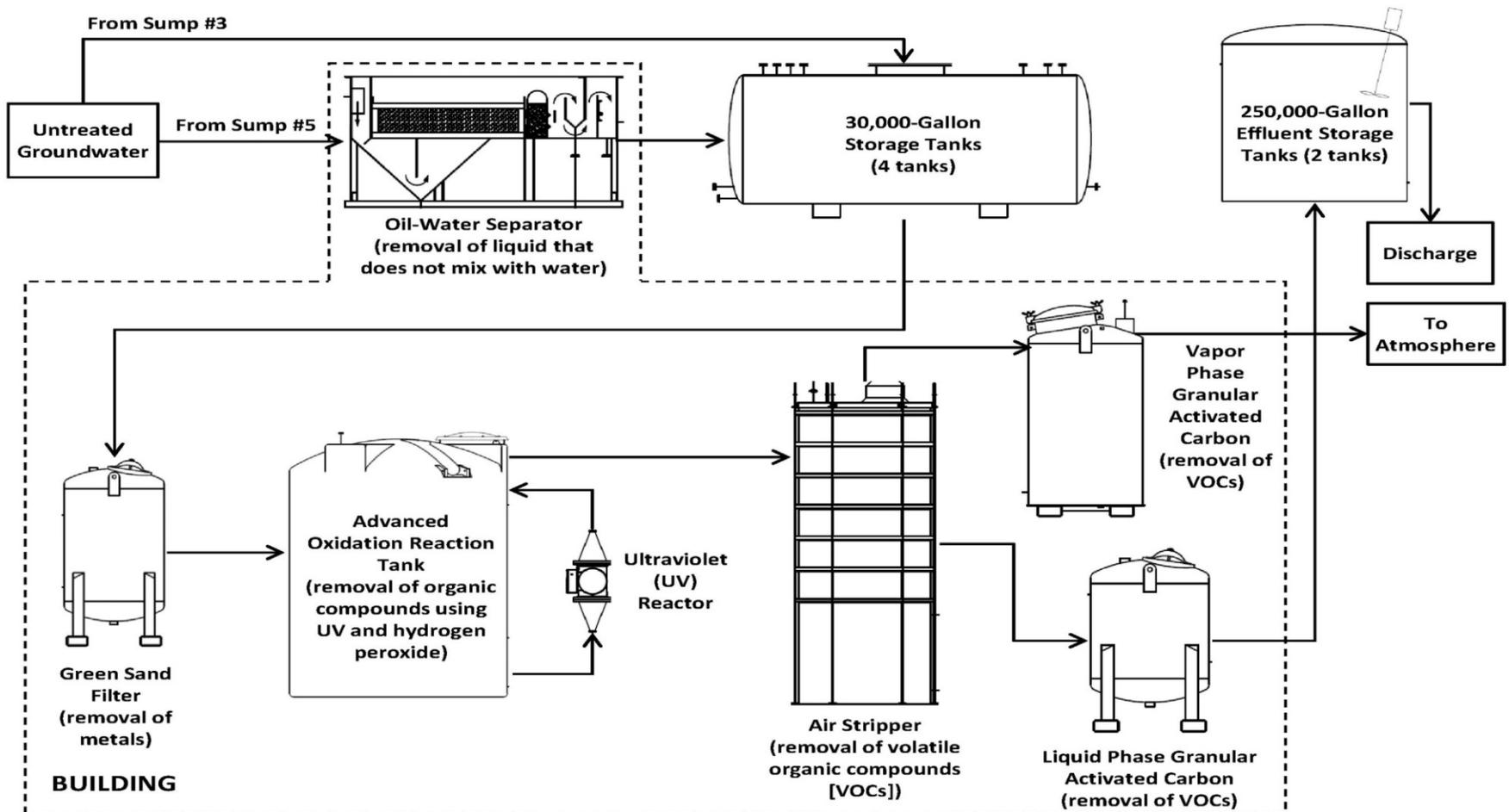


- Leachate and impacted groundwater collected from sumps
- Stored in four 30,000-gallon tanks
- Hauled off-site for disposal
  - Kansas City, Mo and Indianapolis, In
  - Estimated 200-300 trucks yearly

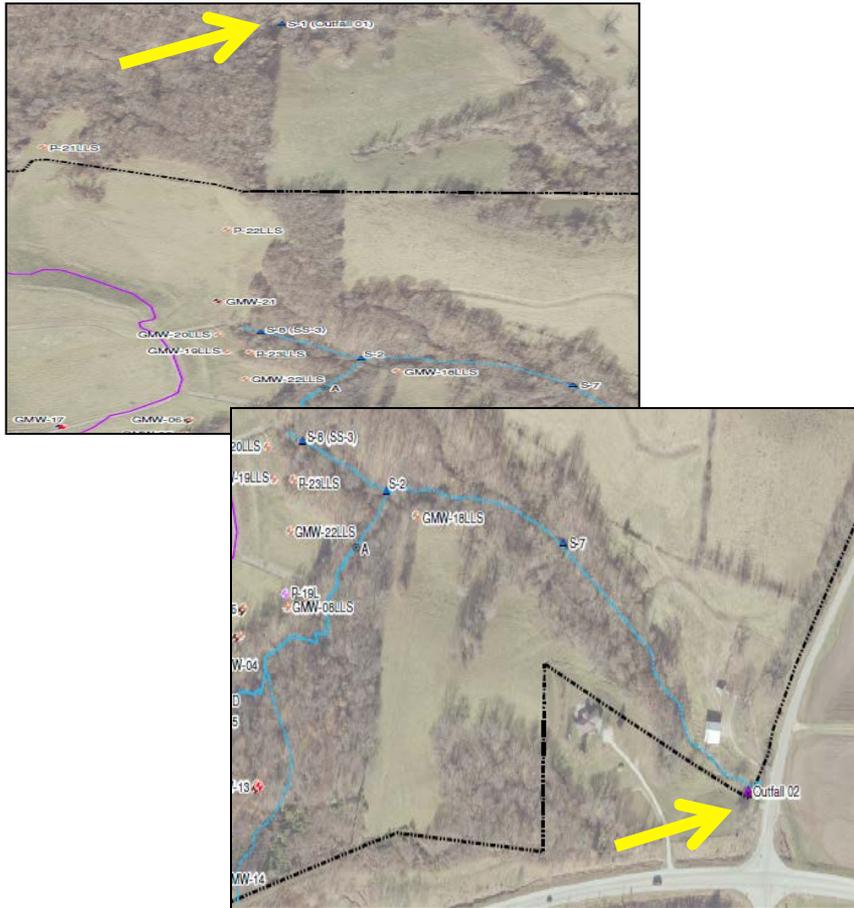
# Proposed Remedial Action Plan

- Build a treatment plant
  - Only treat leachate and impacted groundwater collected on-site
  - Eliminates most trucks
  - Minimizes wear/maintenance on roadways
  - Enhances safety by minimizing truck traffic
- Treated water discharged every two to four weeks, after rigorous testing, to permitted discharge location southwest of landfill

# Treatment Process Layout



# MoDNR Water Protection Program



- Provides permit for storm water discharge and will permit future discharge from treatment plant
  - Additional public notice period provided before finalized
- Water sampled before discharged from plant
  - Will not be discharged until water quality standards met
  - Retreated if exceeds water quality standards



**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

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# Questions?

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816-251-0703

# Written Comments Accepted Until **Oct. 4, 2016**

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