



**MISSOURI**  
**DEPARTMENT OF**  
**NATURAL RESOURCES**

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## **Bridgeton Sanitary Landfill**

### **Information Sheet**

March 15, 2010

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#### **History**

Bridgeton Sanitary Landfill was permitted in 1985 under permit number 118912. The landfill was an expansion of the adjacent Westlake Sanitary Landfill. Bridgeton ceased accepting waste in 2004 and is approximately 52 acres in size. The facility is owned by Republic Services Inc. Bridgeton installed an active methane extraction system in 1986 with 6 extraction wells and expanded it as the landfill increased in size and gas generation.

Enforcement action was initiated in 2004 against Bridgeton due to methane concentrations in several monitoring wells (GMP-01, GMP-05, GMP-07, and GMP-11) exceeding the regulatory limit. Landfill owners notified the fire department and adjacent property owners of the potential for methane migration. Methane monitoring was conducted at structures adjacent to the landfill and methane alarms were offered for installation. The department entered into a settlement agreement with the landfill owners in January 18, 2006 and set out terms to address closure of the landfill and correct the methane gas violations. Since execution of the agreement in 2006, landfill owners have been tasked with expanding their closure actions due to federal closure requirements of the adjoining Westlake landfills.

#### **Methane Migration and Monitoring Wells**

In compliance with terms with the 2006 agreement, Bridgeton developed and implemented an explosive gas management plan, submitted methane corrective action plans, excavated a methane gas interceptor trench, installed dewatering pumps in 40 methane extraction wells, expanded the perimeter extraction system by adding 19 additional extraction wells, replaced 34 older extraction wells, and replaced three leachate collection sumps. The landfill has increased the number of extraction wells to 85 to control the methane gas generated on-site.

These actions have significantly reduced methane readings in the four wells that have historically exceeded the regulatory limits (see attached map). However, at least one of the twelve methane monitoring wells continues to have concentrations above the regulatory limit. As a result, the department issued Republic Services, Inc., a Notice of Violation (NOV), on January 21, 2010.

#### **Summary of Recent Activity at Site**

In response to the NOV issued January 21, 2010, Republic Services, Inc. notified the local fire department and expanded the notification area around the landfill to include approximately 15-20

property owners within 1,000 feet of the wells with elevated methane concentrations. Bridgeton is also offering to conduct monitoring inside buildings and provide methane alarms to those who desire these safety precautions. Bridgeton will continue to conduct semi-annual checks of the structures and replace batteries in methane alarms.

If a property owner receives a notification letter from a landfill, they are being sent the letter as a precautionary measure to ensure they are aware of the potential for landfill gas migration in the area. Landfill gas is a term for a mixture of gases, including methane (CH<sub>4</sub>), carbon dioxide (CO<sub>2</sub>) and trace constituents of many other contaminants. The concern about landfill gas migrating from the landfill is that methane is explosive within a certain range of concentrations. Methane itself is a colorless, odorless gas, while the trace constituents are what cause the landfill gas to have its characteristic odor. One of the constituents is hydrogen sulfide which emits a strong, sour "rotten-egg" odor often compared to the mercaptans added to natural gas. If a property owner smells an unusual odor at or around their house or other enclosed structures, they should call 911 to have the odor investigated.

The department's Solid Waste Management Program will continue working with Bridgeton to develop and implement a remedial system to reduce methane concentrations in monitoring wells at the property boundary and control the gas by containing it on-site.

### **For More Information**

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Solid Waste Management Program  
573-751-5401 or 800-361-4827  
[dnr.mo.gov/env/swmp/methane.htm](http://dnr.mo.gov/env/swmp/methane.htm)