



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Renfro's Sanitary Landfills

Information Sheet

March 26, 2010

History

Renfro's Sanitary Landfill was permitted in 1976, under permit number 120902 and ceased accepting waste in 1987, when a second Renfro's Sanitary Landfill was permitted under number 120903 in an area adjacent to and west of the original landfill. The two landfills together comprise approximately 20 acres and are located on the south side of Ance Creek Road in Reed's Spring. The city of Branson West purchased the landfills in 2008 from Ms. Cleo Renfro, whose husband originally opened and operated the landfills.

The landfill has a history of gas migration. In July of 1993, Renfro Sanitary Landfill (permit number 120903) was ordered to assess the landfill with regard to methane gas generation. In the gas investigation conducted by the landfill's consultant in August of 1995, methane gas was found in high concentrations in monitoring wells located between the landfill and an adjacent trailer park. Representatives from the landfill conducted interviews with residents of the trailer park and monitored their trailers on Aug. 26, 1995. The landfill owner installed monitoring wells on the landfill and in the trailer park, monitored the wells, installed passive vents on the landfill, conducted a gas investigation, and installed an active gas extraction system in the spring of 1997. Methane concentrations in the wells near and in the trailer court decreased to below the regulatory limits in October 1999 and continued to control gas on-site until recently.

Methane Migration and Monitoring Wells

The city of Branson West purchased the landfill and took over responsibility in June of 2008. In December 2009, concentrations of methane in Well #4 exceeded the regulatory requirement and a Notice of Violation was issued to Branson West on March 12, 2010. The notice required Branson West to notify property owners within 1,000 feet of Well #4 of the potential for methane migration in the area and asked for the city to monitor for methane around structures and offer to install methane alarms in structures, if desired by residents.

Summary of Recent Activity at Site

On March 19, 2010, Branson West sent out letters of notification to approximately 50 landowners and renters who live within the area potentially impacted by any migration of methane from the landfill. The city plans to follow the letters with personal visits in the

following week to explain the situation to all parties and offer to monitor for methane around and in structures and provide methane alarms, if desired.

The city submitted a report of notification to the department's Solid Waste Management Program on March 19, 2010 and will be submitting additional information about monitoring they conducted and installation of methane alarms in residences during the week of March 22 to 26. Branson West will also be submitting a remedial plan to the Solid Waste Management Program within 60 days that will address the elevated methane levels in Well #4 and the potential relocation of other methane monitoring wells around the landfill.

If a property owner receives a notification letter, they are being sent the letter as a precautionary measure to ensure they are aware of the potential for gas migration in the area. Landfill gas is a mixture of gases, including methane (CH₄), carbon dioxide (CO₂) and trace constituents of many other contaminants. Methane is a colorless, odorless gas, however, the trace constituents are what causes 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.

Branson West is evaluating the current methane extraction system and will be submitting a remedial plan to the department by the end of May. The department's Solid Waste Management Program will continue working with Branson West to develop and implement a remedial system to reduce methane concentrations in the monitoring well at the property boundary and control the gas by containing it on-site.

For More Information

City of Branson West
City Hall
417-272-3313

Missouri Department of Natural Resources
Solid Waste Management Program
573-751-5401 or 800-361-4827
dnr.mo.gov/env/swmp/methane.htm