



Fred Weber Sanitary Landfill Information Sheet

Updated September 9, 2010

History

The Fred Weber Sanitary Landfill is an active landfill that was originally permitted in 1974 under Permit Number 0118901. The disposal area can be generally divided into 2 areas; the South Pit, permitted under Permit Numbers 0118901, 0118907, 0118910, and 0118915; and the North Pit, permitted under Permit Numbers 0118916, and 0118917.

The landfill waste area is approximately 254 acres and the total permitted area is 524 acres. The facility is owned and operated by Fred Weber, Inc.

Methane was initially detected in March 1994. An active gas extraction system was installed to remediate the migration and was effective for several years. In September 2002, landfill gas was again detected in monitoring wells on the southern and eastern boundaries of the landfill. At that time, the owners of the landfill installed methane monitors in structures on adjacent properties and submitted a proposal to make system repairs and upgrades. The facility evaluated the existing system, made necessary repairs, replaced pipe and increased the vacuum on the system. Once these upgrades were completed, the facility showed a noticeable decrease in methane in the compliance wells. The active gas extraction system at the landfill has been expanded numerous times to proactively address methane migration.

Methane Migration and Monitoring Wells

To expand the gas system to match the landfill's growth, the facility installed additional perimeter monitoring wells in April, May, and June of 2010. During monitoring in April 2010, the facility detected methane, in excess of the regulatory limit, in 3 of the new monitoring wells (GM- 12 through GM-14) on the south side of the property. The facility installed additional gas extraction wells near these monitoring wells, and has had partial success in returning to compliance

During monitoring in July and August, 2010, Fred Weber detected excessive amounts of methane in three additional wells (GM-39, GM-40, and GM-41) near the northwest corner of the property, and in GM-50 on the west side of the property.

Fred Weber, Inc. is having the samples of the gas from these monitoring wells analyzed in greater detail to try to determine if the methane is from the landfill or might be naturally occurring from decomposing vegetation.

Summary of Recent Activity at Site

In April, Fred Weber, Inc. notified in person or by phone the local fire department, Pattonville High School, four tenants on their property and one private property owner of two residences of the possibility of methane migration at the south side of the property. Monitoring detectors have been installed in the nearby six homes; monitoring detectors were previously installed in the Pattonville High School. Two additional extraction wells have been installed in the ground adjacent to the affected monitoring wells to withdraw gas from the area. The facility is reading the monitoring wells at least weekly and will be submitting a plan to install additional probes and determine the extent of the migration.

For the more recent events on the west side of the site, the department is directing Fred Weber, Inc. to notify in person or by phone the local fire department and five adjacent property owners of the possibility of methane migration. Additionally, the department has asked Fred Weber, Inc. to, upon request, provide combustible methane detectors to any occupied structures within 1000 feet of the affected monitoring wells. The facility is to read the monitoring wells at least weekly. If the methane is determined to be originating from the landfill, the facility will be required to submit a plan to remedy the problem.

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 generated during the decomposition of waste at a landfill and includes methane (CH₄), carbon dioxide (CO₂) and trace constituents of many other contaminants. The migration of methane from a landfill is a concern because methane is explosive within a certain range of concentrations (between 5% and 15% by volume). Methane itself is a colorless, odorless gas. The Department of Natural Resources encourages nearby property owners to be aware of the potential for methane migration in the area and cooperate with Fred Weber, Inc. as the company conducts methane monitoring and provides methane detectors to those within the notification area.

The Department's Solid Waste Management Program will continue working with Fred Weber, Inc. to develop and implement a remedial system to reduce methane concentrations in monitoring wells at the property boundary and controlling it on-site.

For More Information

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