

Rumpke Landfill Update Hamilton County

Background

The Rumpke Sanitary Landfill (Rumpke) is a municipal solid waste facility that accepts construction/demolition debris, industrial and residual wastes. This Rumpke facility is more than 500 acres, with more than 330 acres permitted for waste disposal. It is located at 10795 Hughes Road, Colerain Township.

In the fall of 2009, Rumpke reported elevated temperatures and poor gas quality in several gas extraction wells. Rumpke immediately contacted and began working on a response plan with Hamilton County Department of Environmental Services (HCDOES), Hamilton County Public Health (HCPH), Colerain Township Fire, Ohio EPA and U.S. EPA. Excessive settlement on the surface of the northeast corner of the landfill (referred to as the “affected area”) was reported in late 2009.

Experts from local, state and federal agencies are working with Rumpke to implement an action plan designed to monitor and control the abnormal conditions in the affected area. This action plan was approved on March 18, 2010. Before this, response actions were taken to minimize the impact of the situation on the local community. Response actions included odor control measures and installation of a buttress to stabilize and prevent potential slope movement.

Odors

To further minimize odors, Rumpke engineers and contractors are placing thick black plastic, called a flexible membrane liner (FML), directly on top of the surface of the landfill in the area impacted by the reaction/fire. This sloped area is approximately 12 acres and is located at the far northeast corner of the site. The liner, made from high-density polyethylene plastic, is very durable and resistant to the conditions in the affected area. FML has been used at other landfills and found to be very effective at controlling odors. Rumpke plans to have the majority of the project completed by early June. Additional plastic liners, gas extraction wells and liquid collection trenches may be constructed in the future to effectively contain and control the reaction/fire.



Flexible membrane liner (FML) being deployed at a landfill to control odors.

In addition, Rumpke has taken the following measures:

- placed additional clay soil on the affected area to seal it off and prevent odors;
- installed additional gas and leachate collection and control structures;
- increased application of odor-masking spray; and,
- enhanced landfill gas, temperature and pressure monitoring throughout the affected area.

To report an odor complaint, contact HCDOES, 24 hours a day, at (513) 946-7777 or toll free at (800) 889-0474.

Rumpke Landfill Update

Air Monitoring

HCDOES, U.S. EPA and Ohio EPA have done extensive air monitoring onsite at Rumpke and in surrounding neighborhoods using portable instruments, canisters, fixed monitoring stations and a rapid assessment tool.

Air quality parameters being monitored include hydrogen sulfide, volatile organic compounds, carbon monoxide and methane. To date, there have been no exceedances of regulatory or health-based levels for any of the targeted air pollutants.

Ohio EPA air toxicologists analyzed the air monitoring data, including a sample taken during the shutdown of the utility flare on March 4-5, 2010. Based on the data collected so far, they have concluded that there are no immediate health threats. Regardless, additional sampling will be conducted regularly to assess the potential for long-term health impacts to the community.

Action Plan/Orders

On March 18, 2010, Ohio EPA and Rumpke reached a settlement to address issues at the site related to the reaction/fire. The settlement requires Rumpke to follow an action plan developed in cooperation with local, state and federal agencies.

The objectives of the action plan include:

- ensure the health and safety of both workers and the public;
- control offensive odors;
- maintain the structural integrity of the landfill;
- closely monitor the affected area of the landfill;
- prevent the spread of the subsurface fire and returning the area to normal conditions as quickly as possible;
- prepare for any emergency situations that may arise; and,
- ensure compliance with permits, authorizing actions and other regulatory obligations.

Rumpke must immediately comply with the action plan and any revisions Ohio EPA makes to the plan. If the objectives of the action plan are not met, the facility may be required to implement other measures to prevent a nuisance or an adverse impact to public health or safety or the environment.

Rumpke has paid a \$98,000 civil penalty to resolve air pollution violations which stem from elevated temperatures in landfill gas extraction wells. Of the total penalty, \$19,600 was paid to Ohio EPA's Clean Diesel School Bus Program Fund; the remaining \$78,400 was split equally between air pollution control programs and to fund the Ohio Environmental Education Fund.

For Additional Information

Ohio EPA

www.epa.ohio.gov/pic/rumpkehamco.aspx

U.S. EPA

www.epaossc.net/rumpkelandfill

Contact Information

Citizen Contact:

Erika Wiggins

Ohio EPA, Public Interest Center

50 W. Town St., Suite 700 Columbus, OH 43215

Phone: (614) 644-2160

erika.wiggins@epa.ohio.gov

Media Contact:

Heather Lauer

Ohio EPA, Public Interest Center

50 W. Town St., Suite 700 Columbus, OH 43215

Phone: (614) 644-2160

heather.lauer@epa.ohio.gov

Hamilton County Department of Environmental Services

Phone: (513) 946-7777

Odor Hotline: (800) 889-0474

www.hcdoes.org

Paul Ruesch

U.S. EPA

Phone: (312) 617-7212

ruesch.paul@epa.gov