

# Republic Signs Agreement with EPA to Address Landfill Problems

Countywide Recycling and Disposal Facility Site  
East Sparta, Ohio

May 2008

## Information repository

You may review site documents and other site information at:

### Bolivar Branch Library

455 W. Water St.

Bolivar



## To file an odor complaint contact:

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## Check out these Web sites for more information:

[www.epa.gov/region5/sites/countywide](http://www.epa.gov/region5/sites/countywide)

<http://epaosc.net/countywide>

[www.epa.state.oh.us/pic/countywide.html](http://www.epa.state.oh.us/pic/countywide.html)



*Drilling crew installs a well on top of the landfill*

Republic Services of Ohio II LLC, the operator of the Countywide Recycling and Disposal Facility, recently signed a legal agreement with U.S. Environmental Protection Agency. It is called an Administrative Settlement and Order on Consent and requires the company to conduct a number of activities at the site. The site is a solid waste municipal landfill located at 3619 Gracemont St. S.W. in East Sparta, Ohio. Although air testing has been conducted over the past two years, the order requires Republic to develop an enhanced air monitoring and sampling plan for the landfill under the oversight of EPA.

This program will monitor for selected volatile organic compounds or VOCs. VOCs are chemicals that can evaporate easily and release hazardous vapors into the air. The compounds are common industrial waste and often found in landfills. This expanded air monitoring system will help EPA determine how well the air pollution control methods are working at the site as well as the effectiveness of other cleanup methods being used. It will also help EPA to determine whether people living in the area could potentially be exposed to VOCs in the air. A self-contained mobile laboratory called the Trace Atmospheric Gas Analyzer, or TAGA, bus will also be used to assist with air sampling. (See Page 2.)

In addition to the air-monitoring program, the order requires Republic to conduct the following activities:

- Install more landfill gas extraction wells.
- Install an enhanced temperature monitoring system.
- Develop a comprehensive landfill cover and cap for cells 1 through 6. Cells are portions of the landfill. The cover will more effectively prevent the release of landfill gases, which are the source of odors. It will also reduce the amount of rain, snowmelt, etc. getting into the landfill.
- Stabilize areas of the site by backfilling and grading and installing erosion and storm water controls.
- Take monthly thermal images of the landfill by airplane to record temperature changes.

## **TAGA Bus assists in air monitoring effort**

The TAGA bus is scheduled to arrive to conduct site air sampling on May 28. The mobile laboratory can do real-time sampling and analysis of outdoor air emissions. The laboratory can detect very low levels of chemicals (in the low parts per billion). The air monitoring and analysis instruments aboard the TAGA bus allow airborne contamination to be identified and tracked. This mobile lab is based in Edison, N.J. The bus travels to sites throughout the eastern United States assisting in conducting both indoor and outdoor air monitoring.



*EPA's TAGA Bus*

## **Who's doing what?**

EPA's agreement with Republic calls for the Agency to oversee air monitoring and other work at the landfill aimed at controlling odors and releases of gases that might affect nearby residents. EPA experts from around the country in air and water quality as well as waste disposal are reviewing the Countywide landfill issues. However, EPA is only one of several agencies working to solve problems at the site.

Ohio EPA has issued Director's Final Findings and Orders relating to the site and the federal EPA agreement is intended to support and work in tandem with Ohio EPA orders already issued. Ohio EPA is responsible for ensuring compliance with the landfill permit and the Stark County Health Department is responsible for annual licensing of the facility.

In addition, the Stark County Health Department has a phone number people can call for odor complaints. (*See Page 1.*) These complaints are logged, tracked and shared with other agencies, such as the Ohio Department of Health and the federal Agency for Toxic Substances and Disease Registry, which have stepped in to study and assess the possible public health threats associated with air quality.

## **Next steps**

The agreement with Republic requires that work plans to accomplish the various tasks described in the order must be submitted to EPA. These work plans will be reviewed, negotiated and approved by EPA in coordination with Ohio EPA prior to the beginning of field work.

Ohio EPA will continue to oversee day-to-day operations under its state waste facility permit, as well as activities relating to the investigation of the condition of the facility's landfill liner and the protection of ground water.

Finally, EPA engineers and scientists will continue to assist Ohio EPA with regulatory, compliance and technical issues. ATSDR's Chicago office, in cooperation with the Ohio Department of Health, will assist in overseeing the design of the enhanced air monitoring system and analyzing the results.

## Site history

The Countywide Recycling and Disposal Facility is a solid waste municipal landfill owned and operated by Republic Services of Ohio II LLC. The landfill is regulated under the federal Resource Conservation Recovery Act. The facility is permitted and licensed by Ohio EPA. The facility has been in operation since 1991. Republic purchased the site in 1999 and has operated the facility since then.

The landfill was built with systems to protect the environment. These include a specially designed liner system, a leachate collection system, and a landfill gas collection and control system. Leachate is liquid mixed with waste.

It is estimated that the landfill accepted, as one of its waste streams, approximately 600,000 tons of aluminum process waste between 1993 and 2001. The majority of this material is described as “dross” or “salt cake,” a by-product of the melting of aluminum with a salt product. (Salt is added to aluminum as a cleaning agent in the melting process to prevent contamination of the metal.) When aluminum dross mixes with water-based liquids, it results in a reaction that generates excessive heat.

In July 2001, Republic became aware of elevated temperatures in landfill gas wells located in several cells at the facility.

Beginning in 2004, the city of Canton health department began receiving odor complaints associated with the facility. In November 2004, Republic began installing gas collection and control systems in the western part of the landfill to assist in the elimination of odors.

In June 2005, Republic completed construction and began operating a comprehensive gas collection and control system, resulting in better odor controls. Later that year, Republic identified landfill gas wells with higher than expected temperatures.

From January through August 2006, the Canton health department received more than 600 odor complaints.

Early in 2006, Republic also observed an unusual increase in leachate outbreaks and landfill settlement. Republic then initiated numerous activities to reduce odors coming from the landfill. These actions included installation of additional wells, upgrading and repairing various parts of the gas collection system, increasing temperature monitoring, installing additional gas flares and discontinuing the recirculation of leachate.

A large area of the landfill experienced substantial and rapid settlement. Republic installed a flexible membrane liner cap over the affected area to collect gases and prevent water from entering the landfill. Republic also discovered changes in the landfill gas composition, including a decrease in methane and an increase in both carbon monoxide and hydrogen.

Because of the increase in odors coming from the landfill, Ohio EPA issued a number of notices of violation and Director’s Final Findings and Orders aimed at fixing the problems at the landfill. This February, the director of Ohio EPA requested EPA’s assistance on the site.



*Landfill gas extraction well system*

## For more information

For more information about the investigation, you may contact:

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