

Community Availability Session May be Offered

LCHD, IEPA, EPA and Waste Management want to keep you updated on the progress of the monitoring project. In addition to this fact sheet, a community availability session will be held if there is interest from neighbors.

If you are interested in a meeting, please contact Mike Kuhn at 847-377-8016 or by email at mkuhn@lakecountyil.gov

Odor Complaints

Please contact the Lake County Health Department at **847-377-8096** with odor complaints and prepared to provide the following information:

- Your Name
- Location of odor
- Date & time odor encountered
- Odor intensity (see scale below)

ODOR INTENSITY SCALE

- 1 Slight odor, barely detectable
- 2 Some odor, clearly detectable
- 3 Strong odor, enough to attempt to avoid it
- 4 Very strong odor, overpowering and intolerable for any amount of time

This information will greatly assist the data collection process.

The Lake County Health Department (LCHD), U.S. Environmental Protection Agency (EPA), Illinois Environmental Protection Agency (IEPA) and Waste Management Inc. continue to address hydrogen sulfide odors associated with the Countryside Landfill. Hydrogen sulfide gas has a strong rotten egg odor, which is produced by sulfur bacteria that break down organic matter. In March 2010, a series of air monitors were installed along the perimeter of the landfill to evaluate the effectiveness of ongoing efforts to prevent the release of odors offsite.

Over the past nine months, LCHD, IEPA and EPA have been collecting continuous data from three monitors located upwind and downwind of the landfill. The monitors are extremely sensitive, and are capable of measuring very low levels of hydrogen sulfide. The monitors have detected low-level releases of hydrogen sulfide along the immediate perimeter of the landfill. Most people can smell hydrogen sulfide at levels as low as 1 to 5 parts per billion (ppb) which are much lower than the levels which may cause health impacts. For example, the OSHA Permissible Exposure Limit and the NIOSH Recommended Exposure Limit for hydrogen sulfide is 10,000 ppb. Most of the detections are occurring at monitors #2 and #3 (see map below), with location #2 recording the majority of the detections which are occurring in the late evening to early morning hours. On five occasions in July and one in August, the upper limit of the monitors, 90 ppb, was reached. All other detections have been less than 90 ppb. The frequency, duration and levels are trending downward. Data collected from the monitors is evaluated along with landfill operations information and meteorological data to identify potential relationships between hydrogen sulfide releases and conditions at the landfill, and to identify additional actions to control odors which may migrate off-site. The monitoring program will continue into early spring of next year.

Waste Management continues to take actions to control these odors. For example, a new flare system was installed to replace the existing system installed in 1998. The new flare has the ability to maintain a constant vacuum on all parts of the gas collection system, which will help control the release of hydrogen sulfide. In addition, existing gas extraction wells are being replaced in the focus area (see below) along with the installation of horizontal gas collectors to better control odors. The focus area shown below is believed to be the area of the landfill where the hydrogen sulfide gas is being generated.



Location of air monitors at the Countryside Landfill

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For more information on Hydrogen Sulfide:
<http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=38&tid=67>



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