From: Ritter, Christine
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Cc: Chao, Ming-tai
Subject: Draft Landfill Gas Monitoring Plan for Wayne County
Date: Friday, March 14, 2014 9:52:00 AM

The Wayne County Landfill facility located in Dudley, NC consists of two permitted waste areas. Permitted area 9606-MSWLF-1998 is an active Subtitle D lined MSWLF, and permitted area 9601-CDLF-1997 consists of two closed unlined MSWLF units (Unit 1 and Unit 2) and an active C&D landfill on top of closed unlined MSWLF Unit 2. The existing landfill gas monitoring probes currently approved for landfill gas monitoring under two separate Landfill Gas Monitoring Plans include the following:

Wayne County 9601-CDLF-1997

Eighteen landfill gas monitoring wells, MP-1 through MP-18, were described in the approved permit application for continued operations and listed in the August 2012 PTO. However, during a Comprehensive Landfill Audit conducted on April 25, 2013, five landfill gas monitoring probes were not observed/identified: MP-2, MP-3, MP-8, MP-16, and MP-18. County staff confirmed that these five landfill gas monitoring probes do not exist, leaving thirteen landfill gas monitoring probes for this area.

Wayne County 9606-MSWLF

Twelve permitted landfill gas monitoring probes, MP-17, MP-18, MP-19, MP-20, MP-21, MP-24, MP-25, MP-26, MP-27, MP-28, MP-29, and MP-30 are described in the April 12, 2011 approved Landfill Gas Monitoring Plan submitted as part of the permit application for the Phase 3 MSWLF landfill expansion. Twelve landfill gas monitoring probes were confirmed during the Comprehensive Landfill Audit conducted on April 25, 2013.

A combined 25 landfill gas monitoring probes are approved under the two current permits to be monitored on a quarterly basis.

The NC SWS reviewed the request from Wayne County for a combined Landfill Gas Monitoring Plan for the two separate permitted areas which proposed reducing the number of landfill gas monitoring wells to be monitored from a total of 25 to a total of 5. In order to support the request to significantly reduce the number of LFG wells to be monitored in the two permitted areas, we requested, in addition to a number of other things, a copy of the landfill gas well completion records of all landfill gas monitoring wells AND the historical quarterly landfill gas monitoring data for all landfill gas monitoring wells from the last five years.

We received only two landfill gas well completion records, for MP-29 and MP-30.

We received landfill gas monitoring data which appears to be incomplete. Only a select number of landfill gas wells appear to have been monitored and recorded on a quarterly basis, primarily wells MP-4, MP-5, MP-12, and MP-13. From 2008 to 2010, the predominant entry on the landfill gas monitoring form for most columns is NR, for which there is no explanation. The NC SWS requested quarterly landfill gas monitoring data from all 25 landfill gas monitoring probes, understanding that

MP-26 through MP-30 were installed in 2012 which would only yield two years of monitoring data.

Additionally, Wayne County has proposed eliminating landfill gas monitoring probes from the southwestern border of the closed MSWLF Unit 1 area, specifically MP-8, MP-9, MP-10, MP-11, and MP-12, in the vicinity of a plume of VOC contamination in the groundwater. Wayne County is also proposing to eliminate landfill gas monitoring probes MP-5, MP-6, and MP-7 on the southeast side of unlined MSWLF Unit 2 where there is another identified plume of VOC contamination in the groundwater.

Based on the lack of information provided by Wayne County which was necessary to process the request to substantially reduce the number of landfill gas monitoring wells to be monitored on a quarterly basis and the proposal to eliminate landfill gas monitoring wells along property boundaries with known areas of groundwater contaminated with VOCs, the NC SWS does not approve Wayne County's proposed Landfill Gas Monitoring Plan for the Wayne County Active MSWLF, the two unlined MSWLF units, and the active C&DLF on top of unlined MSWLF Unit 2.

Please contact me with any questions or comments. Thank you,
Christine Ritter

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