



PAT MCCRORY  
*Governor*

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*Secretary*

MICHAEL SCOTT  
*Director*

August 8, 2016

Mr. Jonathan Pfohl  
MESCO, PA  
PO Box 97  
Garner, NC 27699

Re: Permit Renewal (0201-CDLF-1997))  
Alexander County CDLF - Alexander County NC  
Monitoring Plans Review **DIN 26595**

Dear Mr. Pfohl,

I have reviewed the monitoring plans submitted as part of the permit renewal application submitted for the referenced facility in regards to hydrogeological considerations (per 15A NCAC 13B .0544): *Groundwater & Surface Water Sampling & Analysis Plan (WQ Plan)* and *Explosive Gas Control Plan (LFG Plan) for Alexander County (revised April 1995)*. The application plans were received by the Solid Waste Section (Section) from MESCO on behalf of Alexander County. According to the permit application submittal, Avery County is requesting an amendment to the operations permit for continuing operations through the next five-year permitting cycle. Since the current request is for continued operation of approved activities, no additional geologic or hydrogeologic investigations (per 15A NCAC 13B .0538) are warranted at this time.

The Alexander County CDLF facility is currently operating under a Corrective Action Plan and CAP Addendum (DINs 6790 and 19362, respectively) to address elevated volatile organics detected in the groundwater. The CAP outlines measures being undertaken to mitigate for groundwater contamination, as well as monitoring and reporting requirements.

As part of the permit renewal, the standard monitoring plans attached to the permit are to updated to reflect current requirements. the following revisions are requested:

**GW & Surface Water Monitoring Plan**

- Monitoring Plan - General: The plan submitted is dated 12/20/2010 and needs to reflect current monitoring situation. Make changes to include references to current Corrective Action Monitoring, including List of monitoring points (Table E-1), etc and also a current figure showing water quality monitoring wells and points. Please include references to approved corrective action plans. We understand that an updated CAER will be prepared and submitted later this year that will also address many of the updates requested.

**Landfill Gas Monitoring Plan**

- **LFG Plan General:** The plan submitted for review is outdated (seems to be from a 1995 plan) and references probes to be installed. Please update the text to indicate current monitoring situation and add the missing basic components (see following bullets). Ideally, the LFG plan would follow the current plan format from our guidance.
- **H2S:** Due to the nature of materials disposed in them, C&D landfills are a source of the explosive gas hydrogen sulfide (H2S). The plan as submitted needs to be amended to also include hydrogen sulfide gas (H2S) monitoring. Please add H2S monitoring along with regulatory action limits for hydrogen sulfide (4% by volume for 100 LEL and 1% by volume for 25% LEL, respectively).
- **LFG Monitoring Locations:** include a map showing LFG monitoring locations (wells, probes and/or buildings).
- **LFG Plan Contingency:** Please include a Contingency section about how to address LFG readings detected above regulatory limits.
- **LFG Monitoring Data Form:** Include a copy of the LFG monitoring form, and add column for H2S measurements.

If you have any questions concerning these comments, please do not hesitate to contact me via email [perry.sugg@ncdenr.gov](mailto:perry.sugg@ncdenr.gov) or phone (919) 707-8258.

Sincerely,



Perry Sugg, PG  
Permitting Hydrogeologist  
Solid Waste Section

Cc: Larry Frost – SWS, Permitting Engineer