

TA-73
SWMU 73-001(a-

Goering, Darlene, NMENV

From: Nur, Mohamed [MNur@TechLawInc.com]
Sent: Monday, January 23, 2006 9:04 AM
To: Goering, Darlene, NMENV
Subject: FW: LANL AIRPORT LANDFILL-GAS GENERATION

Hi Darlene:

FYI.

-----Original Message-----

From: John Keck [mailto:jkeck@northwind-inc.com]
Sent: Monday, January 23, 2006 10:41 AM
To: Nur, Mohamed
Cc: renz@doeal.gov; djorgensen@northwind-inc.com; Pete Maggiore
Subject: LANL AIRPORT LANDFILL-GAS GENERATION

Mr. Nur, in our meeting on 1/12/06 I had promised to send the gas generation calculations used in designing the gas collection system for the LANL TA-73 Airport Landfill final cover. These were provided to NMED as the last six pages of Attachment A. Final Design Package, of the Remedy Design Work Plan (June 2005). The calculations and accompanying discussion are titled "Landfill Gas Production Summary for Los Alamos Site Office TA-73 Airport Landfill". If you do not have this attachment please let me know and provide your fax number and I will send you these pages.

After reviewing these calculations and discussing with our engineers what would be required to determine gas collection equivalence to a RCRA Subtitle C Minimum Technology Guidance (MTG) cover, we have modified part of our draft response to General Comment # 1 as described below.

This is a significantly different response than the original and we wanted you to be aware of it. We think that a better solution would be to modify the Post-Closure Care and Monitoring Plan to include monitoring for combustible gas in the hangars, trench drains and at the north property boundary at the edge of the cap; and to modify the gas collection system design to allow for use of active gas collection by adding one or more blowers, in the event that combustible gas concentrations exceed action levels cited in NMAC 20.9.1.400.B.2.

This approach avoids having to make assumptions about some of the parameters discussed in the LFG calculations, in favor of making direct measurements and taking appropriate action based on the results. Please reply if you have questions. Also Bob or Mr. Nur, please forward this note to Ms. Goering since I do not have her e-mail address, thank you.

Response e) to General Comment #1: "DOE will revise the design and the PCCMP to meet the requirements of NMAC 20.9.1.400.B.2 and 20.9.1.400.B.3. DOE will revise the design of the gas collection system to allow for active gas collection by connecting the manifolded piping to one or more blowers, in the event that methane concentrations exceed 25% of the LEL in hangars or trench drains or exceed the LEL at the property boundary. DOE will modify the PCCMP to include monitoring at these locations using a combustible gas meter quarterly for the first year after completion of construction, with potentially reduced frequency after that depending on the results of monitoring in the first year. If concentrations exceeding 25% of the LEL are observed in hangars or trench drains, or if concentrations exceeding the LEL are observed at the property boundary, then active gas collection will be implemented. Details of the contingent active gas collection system including supporting calculations will be added to the design. Details of the monitoring plan will be added to the PCCMP.

The thickness of the gas collection layer will be kept at 6-in, to maintain the cut-and-fill balance and avoid having to send waste off-site. Addition of another 6-in lift while maintaining surface elevations to accommodate airport expansion could result in a surplus of about 6500 cy of waste (over 400 truckloads) that would have to be sent off-site for disposal, potentially as hazardous waste."

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