

Dhawan, Neelam, NMENV

From: Massey, Ramoncita N. <Ramoncita.Massey@em.doe.gov>
Sent: Monday, July 18, 2016 7:52 AM
To: Stephen Dwyer, PhD, PE; Dhawan, Neelam, NMENV
Cc: Briley, Siona, NMENV; Walker, Kathy (CONTR)
Subject: RE: NMED LA County Airport Landfill Agreement

Follow Up Flag: Follow up
Flag Status: Completed

Thanks Steve for replying to Neelam questions. I was in an all-day Nitrate Salt Meeting off site on Thursday. I should be in all week if anyone needs anything else.
Ramoncita

From: Stephen Dwyer, PhD, PE [mailto:dwyerengineering@yahoo.com]
Sent: Friday, July 15, 2016 2:19 PM
To: Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>; Massey, Ramoncita N. <Ramoncita.Massey@em.doe.gov>
Cc: Briley, Siona, NMENV <Siona.Briley@state.nm.us>; Walker, Kathy (CONTR) <Kathy.Walker@EM.Doe.Gov>
Subject: Re: NMED LA County Airport Landfill Agreement

Neelam

No - there is not a specific moisture content we are looking for. We want to watch wetting fronts and see how deep they go and whether the water comes back out. We also want to see how long wetting fronts take to migrate downward and whether ET is given a chance to pull the moisture out. So the base of the cover will be our point of emphasis for actual flux. I will attempt to actually calculate the annual flux rate using the Darcy-Buckingham equation. I will utilize the daily moisture measurements at various moisture probe depths and calculate the annual flux.

Regards,
Steve

Stephen F Dwyer, PhD, PE
Dwyer Engineering, LLC
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From: "Dhawan, Neelam, NMENV" <neelam.dhawan@state.nm.us>
To: "Stephen Dwyer, PhD, PE" <dwyerengineering@yahoo.com>; "Massey, Ramoncita N." <Ramoncita.Massey@em.doe.gov>
Cc: "Briley, Siona, NMENV" <Siona.Briley@state.nm.us>; "Walker, Kathy (CONTR)" <Kathy.Walker@EM.Doe.Gov>



Sent: Thursday, July 14, 2016 3:28 PM
Subject: RE: NMED LA County Airport Landfill Agreement

Steve
Thanks for clarifying that. Are there any criteria for percent moisture that would indicate that the landfill cover is not functioning as expected?
NMED is ok with DOE collecting water balance and methane monitoring data on quarterly basis and reporting it on annual basis unless some unexpected circumstances arise.

Thx
Neelam Dhawan
Hazardous Waste Bureau
New Mexico Environment Department
2905, Rodeo Park Drive East, Building 1
Santa Fe, NM 87505
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From: Stephen Dwyer, PhD, PE [<mailto:dwyerengineering@yahoo.com>]
Sent: Thursday, July 14, 2016 1:46 PM
To: Dhawan, Neelam, NMENV; Massey, Ramoncita N.
Cc: Briley, Siona, NMENV; Walker, Kathy (CONTR)
Subject: Re: NMED LA County Airport Landfill Agreement

Neelum

The water balance equipment will be set up for continual monitoring and downloaded on a quarterly basis for at least the first 5 years for use by DOE. The reporting to NMED may fall in-line with that for methane based on results and discussions between NMED and DOE. If results are good, and both DOE and NMED agree to reduce the reporting frequency; it will be reduced to the agreed upon frequency similar to methane monitoring. DOE wants additional data for their own information to consider these type of covers for future deployments at Los Alamos.

Steve

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From: "Dhawan, Neelam, NMENV" <neelam.dhawan@state.nm.us>
To: "Massey, Ramoncita N." <Ramoncita.Massey@em.doe.gov>
Cc: "Briley, Siona, NMENV" <Siona.Briley@state.nm.us>; "Walker, Kathy (CONTR)" <Kathy.Walker@EM.Doe.Gov>;
dwyerengineering <dwyerengineering@yahoo.com>
Sent: Thursday, July 14, 2016 8:46 AM
Subject: RE: NMED LA County Airport Landfill Agreement

Ramoncita

Your email captures our discussion. However, I'd like to point out that reduction in monitoring frequency is subject to NMED's approval of DOE's justification. We discussed methane monitoring but didn't discuss water balance monitoring. What criteria would be used to reduce frequency of moisture monitoring? Is it going to be tied to methane detection over 25% LEL or detection of some level of percentage moisture? Time frames mentioned in the email are what was agreed upon.
Thanks

Neelam Dhawan
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-----Original Message-----

From: Massey, Ramoncita N. [mailto:Ramoncita.Massey@em.doe.gov]
Sent: Wednesday, July 13, 2016 4:34 PM
To: Dhawan, Neelam, NMENV
Cc: Briley, Siona, NMENV; Walker, Kathy (CONTR); dwyerengineering
Subject: FW: NMED LA County Airport Landfill Agreement

Neelam,

I wanted to make sure that I understood our discussion on July 11, 2016 on the level of monitoring for the LA Airport Landfill. I am working on altering the Scope of work for the monitoring Contract at the Airport Land to fit the current changes. I wanted to make sure I include our verbal agreements correctly. Please let me know if I have captured what you indicated or if I have missed the boat. 1st: The name of the Post Closure and Monitoring Plan name will be changed to the Long-Term Monitoring Plan. 2nd: Monitoring Timetable: Monitoring for Landfill Cover, Methane and Water Balance will be performed quarterly for the first two years. If the results for methane do not exceed 25% of the lower explosive limit (LEL) during these two years then, the landfill, methane and water balance monitoring may be reduced to semi-annually for the next two years. This reduction request will be included in the cover letter for the submission of the Annual Inspection for LA County Airport Landfill Report on February 15, 2019. Since we may get only 2 quarters of monitoring information this year we will provide 2 1/2 years of data for the first reduction request.

In the next two years, if methane results do not exceed 25% of the LEL, then the Landfill, Methane and Moisture monitoring could be changed from semiannually to yearly for the 5th year. The landfill would be inspected semiannually for the next two years after winter and after the end of the raining season. The start of the 5th year would change the monitoring to yearly for all activities if positive conditions persist. We will provide you with a reduction request in the annual reporting at the end of the 5th year report due in February 2022. We would at this time request the elimination of Methane and Water Balance Monitoring. The landfill inspection would also be requested yearly, after the fifth year if conditions are found to be stabilized. The landfill inspections could be performed after winter. The landfill would be inspected annually for the remaining 25 years.

Any " Significant Rain Event" Inspections will be report immediately to the NMED and included in the annual report.

EM LA has agreed to be add a 4th monitoring well North of the existing county hangars. we will be sending you drawings indicating the locations for all the monitoring stations within the next week. A new Long Term Monitoring Plan and a Final LA County Airport Landfill Cover Replacement Project Report will be coming to you in August. Thanks for your help on this project.

Ramoncita