From: Roberts, Kathryn, NMENV <Kathryn.Roberts@state.nm.us>
Sent: Friday, November 20, 2015 11:04 AM
To: Haagenstad, Mark P
Cc: Kieling, John, NMENV; Cobrain, Dave, NMENV; Dhawan, Neelam, NMENV; Briley, Siona, NMENV; Brandt, Michael Thomas; Sharp-Geiger, Raeanna Racine; Dorries, Alison Marie; Grieggs, Tony; McCann, John Phillips; Erickson, Randy; Funk, David John; Frederici, Dave; Torres, Enrique; Vigil-Holterman, Luciana R; Diaz, Tammy; Nickless, David; Turner, Gene E; Maggiore, Peter
Subject: Re: Request for Approval: Change to Visual Inspection Requirements for Remediated Nitrate Salt-Bearing Waste Containers

Mark,

Thank you for your email.

Based on the data provided, NMED hereby approves your request to reduce the frequency of visual inspections of the remediated nitrate-salt bearing waste containers from hourly to daily.

As stated in your email, NMED will await the formal modification of the Nitrate Salt-Bearing Waste Container Isolation Plan (Revision 4).

Please let me know if you have any questions.

Sincerely,

Katie Roberts

Sent from my iPhone

On Nov 20, 2015, at 10:19 AM, Haagenstad, Mark P <mph@lanl.gov> wrote:

> Dear Mrs. Roberts and Mr. Kieling:
>
> This email requests approval from the New Mexico Environment Department – Hazardous Waste Bureau (NMED-HWB) for the Permittees (U.S. Department of Energy and Los Alamos National Security, LLC) to change the frequency of visual inspections of remediated nitrate salt-bearing waste containers. The Permittees currently conduct hourly inspections on these waste containers and are requesting approval to conduct these inspections daily.
>
> Recent studies, analysis, and a head space gas (HSG) data report that were previously presented and submitted to the NMED (ESHID-600373, April 2015) provide additional understanding of the safety of remediated nitrate salt-bearing waste containers onsite in the Technical Area (TA) 54, Area G, Dome 375 Perma-Con®. The HSG data report demonstrated the correlation of HSG concentrations with environmental temperature, and showed that temperature influences the rate of chemical reaction. The HSG results provided a measure of chemical reactivity of the remediated nitrate salt waste stream that has greater fidelity than either temperature or visual monitoring. In fact, the HSG analysis can be used as an indicator of increased chemical reactivity and as an input to initiate a

facility response for abnormal operating conditions. Visual inspection of the drums, while providing confirmation of an abnormal environment, is not a leading indicator of an abnormality. It is expected that any visual indication of an abnormality will be accompanied by hot gas release, which would be detectable through continuous remote temperature monitoring of the over-pack container lid. For these reasons, the Permittees propose a change from hourly visual inspections to daily visual inspections.

The Permittees are also working to install thermocouples on all remediated nitrate salt-bearing waste containers to have remote continuous temperature monitoring capabilities as an added measure. Until the time that temperature data can be collected from the thermocouples, daily temperature measurements will be collect in the afternoon during the warmer portion of the day (between 1 and 5 pm).

Although a revision to the Los Alamos National Laboratory Nitrate Salt-Bearing Waste Container Isolation Plan (Revision 4) is currently underway to make this change, the Permittees would like to expedite this approval to provide monitoring staff relief during the upcoming seasonal holidays and Laboratory closures.

Please contact me if additional information would be helpful. Thank you.

Mark Haagenstad
Environmental Protection Division
RCRA Permitting and Compliance Team Leader
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