

Allen, Pam, NMENV

From: Maestas, Ricardo, NMENV
Sent: Wednesday, June 25, 2014 2:57 PM
To: Allen, Pam, NMENV
Subject: FW: Update from Trais

March

From: Stone, Nick [mailto:stone.nick@epa.gov]
Sent: Monday, March 03, 2014 5:43 AM
To: Kliphuis, Trais, NMENV; Holmes, Steve, NMENV; Maestas, Ricardo, NMENV; Nick Stone (diesel4ever@gmail.com)
Cc: Stenger, Wren; Spalding, Susan
Subject: RE: Update from Trais

Trais,

This issue may become the biggest challenge for DOE and its regulators to communicate to the public.

Plutonium is an alpha emitter that exists in the natural environment in the Southwest due to nuclear tests that have occurred over the last 70 years. The plutonium particle will drop out and bind to dust, sand, or other particles in the environment. Alpha emitting particles have been recorded in the WIPP exhaust filters before. Further analysis confirmed those particles were part of the Trinity Test once and the Gnome Project another time.

Though we know WIPP has released an un-quantified amount of plutonium and americium, we do not know if the plume left the land withdrawal area. We are assured that the release was minimal and the air monitors at the fence line have indicated alpha emission particles near the background average. Subsequent analysis is necessary to identify if the air sample particles are from the WIPP waste or if they are part of the alpha background. At this time, we do not have enough analysis to draw a conclusion.

EPA and NMED must continue to cooperate with each other and DOE to quantify the release and determine if filtered samples reflect waste or background.

Please call on me if I can provide further information.
Nick

Nick Stone
EPA Region 6
(214) 665-7226

From: Kliphuis, Trais, NMENV [mailto:trais.kliphuis@state.nm.us]
Sent: Sunday, March 02, 2014 1:26 PM
To: Smith, Coleman, NMENV; Holmes, Steve, NMENV; Maestas, Ricardo, NMENV; LucasKamat, Susan, NMENV; Stone, Nick; Nick Stone (diesel4ever@gmail.com); steve.pullen@state.nm.us
Subject: FW: Update from Trais

From: Kliphuis, Trais, NMENV

Sent: Sunday, March 02, 2014 12:28 PM

To: Kendall, Jeff, NMENV; Flynn, Ryan, NMENV

Cc: Blaine, Tom, NMENV; Tongate, Butch, NMENV; Schwender, Erika, NMENV; Kieling, John, NMENV; Winchester, Jim, NMENV; Nelson, Morgan, NMENV; Skibitski, Thomas, NMENV

Subject: Update from Trais

I agree that dpm from an air monitor and human inhalation exposures are different.

If you watch the Town Hall meeting (<http://new.livestream.com/accounts/85948/events/1702454>), around 1:50:40 a citizen asked "What are the chronic and acute effects of inhaling a plutonium particle? –The ones that were blowing out in the wind."

Joel Cantrell, the Radiation Protection Manager from SRS, stated "Typically, when we talk about acute effects, we talk about prompt response to a very high level of exposure. In the case of Plutonium, and this case we are talking about an acute effect. We are talking about a hyper low level. We previously talked about the exposures and the health physics community discusses exposures in terms of millirem and I would encourage everyone as others have said, to go outside to speak with folks like Dr. Hayes who are manning the kiosks outside. Dr. Hayes discussed that the potential exposure from this was on the order of a tenth of a millirem off plant. If you put that into context, we received about a tenth of a millirem from background while we have been sitting here. If you put it in perspective, the total release impact from this event is roughly equivalent to the dose we already received while we've been in the town hall from natural sources."

The citizen then asked "So you are saying it's OK to breathe Plutonium particles?"

Joel responded "Exposure is exposure whether it is due to Radon/Thoron or due to cosmic rays or due to Plutonium. A millirem is a millirem. It's the same."

This just doesn't ring true (or at least completely accurate) to me so we have been researching this. It is my understanding that continuous alpha particle release caused by Plutonium inside the body is much more dangerous than external exposure. We have been researching this including communicating with Jon Walsh at EPA. Cole has a Plutonium Handbook that talks about hazards of inhaled plutonium that we have been looking at. It's a bit out of date (1980) but does talk about body burden values given in microcuries. EPA has the experts that it would be great to coordinate and communicate with more extensively. Based on Oba's last email, DOE is taking this more seriously than indicated in the town hall meeting.

The Release Calculation that was provided on Friday also has a discussion on page 6 that states:

"It is important to understand the context of plume models and air sample correlation. 10 CFR 835 requires that dose from inhalation be determined using bioassay rather than air monitoring data due to the extremely large variations inherent to these kinds of measurements."

My other major concern regards the 99.97% control efficiency of the HEPA filter system. They have continuously stated that the filtration system has "done its job" of controlling the release but then we heard about the leaking louvers which to me, contradicts the claims that they were meeting their design specifications and intent. I question what the root cause of the leaking at these louver is. Were they designed effectively? installed incorrectly? maintained correctly? Didn't they have to do periodic inspections of the system to ensure it worked effectively? Because they do not control RCRA chemicals, this is not addressed in the HWB permit. I would like to ask these questions in the next few days and I am looking forward to seeing the differential pressure data they will share with us particularly how much it changes after the louvers are sealed.

Trais Kliphuis

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New Mexico Environment Department
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----- Original message -----

From: Oba Vincent
Date: 03/02/2014 7:25 AM (GMT-07:00)
To: "Kliphuis, Trais, NMENV"
Subject: RE: WIPP Information - No Call today

Hi Trais

The numbers don't mean too much at this point, other than they were positive. The measured range was between (approximately) 0.5 dpm and 1.5 dpm. We have a meeting Monday morning with the Radiological Emergency Response Center (REAC) and NWP also has obtained the services of a well-respected internal dosimetrist, who will be here on Monday. Also, we have been talking about providing some samples directly to CDC for additional analysis. The program is being expanded to include more employees and samples are being collected.

I will get you more information as I receive it.

Does this help?

Thanks

Oba

From: Kliphuis, Trais, NMENV [<mailto:trais.kliphuis@state.nm.us>]
Sent: Sunday, March 02, 2014 7:13 AM
To: Oba Vincent
Subject: RE: WIPP Information - No Call today

Hi Oba,

Senior management here at NMED is asking for more information on the levels of exposure to the workers from the preliminary results. I understand that there are HIPAA restrictions but is there a possibility to provide something? Maybe the range of values that were seen?

Sent from my Samsung Galaxy Note® 3

----- Original message -----

From: Oba Vincent
Date: 03/01/2014 10:33 AM (GMT-07:00)

To: "Kliphuis, Trais, NMENV" , "peake.tom@epa.gov" , "Edwards, Jonathan" , "Walsh, Jonathan" , "Perrin, Alan" , "Bob.Kehrman@wipp.ws" , "Rick.Chavez@wipp.ws" , "Stone.Nick@epa.gov" , "Smith, Coleman, NMENV"
Cc: George Basabilvazo - WIPPNet , "Reynolds, Tammy - NWP (Tammy.Reynolds@wipp.ws)" , "Pace, Berry (Berry.Pace@wipp.ws)" , "Alton.Harris@em.doe.gov" , "Joe Harvill (jharvill@portageinc.com)" , "Kennedy, Scott - NWP (Scott.Kennedy@wipp.ws)" , "Jones, Stewart - RES" , "Joe Harvill (jharvill@portageinc.com)"
Subject: WIPP Information - No Call today

Attached are the tables and graph with the station A and B sampling results. No new environmental results have been obtained.

Today at the site, the UCOR team is beginning the project to seal in place two louvers in the exhaust ductwork with high density foam. This part of the activity is anticipated to take two days. Afterwards, they will use low density foam to fill the space between. The total job is anticipated to take three days. Site access has been reduced to minimum essential staff.

If you have any comments or questions before our Monday meeting, please contact George or myself. I can be reached at (863) 546-1181.

Thanks

Oba