Allen, Pam, NMENV

From: Maestas, Ricardo, NMENV
Sent: Wednesday, June 25, 2014 3:41 PM
To: Allen, Pam, NMENV
Subject: FW: NMED Questions
Attachments: NMED Questions about the ventilation 3122014.docx

March

From: Kliphuis, Trais, NMENV
Sent: Wednesday, March 12, 2014 12:44 PM
To: Flynn, Ryan, NMENV; Kendall, Jeff, NMENV
Cc: Tongate, Butch, NMENV; Winchester, Jim, NMENV; Blaine, Tom, NMENV; Schwender, Erika, NMENV; Skibitski, Thomas, NMENV; Kieling, John, NMENV; Nelson, Morgan, NMENV; Maestas, Ricardo, NMENV; Smith, Coleman, NMENV; Holmes, Steve, NMENV; LucasKamat, Susan, NMENV; Turner, Jill, NMENV
Subject: NMED Questions

Trais Kliphuis
WIPP Staff Manager
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive E, Building 1
Santa Fe, New Mexico 87505

Office: 505-476-6051
Front Desk: 505-476-6000

From: Kliphuis, Trais, NMENV
Sent: Wednesday, March 12, 2014 12:44 PM
To: 'Oba Vincent'; '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; 'brozowski.george@epa.gov'; 'Fraass, Ron'
Cc: George Basabilvazo - WIPPNet; 'Reynolds, Tammy - NWP (Tammy.Reynolds@wipp.ws)'; 'Pace, Berry (Berry.Pace@wipp.ws)'; 'Alton.Harris@em.doe.gov'; Susan McCauslin; 'Joe Harvill (jharvill@portageinc.com)'; 'Kennedy, Scott - NWP (Scott.Kennedy@wipp.ws)'; 'Jones, Stewart - RES'; 'Berta Oates'
Subject: RE: WIPP Information - for call today

Please see the attached document listing our questions regarding the filtration system. Thanks.

Trais Kliphuis
WIPP Staff Manager
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive E, Building 1
Santa Fe, New Mexico 87505

Office: 505-476-6051
Front Desk: 505-476-6000

From: Oba Vincent [mailto:oba.vincent@cbfo.doe.gov]
Sent: Tuesday, March 11, 2014 12:23 PM
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; 'brozowski.george@epa.gov'; 'Fraass, Ron'
Cc: George Basabilvazo - WIPPNet; 'Reynolds, Tammy - NWP (Tammy.Reynolds@wipp.ws)'; 'Pace, Berry (Berry.Pace@wipp.ws)'; 'Alton.Harris@em.doe.gov'; Susan McCauslin; 'Joe Harvill (jharvill@portageinc.com)'; 'Kennedy, Scott - NWP (Scott.Kennedy@wipp.ws)'; 'Jones, Stewart - RES'; 'Berta Oates'
Subject: WIPP Information - for call today

Attached are the tables and graph with the environmental data. Also attached is a revised version of the Consequence Assessment.
Thanks

Oba

Questions about the ventilation/filtrations system, 3/12/2014

What is the control efficiency (CE) for the filtration system as a whole including the CE with the leaking dampers and CE after the foaming of those leaking dampers?

It has been publically stated on numerous occasions that the filtration system worked at 99.97% control efficiency. Was this correct? If not, when was it identified?

Apparently the total CE across the filter system (taking into account the bypass leak) different than the CE for each filter bank (99 vs. 99.97)? Why are they different and where in the design (specs and history) does it provide for a distinction?

The EIS for WIPP required a particulate reduction of 10^6. How does this correlate with the DSA required value of < or = 99%? Does the DSA value include provisions for a leak? Is the EIS value binding? If not, why not?

If each HEPA has a manufacturer specification of 99.97% and there are two in series in each bank, why isn't the reduction efficiency multiplicative (99.9991)%?

Is the filtration system as a whole tested or just each HEPA filter bank? If it is not tested as a system, why not?

There are two dampers in series. Please provide calculations with explanation of assumptions of the leak rate after the second damper at the current operating flow rates. Was this value ever discussed during the design phase? Is this considered part of the filtration system reduction (or lack thereof) efficiency? If not, why not? Also, if the data is not logged, why not?

On 3/5/2014 we were told that the dampers were leaking at 250 cfm. On 3/6/2014 we were told they were leaking at 1000 cfm. On 3/7/2014 we were told that the 1000 cfm leak rate was because of the windows cut in the ducts and were not an accurate value of the leak rate. What is the correct leaking rate prior to window cutting and repair? How was it determined?

Also, if rad risk > 10E6, is there a requirement to tell the public? If so, who will tell the public?

Would you be able to provide all known differential pressures (ΔP) associated with the filtration system (running in filtration mode), including:

- ΔP across each component of each filter unit, including individual ΔPs across each roughing filter, medium filter, and each of the two series HEPA filter banks;
- ΔP between the filter inlet plenum and the filter outlet plenum;
- Estimated or measured ΔP across each of the series bypass dampers just before the foam sealing was performed;
- Compare total ΔP across both series bypass dampers to total ΔP across the filter inlet/outlet plenums.

If the data is not logged, why not?