

Allen, Pam, NMENV

From: Maestas, Ricardo, NMENV
Sent: Thursday, June 26, 2014 2:24 PM
To: Allen, Pam, NMENV
Subject: FW: WIPP Information - For Call Today
Attachments: Effluent Monitoring Fact Sheet.docx; DOE Air Monitoring Plan 3-25-14 (3).xlsx; 41-b-856 WHT dp Daily Averages_3-25-14.pdf; 41-b-857 WHT dp Daily Averages_3-25-14.pdf; DOE Active and Proposed Sampling Sites - draft.pdf; Excess Cancer Risk Calculation 25 March 2014.pdf; Station A and B Filter Readings for Public Release 3-25-14.xlsx

March

From: Kliphuis, Trais, NMENV
Sent: Wednesday, March 26, 2014 11:38 AM
To: Flynn, Ryan, NMENV; Kendall, Jeff, NMENV
Cc: Winchester, Jim, NMENV; Tongate, Butch, NMENV; Blaine, Tom, NMENV; Schwender, Erika, NMENV; Skibitski, Thomas, NMENV; Kieling, John, NMENV; Maestas, Ricardo, NMENV; Holmes, Steve, NMENV; Nelson, Morgan, NMENV; Smith, Coleman, NMENV; Ines Triay (triayin@fiu.edu)
Subject: FW: WIPP Information - For Call Today

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From: Oba Vincent [<mailto:oba.vincent@cbfo.doe.gov>]
Sent: Wednesday, March 26, 2014 11:18 AM
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Subject: WIPP Information - For Call Today

Attached are the tables for the station A and B data, action item listing, excess cancer calculation, environmental air sampling plan/information/map and graphs showing the performance of the filtration system.

Below is a summary of the discussion points for today: (Please note, activities and dates are subject to change. Please verify the most current dates of any information provided).

- Work has been paused on installation of the vacuum break in the duct; questions are being addressed dealing with design specifications. (No change)



- Station A and B Sampling: A CAM was installed at Station B and is operating. Connection to the Central Monitoring planned for Friday. The CAM will be operated until 4/7 in a test mode prior to allowing repopulation of the site. Discussions are underway regarding the safety basis strategy for the CAM utilization.
- SS and AIS Shaft/Rope Inspections: The AIS was inspected yesterday. The SS is being inspected today. These inspections will be done weekly.
- Initial Manned Re-entry of U/G: After SS and AIS inspections above are completed, personnel will enter the mine and survey the area between the SS and AIS. This entry is expected to occur on 3/29 (based on DOE approval of nuclear safety documentation tomorrow).
- After the area between the shafts is surveyed, a team will enter the mine, perform initial characterization and attempt to identify the contamination source and location. Entry may occur late next week.
- The aerosol test on the HEPA filters has been delayed until tomorrow. (The larger aerosol generator required more power than was anticipated and a longer hose had to be obtained.) One set of replacement HEPA filters is expected next week. The remainder is anticipated in about three weeks.
- The unloading of the first TRUPACT 3 occurred yesterday afternoon. Unloading will continue into next week.
- Activities are continuing in preparation of waste storage at WCS. (No change)
- NWP is evaluating whether to resume salt sales to the small business. NWP will provide a recommendation and path forward to DOE later this week. (No change)
- An ORPS report will be generated today resulting from the positive USQ associated with the potential deflagration of a certified TRU waste container.
- Four additional positive bioassay results have been identified. The impacted workers were contacted and notified of the results.

As a reminder, the call-in number is (866) 723-6758, code 8040901#

Thanks

Oba

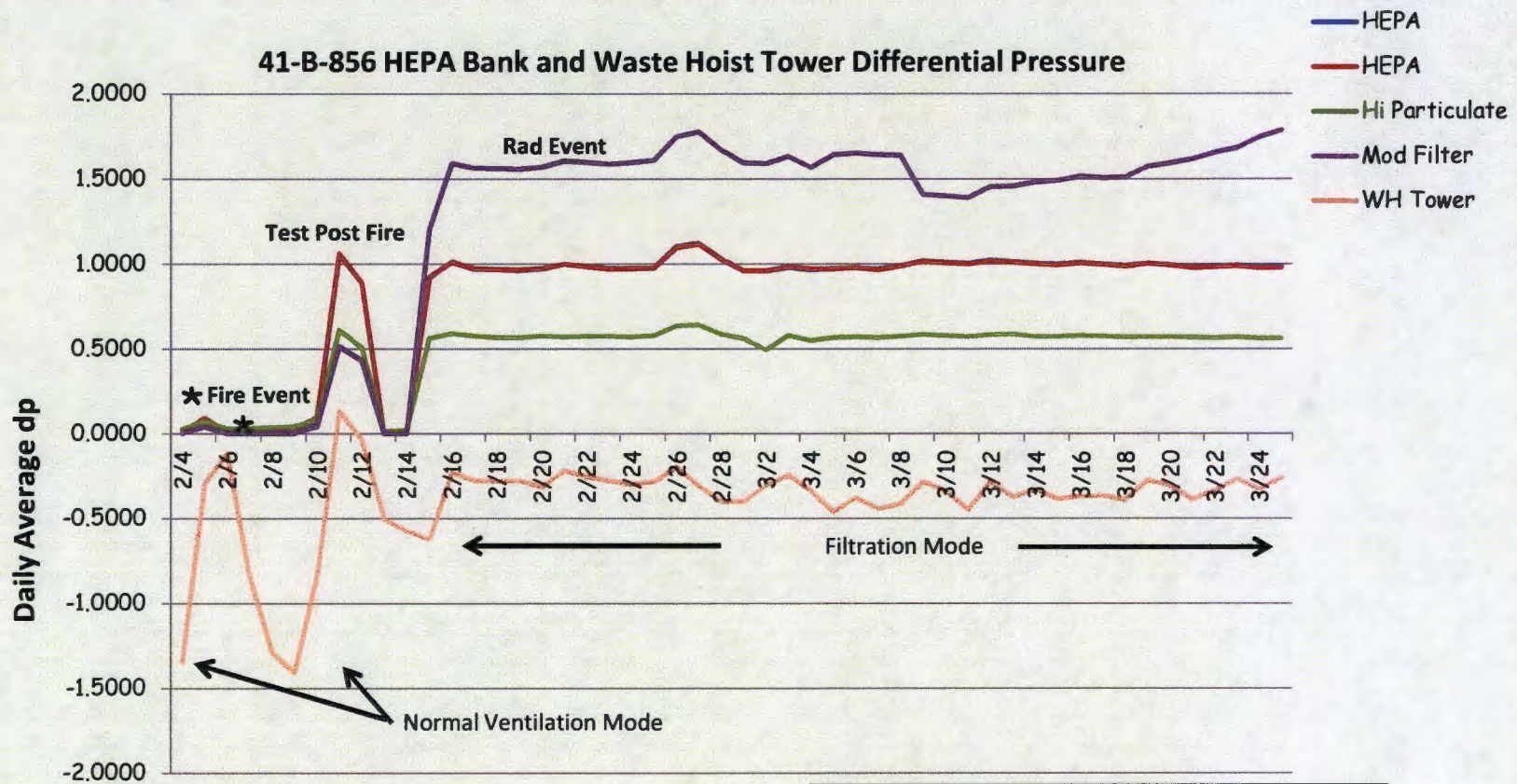
DRAFT

Effluent Monitoring Fact Sheet

On February 14, 2014 a continuous air monitor (CAM) in the underground of the mine facility at the Waste Isolation Pilot Plant (WIPP), approximately 2,150 feet below the surface of the earth, alarmed. A CAM detects airborne radioactivity. The underground CAM was located in the vicinity of where waste was being emplaced. When the CAM alarmed, bypass dampers automatically closed in the exhaust ducts which redirected the exhaust air from the WIPP disposal system through high efficiency particulate air (HEPA) filters. The HEPAs are designed to remove 99.97 percent of airborne particulates. The bypass dampers are metal louver dampers designed to be opened and closed, and where the louvers meet the duct work housing, a 100 percent seal cannot be obtained. This allowed for a small amount of unfiltered air with radioactivity to escape. These dampers have since been sealed with expanding foam insulation and this small amount of exhaust air is no longer bypassing the HEPA filters. The exhaust air from the WIPP underground is now maintained in the exhaust system, and it is monitored by a Fixed Air Sampler (FAS) at Station A (before going through the HEPA filters) and by a FAS at Station B (after passing through the HEPA filters). The FASs contain sample filters that checked for radiation every two hour and exchanged every eight hours, to be analyzed for radiological content. Furthermore, a CAM will be installed at Station B, at a later date, to measure airborne radiation in real-time. This CAM will send an alarm to the WIPP Central Monitoring Room should there be a release. Having this CAM in an operational status is not required prior to personnel entering the WIPP underground wearing proper personnel protective equipment.

DOE Air Monitoring Plan

Program Administrator	Type	Location	Filter Inlet Height	Filter Retrieval Frequency	Action Level	Analysis Type	Filter Count Time (min)	Currently Operational Yes / No	Comments
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	WIPP Far Field (WFF)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	WIPP East (WEE)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	WIPP South (WSS)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Mills Ranch (MLR)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Smith Ranch (SMR)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Carlsbad (CBD)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Southeast Control (SEC)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Southeast Control co-located (SEC)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	Sampler is a duplicate sample and will be relocated on April 1. Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Met Tower (MET)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	This sampling location was initiated on March 4, 2014. Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Salt Hoist (SLT)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	This sampling location was initiated on March 4, 2014. Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Training Building (STB)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	This sampling location was initiated on March 4, 2014. Results reported weekly on DOE Public Website.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Artesia (ART)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Loving (LVG)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Hobbs (HBS)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Eunice (EUN)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Angel Ranch (AGR)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Intrepid North (ITN)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	Mosaic - Shaft 5 (MS5)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	WIPP North (WNN)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	LWA East (LWE)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	No	Expected start up of this station is April XX, 2014.
Environmental Monitoring and Hydrology	Low-Volume Air Sampler (Lo-Vol)	WIPP Guard & Security Building (GSB)	1.5 to 3 m	Weekly	N/A	Gross Alpha, Radiochemistry	Gross Alpha - 1000	Yes	This sampling location was initiated on March 25, 2014. Results reported weekly on DOE Public Website.
Radiological Control	Fixed Air Sampler (FAS)	Station A, top of Exhaust Shaft, before HEPA filtration	N/A	8 hours	Greater than 2000 dpm alpha	Direct frisk, hourly GAB - Tennelec	10 minutes - 8, 24 and 72 hours	Yes	In addition, this location is monitored every two hours via probe. Results reported weekly on DOE Public Website.
Radiological Control	Fixed Air Sampler (FAS)	Station B, Exhaust Shaft, after HEPA filtration	N/A	8 hours	8 DAC hours	Direct frisk, every two hours GAB - Tennelec	10 minutes - 8, 24 and 72 hours	Yes	In addition, this location is monitored every two hours via probe. Results reported weekly on DOE Public Website.
Radiological Control	Continuous Air Monitor (CAM)	Station B, Exhaust Shaft, after HEPA filtration	N/A	8 hours	Greater than 2000 dpm alpha	GAB - Tennelec	N/A	Yes	
Radiological Control	Fixed Air Sampler (FAS)	Station C, Waste Handling Building, after HEPA filtration	N/A	24 hours	8 DAC hours	GAB - Tennelec, direct frisk, every two hours	10 minutes - 8, 24 and 72 hours	Yes	
Radiological Control	Fixed Air Sampler (FAS)	Station D, Underground, E-280, S-400	N/A	N/A	N/A	N/A	N/A - at this time	N/A	This location is underground and access is unavailable.
Radiological Control	Portable Air Sampler (PAS)	Air Intake Shaft (1612)	4 feet	24 hours	0.3 DAC	GAB - Tennelec	10 minutes - 8 and 24 hours	Yes	
Radiological Control	Portable Air Sampler (PAS)	East side of Salt Shaft (1610)	4 feet	24 hours	0.3 DAC	GAB - Tennelec	10 minutes - 8 and 24 hours	Yes	



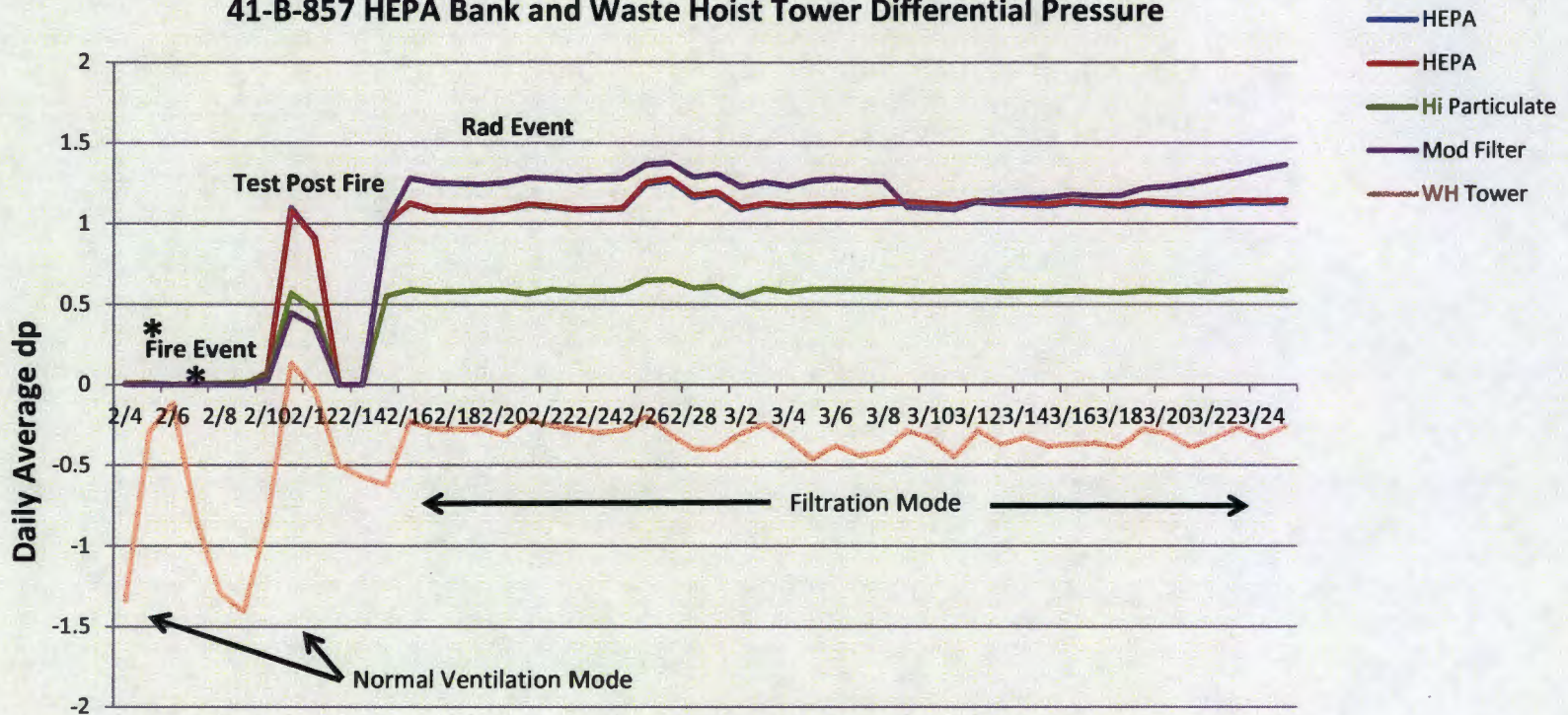
Prior to 2/5/2014 (2/3 @ 0200-0215)

856 Mod	0.47
856 High	0.75
856 HEPA	1.54
856 HEPA	1.45

*** Fire Event Waste Tower dp Details**

During the Fire Event positive dp was seen on 2/5 and 2/6. Overall the dp was negative for the daily average.
 2/5 Positive dp (Avg) + 0.308 (Duration 13 hrs)
 2/6 Positive dp (Avg) + 0.200 (Duration 14 hrs)

41-B-857 HEPA Bank and Waste Hoist Tower Differential Pressure



Prior to 2/5/2014 (2/3 @ 0200-0215)

857	Mod	0.45
857	High	0.75
857	HEPA	1.52
857	HEPA	1.45

*** Fire Event Waste Tower dp Details**

During the Fire Event positive dp was seen on 2/5 and 2/6. Overall the dp was negative for the daily average.
 2/5 Positive dp (Avg) + 0.308 (Duration 13 hrs)
 2/6 Positive dp (AVg) + 0.200 (Duration 14 hrs)

DOE Active and Proposed Air Sampling Sites

