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NMED
Hazardous Waste Bureau

Status of the Waste Isolation Pilot Plant (WIPP) following the radiological incident that occurred on site in the underground Feb. 14, 2014, most information is according to DOE and has not been verified by NMED:

- At 11:30 PM on Friday, Feb. 14th, a continuous air monitor (CAM) detected airborne radiation underground at the active hazardous waste disposal unit (HWDU), configured as Panel 7. The radiation alarm automatically switched the underground ventilation system to filtration mode. Normally mine air is exhausted to the atmosphere. It was believed that the high efficiency particulate air (HEPA) filter system performed as expected, mitigating release to the environment.
- No personnel were underground (2150 ft below ground level) at the time.
- Personnel on site at above-ground locations were instructed to shelter in place.
- Initial measurements from multiple perimeter monitors at the WIPP boundary suggested that there was no detectable release from the repository and therefore no danger to human health or the environment.
- Personnel that are considered non-essential were allowed to leave the site at 5:00 PM on Saturday, Feb. 15th. None were found to have any contamination on their bodies.
- WIPP was already in stand down following a vehicle fire in the underground that occurred on Feb. 5th.
- The Department of Energy is investigating both events. No personnel have been allowed underground since the radiological event. Limited personnel were permitted underground after the fire.
- Panel 7, Room 7 is the active panel where the CAM alarm activated. There are approximately 238 containers in the room.
- Measured radioactivity at the underground air monitor show a steady decline.
- Until the phone conference on Feb 19th at 4:00 PM, DOE had provided the NMED with limited information.
- At the Feb 19th meeting DOE informed NMED of the following:
    - Station A (air monitoring and sampling site located at exhaust) data showed a maximum of 4.4 million dpm (disintegrations per minute) on the morning after the onset of the event (February 15th)
    - Station A data is declining and now showing values around 326 dpm
    - Station B (at filter exhaust) shows activity of 42 dpm
    - They are looking across the complex for personnel with expertise for this type of circumstance. A team from the Savannah River Site lead by Dave Moody may be deployed.
    - They do not have any underground monitoring at this time

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- They are performing plume modeling (computer simulation of air dispersion) to determine where release may have gone. They plume went from the SE to the NW.
- The ventilation system is still operating at a decreased level and venting through the filtration system.
- They are working on a re-entry plan and anticipate it will be a couple of weeks before they can enter the underground and find out what really happened.
- They are considering all options and may send robotic instrumentation underground.

- Decontamination of salt and all associated infrastructure may prove to be very tedious and difficult. Many people are speculating that WIPP will not be able to accept waste for an extended period of time.
- On Feb. 19th, a portable radiation monitor emplaced by the Carlsbad Environmental Monitoring and Research Center (CEMRC) detected transuranic radionuclides approximately 0.6 mile northwest of the WIPP property boundary. CEMRC is a laboratory located in Carlsbad and is run by New Mexico State University in collaboration with Los Alamos National Laboratory, Sandia National Laboratory, and the WIPP operating contractor, Nuclear Waste Partnership. CEMRC is the laboratory that routinely analyzes air, water, and soil samples collected at WIPP resulting from permit required periodic monitoring. CMERC announced through the Carlsbad Current Argus that their independent air sampling show levels that are higher than the normal background levels of radioactivity from transuranic elements commonly found at this sampling station. Thus their presence during this specific time frame appears to indicate a small release of radioactive particles from the WIPP underground exhaust shaft in the brief moments following when the radiation event occurred and when the WIPP ventilation system shifted to the filtration mode.
- NMED DOE Oversight Bureau also takes samples at the Air Stations A and B. Currently, those samples are being held at the WIPP.
- NMED also has ambient air monitoring at off-site locations: twenty (20) direct penetrating radiation (DPR) monitoring stations are located in the Carlsbad region: fourteen within the Exclusive Use Area and six off-site in Carlsbad, Loving and Malaga.