Defense Nuclear Facility Safety Board Public Hearing held on March 22, 2016

Environmental Management Los Alamos Field Office (EM-LA) Action Response to questions raised by members of the DNFSB during the Public Hearing on March 22, 2016 in Santa Fe, New Mexico.

Question

MR. SANTOS: "How many monitors do you have?"

MR. HINTZE: "I'm not familiar with exactly how many we have out there." MR. SANTOS: "If you could get back to -- for the record I'd appreciate it."

Response

The Remediated Nitrate Salts (RNS) drums are stored in a PermaCon located within Dome 375 in Area G. The PermaCon is a hard-walled structure providing contamination control, fire protection, and ventilation to the RNS drums stored there. Within the PermaCon, Dome 375, or in the immediate vicinity of Dome 375, the following detectors monitor for alpha radiation:

- 9 Canberra Alpha Sentry Continuous Air Monitors (CAMs) 2 in cell one, 4 in cell two, 3 in cell three
- 5 Bladewerx Sabre Environmental CAM (ECAMs) 2 in cell two, 2 in the exhaust stream, 1 northeast of Dome 375

Additionally, there are 8 AirNet samplers located around the Area G perimeter which monitor for alpha and beta radiation and provide data to ensure compliance with regulatory requirements.

The number and location of these monitoring devices provide defense-in-depth for detecting releases of radioactive materials. The monitoring system in place enables the site to take immediate action to address any release, with the objective of addressing issues within the immediate vicinity of the location of the radioactive material first.

A CAM emits a high pitch alarm and a red blinking light notifying workers there is a potential air borne release (hazard). If work teams are present in Dome 375 PermaCon continuous RCT support is also present resulting in immediate response to a CAM alarm. If no workers are present, the CAM alarm will not be heard; however any personnel entering the dome is trained to call the Operations Center. The Operations Center then contacts an on-site RCT to respond to the CAM alarm, who responds within minutes.

ECAMs are the primarily alarms for situations where no workers are present in Dome 375, including off-hours. The ECAMs have a reaction time of within 15 minutes (the ECAMs are queried every 15 minutes) and alert environmental staff not located in Area G there is a potential air borne release initiating a response. During normal work hours, an on-site RCT will respond to the ECAM notification within minutes. During off-hours, the on-call RCT is notified; on-call personnel are required to be able to arrive at the facility within 1 hour.

Question

MR. SULLIVAN: "Okay. Well, then -- just, then, for the record, can you take it for the record and get back to us on when we will be running at Area G?"

MR. HINTZE: "Are you talking about from our -- and what I would classify as running versus walking? Yeah, I'll get back to you."

Response

The drill program at Area G is an area where we recognize there is room for improvement. Progress will continue to be made through the remainder of this year: 1) revisions to procedures, 2) enhancements to drill program such as additional personnel and enhanced drill procedures, and 3) frequent exercising of emergency preparedness system through conduct of operational drills and program enhancements. The adequacy and effectiveness of the drill program will be evaluated through a series of contractor and federal readiness assessments prior to performing the treatment of the RNS waste. We anticipate starting these reviews in October. Upon successful completion of these assessments together with improvements implemented, I would classify the Area G emergency preparedness program as "running."