

personnel was completed at 1120 and the third and final mantrip was completed at 1134. Full accountability of all underground workers was achieved at 1135.

All surface waste-handling activities were suspended and the Mine Rescue Team (MRT) was activated at 1120.

Once on the surface, workers were evaluated by Emergency Service Technicians (ESTs) and six personnel were transported to the CMC for treatment of smoke inhalation. At 1420, all personnel were released from the CMC.

The MRT performed carbon monoxide gas checks and entered the underground via the Air Intake Shaft at 1746. They proceeded to the reported fire location via the Air Intake Shaft and arrived at the salt haul truck at 1825. No fire was observed. Oxygen levels were at 21 percent and methane and carbon monoxide were at 0 percent. The MRT noted that the air was clear but that there were embers at the location of the right front tire. They expended their fire extinguishers on these embers and proceeded to the surface at 1915.

At 2202, a second MRT entered the underground via the salt hoist, took additional air quality readings, and drove the underground rescue vehicle to the scene of the fire. They applied all the extinguishing foam from the rescue vehicle and the fire appeared to be fully extinguished. They then unchained a number of bulkhead doors which had been chained open prior to the incident. On Thursday, February 6, 2014, at 0025, the MRT exited the underground via the salt hoist.

At 0105 on February 6, 2014, the event was terminated and the EOC and JIC were deactivated.

### **Direct, Root, and Contributing Causes**

**Direct Cause (DC)** – the immediate events or conditions that caused the accident.

The Board identified the direct cause of this accident to be contact between flammable fluids (either hydraulic fluid or diesel fuel) and hot surfaces (most likely the catalytic converter) on the salt haul truck, which resulted in a fire that consumed the engine compartment and two front tires.

**Root Cause (RC)** – causal factors that, if corrected, would prevent recurrence of the same or similar accidents.

The Board identified the root cause of this accident to be the failure of Nuclear Waste Partnership LLC (NWP) and the previous management and operations (M&O) contractor to adequately recognize and mitigate the hazard regarding a fire in the underground. This includes recognition and removal of the buildup of combustibles through inspections and periodic preventative maintenance (e.g., cleaning), and the decision to deactivate the automatic onboard fire suppression system.

**Contributing Causes (CC)** – events or conditions that collectively with other causes increased the likelihood or severity of an accident but that individually did not cause the accident. For the purposes of this investigation, contributing causes include those related to the cause of the fire, as well as those related to the subsequent response.