

## Summary Report of Occurrences Reviewed From April 21 – 25, 2008

**Summary:** 33 occurrences at 19 sites reviewed during this period.

### **Significant Occurrences (4)**

#### **Near Misses – 2 occurrences at 2 sites**

- **EM – Hanford Site, Richland Operations Office (Significance Category 3).** On April 17, a pump assembly being transported to the excess yard fell off of a flat bed trailer and landed on a fire lane. The pump assembly, which weighs 1,260 pounds, was sitting on a diamond plated metal skid that was secured to the flat bed trailer with a 4-inch strap rated at 12,000 pounds. A storekeeper and the two drivers believed that the pump assembly and the metal skid were welded together, but they were not. As the tractor-trailer encountered a slight slope and a hole/depression in the ground, the pump assembly tipped on its side and slid off the skid, falling to the ground. The metal skid remained strapped to the truck. Work was stopped and the scene was placed in a safe condition.
- **NA – Los Alamos National Laboratory (Significance Category 4).** On April 16, at Technical Area 3, the traffic luminary arm fell into the traffic lanes at the intersection of Jemez Road and Diamond Drive, just after a privately-owned vehicle had passed through the intersection. Subsequent inspection of the three bolts used to secure the traffic luminary arm to the pole found that two of the bolts had sheared and the third bolt was clearly of a smaller size and different material with layers of tape applied to fit it into the female end. The traffic lights were re-set to a back-up system and exposed wires were de-energized. A witness stated that he observed the traffic luminary arm swaying prior to the event due to the high winds. On April 18, the rest of the traffic poles were inspected and some additional deficiencies were identified. The deficiencies will be corrected, the tightness of the bolts will be checked, and lock washers will be placed at the identified locations.

#### **Radiological Exposure – 1 occurrence at 1 site**

- **SC – Pacific Northwest National Laboratory (Significance Category 4).** On April 16, a preliminary dose calculation indicated that a hot cell technician received approximately 11,800 mRem to his left hand while handling a sample of purified strontium-90/yttrium-90 during the transfer of the sample from a hot cell to a lab on February 20, 2008. Although the dose calculation was below the staff member's Administrative Control Level for the year of 15,000 mRem, it was greater than anticipated. An initial dose survey of the sample vial was performed while it was inside a plastic outer container that provided shielding, which prevented an accurate contact reading. The technician handled the vial in gloved hands to perform a removable contamination survey. When a dose measurement of the unshielded vial was taken with a hand-held instrument, the reading was "off-scale." An order has been issued notifying Shielded Facility Operations (SFO) staff that the transfer of Sr-90/Y-90 samples requires prior SFO line management approval.

#### **Conduct of Operations – 1 occurrence at 1 site**

- **NA – Los Alamos National Laboratory (Significance Category 4).** On April 14, while researching the confidence level related to the Radioactive Liquid Waste Treatment Facility (RLWTF) Material At Risk (MAR) accountability and LLW processes, a process engineer

determined that the majority of RLWTF process monitoring equipment was behind on calibrations. A total of 432 pieces of RLWTF process monitoring equipment, located at eight different technical areas, was logged into the RLWTF calibration database and 12 of them were identified as having been calibrated during 2007. RLWTF currently has one staff member who performs calibrations. On April 21, 2008, during fact finding, the process engineer stated that the process monitoring equipment associated with the primary tanks containing MAR is calibrated and there is a high level of confidence that MAR accountability has been maintained. However, the monitoring equipment associated with the LLW system is behind on calibrations. It is unknown which of the 432 pieces of process monitoring equipment are required, per regulations, for process monitoring, and which are not needed or out-of-service. While RLWTF does have a calibration database and a calibration procedure, it appears that the calibration program has not been managed or kept up-to-date. There is only one technician on staff who performs calibrations and he is not provided a list of which calibrations are due at any given time. He is only performing calibrations when asked to do so. The technician is unaware of which equipment is required per regulations or other reporting requirements.

**Other Occurrences (29).** See Table (Note: The Table includes the occurrences listed above).

Occurrence Category	Number of Occurrences				Number of Sites
	E&E	NNSA	SC	DOE Total	
Injury - Industrial Hygiene/Occupational Safety	2	1	0	3	3
Near Miss	2	2	0	4	3
Authorization Basis	1	2	0	3	3
Radiological Concerns	2	0	2	4	4
Environmental	0	1	2	3	3
Fire Safety	0	0	1	1	1
Shipping/Quality Assurance	1	1	0	2	2
Criticality Concerns	0	0	0	0	0
Industrial Operations	0	0	0	0	0
Conduct of Operations	1	4	0	5	3
Electrical Safety	0	1	1	2	2
Vehicle Accident	0	0	0	0	0
Equipment Failures	0	4	1	5	2
Safeguards and Security	0	0	0	0	0
Suspect & Counterfeit Parts	1	0	0	1	1
Other	0	0	0	0	0
<b>Total</b>	<b>10</b>	<b>16</b>	<b>7</b>	<b>33</b>	

### Secretarial Office Summary

National Nuclear Security Administration	16 occurrences	(7 sites)
Office of Environmental Management	8 occurrences	(5 sites)
Office of Energy Efficiency and Renewable Energy	1 occurrence	(1 site)
Office of Management	1 occurrence	(1 site)
Office of Science	7 occurrences	(5 sites)