

## Summary Report of Occurrences Reviewed From May 23 –27, 2011

**Summary:** 34 occurrences at 14 sites reviewed during this period.

### Occurrences of Significant Interest (1)

#### **Industrial Hygiene Exposure – 1 occurrence at 1 site**

- EM –Paducah Gaseous Diffusion Plant (Significance Category 3).** On May 22, a second shift Decontamination and Decommissioning crew mechanically breached a process pipe line in preparation for complete deactivation and removal of the lines. The crew wore specified respiratory and personal protective equipment and had a Negative Air Machine (NAM) available. Upon penetration, a plume of white smoke was emitted. Workers immediately attempted to stop the release with chemical resistant tape, while using the NAM to mitigate the gas plume. The tape was not effective and the gas began to overwhelm the capability of the NAM. Personnel evacuated the facility and notified the plant shift superintendent. All personnel were accounted for and there were no injuries. Preliminary urinary fluoride test results were below the American Conference of Governmental Industrial Hygienists biological exposure indices for fluorides in urine of 10 mg/g creatinine, as well as the administrative site recall limit of 5 mg/g creatinine. Spot urine samples for uranium and fluoride analysis were submitted by the three workers performing the evolution. One worker had a slightly elevated uranium result; however, initial estimates indicate the dose to be less than 10 mrem. Follow up 24-hour urine samples for radioactivity were collected from all workers who were in the area. The samples have been flagged as high priority and results are expected within 15 working days. An entry team stabilized the piping. A fact finding meeting was held.

**Other Occurrences (33).** 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	3	0	5	4
Near Miss	0	0	0	0	0
Authorization Basis	1	2	0	3	3
Radiological Concerns	2	2	0	4	3
Environmental	0	3	0	3	2
Fire Safety	0	0	0	0	0
Shipping / Quality Assurance	0	0	0	0	0
Criticality Concerns	0	1	0	1	1
Industrial Operations	1	2	1	4	4
Conduct of Operations / LOTO	3	2	0	5	5
Electrical Safety	0	0	0	0	0
Vehicle Accident	0	0	0	0	0

Occurrence Category	Number of Occurrences				Number of Sites
	E&E	NNSA	SC	DOE Total	
Equipment Failures	1	2	0	3	3
Safeguards and Security	0	0	0	0	0
Suspect & Counterfeit Parts	3	2	0	5	4
Other	0	1	0	1	1
<b>Total</b>	<b>13</b>	<b>20</b>	<b>1</b>	<b>34</b>	

ORPS Significance Categories	OE	SC1	SC2	SC3	SC4	R
Totals for the Week:	0	0	1	12	21	0

### Secretarial Office Summary

National Nuclear Security Administration	20 occurrences	(6 sites)
Office of Environmental Management	10 occurrences	(6 sites)
Office of Nuclear Energy	3 occurrences	(1 site)
Office of Science	1 occurrence	(1 site)