

November 7, 2006

**THIS EVENT IS NOT FOR PUBLIC DISCLOSURE PER AGREEMENT STATE REQUEST UNTIL November 09, 2006**

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE** PNO-IV-06-014

This preliminary notification constitutes EARLY notice of events of possible safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region II staff (Atlanta, Georgia) on this date.

**Facility**

Pacific EcoSolutions (PECOS)  
Richland, WA

Washington Agreement State Licensee

**Licensee Emergency Classification**

Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

SUBJECT: AMERICIUM-241 INHALATION EXPOSURES

DESCRIPTION: On November 3, 2006, the Washington Division of Radiation Protection (the state) notified the NRC Operations Center of an Americium-241 inhalation exposure of one individual involved in separating sources, lead shields, and trash from several barrels at the Pacific EcoSolutions (Pecos) facility in Richland, Washington (EN 42962).

The state reported that work with the materials was conducted in a ventilated room several hundred square feet in area. This room was within a larger processing area of approximately 10,000 square feet. Two workers with respirators were removing materials from drums containing waste that had been stored at a customer's facility for several years. A supervisor without a respirator was located immediately outside the inner room and at times reached his hands into the room through the door to transfer paperwork and other items to the workers. Handheld survey instruments indicated high levels of alpha activity after several drums were opened. At that point work was stopped.

Lung counting at Battelle indicated the supervisor had an estimated intake of 11.7 nanocuries (433 Bq) Am-241 with an estimated lung dose of 97.5 rem CDE (0.975 Sv). The two other workers were given two lung counts with results of 6.7 and 3.2 nCi (248 and 188 Bq) for the first worker and 1.5 and 0.5 nCi (56 and 19 Bq) for the second. A health physics technician working near the supervisor in the outer room was also counted with a result of less than 0.9 nCi (33 Bq). The individuals have undergone chelation treatment with indications of some success (reduction of lung deposition) for the supervisor.

There has been some local media attention. There was no release of radioactive material to the public or the environment.

NRC's Operations Center was notified of this event by the state of Washington on November 3, 2006. Region IV has informed OEDO, FSME, and the Region's SLO and PAO. Region IV continues to monitor the state's activities related to the event and has offered assistance. An International Nuclear Event Scale (INES) report on the radiation overexposure has been sent to the International Atomic Energy Agency.

This information has been discussed with the state and is current as of 8:30 p.m. (CST) on November 6, 2006.

ADAMS ACCESSION NUMBER: ML063110307

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