

September 18, 2000

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-00-021

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 the Region IV staff on this date.

**Facility**

Transalta Centralia Mining LLC  
Centralia, Washington  
License No.: WN-I0241-1  
(Agreement State Licensee)

**Licensee Emergency Classification**

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

SUBJECT: MECHANICAL FAILURE OF A RONAN MODEL SA-4 GAUGING DEVICE

DESCRIPTION: On September 15, 2000, the Washington Department of Health (WDOH) notified the NRC of a mechanical failure of a Ronan Engineering Company Model SA-4 gauging device. Transalta Centralia Mining LLC, a WDOH licensee, reported to WDOH that the mechanical failure occurred on September 13, 2000. The device is specifically licensed and is used for density process measurements. The device houses a cesium-137 sealed source, Amersham Model CDC.711M, with a source activity not to exceed 74 gigabecquerels (2 curies). The source is normally mounted at the end of a source rod and secured by pins. When not in operation, the rod with source can be withdrawn into a shielded position inside the gauge housing. When in operation, the rod with source is inserted into the process area through a dry well.

While the gauge was in use on September 13, 2000, an authorized user realized that a problem existed when attempting to return the source to the safe position. Apparently the rod did not feel "normal" when it was withdrawn to its shielded position. According to the report received from WDOH, preliminary indications are that the source may have separated from the source rod and fallen to the bottom of the dry well. WDOH's report also indicated the licensee's health physics consultant noted that this type of Ronan device has suffered similar failures in the past. The licensee's radiation safety officer and health physics consultant subsequently surveyed the process area and stated there was no dose rate problem since the process mixture was still providing ample shielding. Licensee representatives indicated the mixture will remain in-place until the source can be returned to its shielded position. As a precaution, the area adjacent to the dry well access point has been marked as a restricted area.

The licensee's consultant has contacted Ronan Engineering and requested that they send procedures and special equipment to recover the source. The recovery operation is anticipated to take place on September 18. WDOH will have a representative on-site during the recovery operation.

Region IV received notification of this occurrence by e-mail from the State of Washington at 7:32 p.m. (EDT) on September 15, 2000.

Region IV has informed NMSS, OSTP and OEDO.

This information has been discussed with WDOH and is current as of 11:00 a.m. on September 18, 2000.

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