

Darlene Goering

From: Don Hickmott [dhickmott@lanl.gov]
Sent: Tuesday, April 29, 2003 12:04 PM
To: Darlene_Goering@nmenv.state.nm.us

Darlene, I reviewed the write-up in the SWMU report (material below) which I think you have already seen and in the OU 1130 workplan on IJ site. None of these writeups has anything definitive on the sand mounds (see speculation below). I talked to Franco and he didn't have any specific knowledge on the sand mounds at IJ - his guess is that they are old sandbags from which the burlap has rotted away. I also have a call into Jerry. I hope that this is of help, but am afraid it doesn't really clarify anything. Don

SWMU Report verbiage

AOC 15-008(f) consists of several sand mounds that are located around the active I-J Firing Site [SWMU 36-004(e)]. I-J firing site is located on a mesa overlooking Potrillo Canyon and was part of TA-15 when it was originally constructed in 1948. This AOC became part of TA-36 in 1981 when the boundaries of TA-36 were expanded. The RFI work plan for OU 1130 does not specifically address this AOC in the discussion of the SWMU 36-004(e), I-J Firing Site. The purpose and characteristics of these mounds are not described, but they were likely associated with explosives tests conducted at I-J Firing Site. Tests at I-J Firing Site involved a variety of solid and liquid explosives, up to 500 lb per shot, as well as a variety of inorganic chemicals, including aluminum, antimony, beryllium, cadmium, copper, iron, lead, mercury, steel, uranium, lithium-magnesium alloys, and lithium hydride. Previous environmental investigations at this site include a surface radiological survey in 1991 that identified localized areas of elevated radiation levels. Numerous pieces of depleted uranium and oxidized depleted uranium have reportedly been found at and around I-J Firing Site. In addition, there is evidence of barium contamination in Potrillo Canyon watershed near TA-15. During remediation of the septic tank [SWMU 36-003(b)] at this firing site, elevated radiological readings were reportedly observed in surface soil samples collected along the surface water runoff pathways from the firing site and sand mounds [AOC 15-008(f)].

Because I-J Firing Site is an active firing site, the RFI work plan for OU 1130 recommended deferring investigation and remediation of the AOC until decommissioning of the firing site. However, the need for an IA was apparently identified based on the contamination observed in surface water runoff pathways during the septic tank remediation. The ER Project prepared an IA plan in 1997 that included removal of visible pieces of uranium from the firing site and surrounding area, installation of stormwater flow diversions, and stabilization of the sand mounds [AOC 15-008(f)] by covering them with tarps.

More SWMU Report verbiage

AOC 36-004(e) consists of an active firing site, commonly referred to as "I-J Site." I-J Site consists of two active firing points, known as "I" and "J," two control buildings, a dirt bunker, and a covered work area. I-J Site is located at the west end of TA-36 on Mesita del Potrillo, along the north rim of Potrillo Canyon. The site was constructed in 1948 and was part of TA-15 until 1981, when the boundary of TA-36 was expanded to include I-J Site. Shots at I-J Site have used up to 500 lbs HE and have involved a variety of solid and liquid explosives and metals. All shots involving radioactive materials at this site were reportedly conducted in fully enclosed containment vessels. These vessels were then removed from the site for use at TA-15, though one was later returned to I-J Site. This vessel was identified in the 1990 SWMU report as AOC C-36-001 and was removed from the site in 1994 and disposed of at TA-54, Area G. Activities conducted at I-J Site have also included tests where depleted uranium projectiles were fired into an embankment. This projectile test area has been identified as AOC C-36-006(e). Previous investigations conducted at I-J Site consist of a surface radiological survey conducted in 1991 that identified hot spots up



to 255,000 counts per min. Numerous pieces of depleted uranium and oxidized depleted uranium were reportedly present around the site.

Because AOC 36-004(e) is an active firing site, the RFI work plan indicated that investigation and, if necessary, remediation of this site would be deferred until the site is decommissioned. However, the need for an interim action was identified based on the presence of visible pieces of depleted uranium around the site. The ER Project prepared an interim action plan in 1997 that called for removal of visible pieces of uranium from the firing site and surrounding area. This interim action plan addressed AOC 36-004(e), as well as two other AOCs at I-J Site [AOC 15-008(f) and AOC C-36-006(e)].