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Date: SEP 13 2012
Refer To: EP2012-0202

John Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Request for Certificates of Completion for Four Solid Waste Management Units and One Area of Concern in the Pueblo Canyon Aggregate Area

Dear Mr. Kieling:

In accordance with Section VII.E.6.b of the Compliance Order on Consent (the Consent Order), the U.S. Department of Energy (DOE) and Los Alamos National Security, LLC (LANS), request Certificates of Completion without Controls for the following solid waste management units (SWMUs) and area of concern (AOC) within the Pueblo Canyon Aggregate Area:

- SWMU 45-001, former treatment plant and outfalls
- SWMU 45-002, former vehicle decontamination facility
- SWMU 45-003, former industrial waste line
- SWMU 45-004, sanitary sewer outfall
- AOC C-45-001, accidental release

These five sites are components of Consolidated Unit 45-001-00, which also includes one additional site, SWMU 01-002(b)-00. As explained in the Investigation Report for Pueblo Canyon Aggregate Area, Revision 1 (LA-UR-08-4765, EP2008-0391) (hereafter, IR), SWMU 01-002(b)-00 was not included in the investigation of Consolidated Unit 45-001-00 because it had previously been investigated and reported in the Interim Action Completion Report for the South Fork of Acid Canyon (LA-UR-02-5785, ER2002-0544) and the Los Alamos and Pueblo Canyons Investigation Report (LA-UR-04-2714, ER2004-0027). A request for a Certificate of Completion without Controls for SWMU 01-002(b)-00 will be submitted at a later date.

SWMUs 45-001, 45-002, 45-003, and 45-004 and AOC C-45-001 were recommended for corrective action complete without controls in the Phase II Investigation Report for Pueblo Canyon Aggregate Area (LA-UR-10-6411, EP2010-0384) (hereafter, Phase II IR). That report, along with the IR, documents that the nature and extent of contamination are defined at these five sites. In addition, the

Phase II IR demonstrates that the five sites pose no potential unacceptable risks or doses to human health under the recreational and residential scenarios and pose no potential risk to ecological receptors.

The IR was approved in the New Mexico Environment Department's (NMED's) Approval with Modifications [for the] Investigation Report for Pueblo Canyon Aggregate Area, Revision 1 (HWB-LANL-08-009), dated August 22, 2008, and the Phase II IR was approved in the Notice of Approval with Modifications [for the] Pueblo Canyon Aggregate Area Phase II Investigation Report (HWB-LANL-10-076), dated December 23, 2010. The notice of approval with modifications for the Phase II IR does not contain any comments related to the recommendation for corrective action complete without controls for SWMUs 45-001, 45-002, 45-003, and 45-004 and AOC C-45-001. However, the approval with modifications does instruct DOE/LANS to evaluate the vapor intrusion pathway as part of the residential scenario for a site to qualify for corrective action complete without controls designation. In response to this comment, DOE/LANS have evaluated the vapor intrusion pathway for SWMUs 45-001, 45-002, 45-003, and 45-004 and AOC C-45-001.

Because the footprints of SWMUs 45-001, 45-002, 45-003, and 45-004 and AOC C-45-001 overlap, the Phase II IR evaluated the risk for all five sites combined, rather than individually. A similar approach was used to evaluate the vapor intrusion pathway, and the results of this evaluation are presented in Attachment 1. Based on this evaluation, the excess cancer risk is 4×10^{-8} (Attachment 1, Table 1), and the hazard index (HI) due to vapor intrusion is 0.06 (Attachment 1, Table 2). The Johnson and Ettinger model spreadsheets used to calculate soil screening levels for the vapor intrusion evaluation are included in Attachment 2 (on CD).

The cancer risk and HI for the residential scenario exclusive of vapor intrusion were evaluated and presented in Appendix I of the Phase II IR. The cancer risk is 4×10^{-6} (Phase II IR, Table I-4.2-32), and the HI is 0.8 (Phase II IR, Table I-4.2-33). Combining these results with the vapor intrusion results yields a cancer risk of 4×10^{-6} and a total HI of 0.9, both of which are below NMED's targets of 1×10^{-5} and 1, respectively. Therefore, evaluation of the vapor intrusion pathway does not alter the conclusions presented in the Phase II IR, and neither site controls nor additional future actions under the Consent Order are necessary at these five sites.

If you have any questions, please contact Todd Haagenstad at (505) 665-2936 (hth@lanl.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@nnsa.doe.gov).

Sincerely,

B-G Schappell

Bruce Schappell, Acting Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,

Edwin P. Worth for

Peter Maggiore, Assistant Manager
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Los Alamos Site Office

BS/PM/DM/TH:pm

Attachments: (1) Results of the Residential Risk-Screening Evaluation for SWMUs 45-001, 45-002, 45-003, and 45-004 and AOC C-45-001 (LA-UR-12-24541)
(2) Johnson and Ettinger Model Spreadsheets (on CD)

Cy: (w/att.)
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Steve Yanicak, NMED-DOE-OB, MS M894
Cheryl Rodriguez, DOE-LASO, MS A316
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Cy: (w/o att.)
Tom Skibitski, NMED-OB (date-stamped letter emailed)
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