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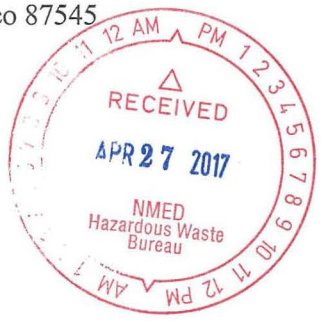

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Date: APR 27 2017
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Locates Action No.: n/a

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

Subject: Supplemental Investigation Report for North Ancho Canyon Aggregate Area

Dear Mr. Kieling:

The U.S. Department of Energy (DOE) and Los Alamos National Security (LANS) have reviewed existing data and evaluated the additional data requirements to complete the investigation at six sites within the North Ancho Canyon Aggregate Area. Based on the data evaluation guidelines, Los Alamos National Laboratory (the Laboratory) used in 2009, when the original investigation report was prepared, the Laboratory concluded the extent of contamination was not defined for six solid waste management units (SWMUs) and areas of concern in the North Ancho Canyon Aggregate Area.

After the approval of the investigation report, the New Mexico Environment (NMED) and DOE entered into a Framework Agreement for the realignment of environmental priorities at the Laboratory. Under the Framework Agreement, NMED and DOE agreed to review characterization efforts undertaken to date pursuant to the Compliance Order on Consent (the Consent Order) to identify those sites where the nature and extent of contamination have been adequately characterized.

Pursuant to the Framework Agreement, the Laboratory reviewed its data evaluation process with respect to U.S. Environmental Protection Agency (EPA) guidance and the Framework Agreement principles and concluded that the process could be revised to complete site characterization more efficiently, while providing full protection of human health and the environment. Specifically, the process for evaluating data to define extent of contamination was revised to provide a greater emphasis on risk/dose reduction, consistent with EPA guidance. This revised process includes (1) initially identifying chemicals of potential concern (COPCs) to focus efforts on the constituents of most concern; (2) screening COPCs against soil screening levels (SSLs) and screening action

levels (SALs) during determination of extent to focus efforts on characterizing contamination potentially posing a risk/dose and requiring corrective action; and (3) performing screening-level risk/dose evaluations on all sites, even if extent is not defined, to incorporate risk/dose reduction into recommendations for further actions. The revised process is documented in a deliverable called a supplemental investigation report (SIR).

Unlike other aggregate areas for which the SIR process has been implemented, it has been determined that a reevaluation of the sites for North Ancho Canyon Aggregate Area will not affect (i.e., decrease) the scope of the Phase II investigation and will not result in requests for certificates of completion for any of the sites. Therefore, additional evaluation of nature and extent and risk assessments is not needed until after the Phase II investigation has been completed. DOE and LANS will fully implement the Phase II investigation work plan, including the modifications addressed in the May 13, 2011, approval with modifications letter, and submit an investigation report that will evaluate all relevant data, provide human health and ecological risk assessments, and make recommendations. This letter satisfies the requirement in Appendix B of the 2016 Consent Order to submit a SIR for North Ancho Canyon Aggregate Area.

Although the Phase II investigation is scheduled in the future, DOE and LANS are planning to implement an accelerated corrective action (ACA) at three sites within the North Ancho Canyon Aggregate Area this fiscal year. This ACA will reduce the risk at these sites by removing polychlorinated biphenyl– (PCB-) contaminated soil. The scope has already been defined and is included in the approved Phase II investigation work plan. The purpose of the ACA is to complete the remediation at two areas by removing PCB-contaminated waste from former waste stockpile areas previously used during remediation at SWMUs 39-001(a) and 39-001(b). The ACA will also include the remediation of PCB-contaminated soil at a small storage area, SWMU 39-007(a). Details of these cleanup efforts are presented below.

SWMUs 39-001(a) and 39-001(b) are former inactive landfills that were remediated in 2009. Activities conducted during the remediation included excavation and stockpiling debris and contaminated soil from the disposal trenches and packaging and shipping this waste material for off-site disposal. Following removal of all waste and contaminated soil from the waste stockpile areas, sampling was performed within and around the footprints of the former waste stockpiles to characterize residual contamination associated with waste management activities. At both waste stockpile areas, PCBs were detected at concentrations greater than 1 mg/kg. Additional sampling locations will be established to define the lateral extent of contaminated soil with greater than 1 mg/kg PCBs. Discrete samples will be collected from these new step-out locations and analyzed for PCBs to confirm the extent of the area that must be excavated. If PCBs concentrations are detected at greater than 1 mg/kg in any of these samples, additional step-out sampling locations will be added and sampled until data from all of the outermost sampling locations show less than 1 mg/kg PCBs. After sampling has defined the extent of the area with PCB concentrations greater than 1 mg/kg, soil contaminated with PCB concentrations greater than 1 mg/kg will be removed. If any residual debris is encountered during the removal of the remaining contaminated soil, it will also be removed. Confirmation samples will be collected following excavation of the top 1 ft of soil from sampling grids with PCB concentrations greater than 1 mg/kg.

Contamination currently at the sites is associated with waste stored on the surface of the stockpile areas. Confirmation sampling is intended to confirm that all residual waste has been removed from the sites and that original, native soil surface has been reached. Therefore, defining vertical extent is not an objective and samples will be collected at only one depth. Each of these confirmation samples will be analyzed for PCBs [SWMUs 39-001(a) and 39 001(b)]; lead [SWMU 39-001(a) only]; isotopic uranium [SWMU 39-001(a) only]; and semivolatile organic compounds (SVOCs) [SWMU 39 001(b) only]. Analysis for constituents other than lead, isotopic uranium, and/or SVOCs will not be performed because waste characterization sampling indicated all other constituents to be present below residential SSLs/SALs. If sampling results show total PCB concentrations to be greater than 1 mg/kg, lead or SVOCs to be greater than residential SSLs, or uranium-238 activities to be greater than the residential SAL, an additional 1 ft of soil will be removed from the sampling grid and the location will be resampled. This process will be repeated until all confirmation sampling results show PCB concentrations to be less than 1 mg/kg and concentrations of lead and/or SVOCs and activities of isotopic uranium to be less than the residential SSLs/SALs.

SWMU 39-007(a) is the location of a former storage area on a concrete pad under a covered porch outside the east side of an equipment shelter (structure 39-63) at Technical Area 39. The dates of operation of the storage area are not known. Used oil containing lead and solvents was stored in this area. The area around the concrete pad is relatively flat but slopes eastward to a drainage near the adjacent road. A portion of the site was remediated during a 1995 voluntary corrective action to remove PCB-contaminated soil. Soil will be removed where Aroclor-1254 and Aroclor-1260 concentrations were detected above 1 mg/kg. Following soil removal, confirmation samples will be collected at six new locations around the outside edge of the excavation to confirm cleanup to less than 1 mg/kg PCBs. Confirmation samples will also be collected from the bottom of the excavation. All samples will be analyzed for PCBs.

In accordance with Section XIX.B of the Consent Order, implementation of the ACA does not require approval by NMED because the accelerated corrective actions are included in an NMED-approved work plan. The ACA will be conducted during the summer of 2017, and an ACA report will be submitted by September 30, 2017. The report will document the cleanup activities and provide the necessary data to demonstrate the ACA cleanup goals were achieved.

This letter replaces the letter dated April 7, 2017, requesting removal of the SIR for North Ancho Canyon Aggregate Area from Appendix B of the Consent Order (ADEM-17-0072).

If you have any questions, please contact Kent Rich at (505) 665-4272 (krich@lanl.gov) or Ramoncita Massey at (505) 665-7771 (ramoncita.massey@em.doe.gov).

Sincerely,

Bruce Robinson, Program Director
Environmental Remediation Program
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Sincerely,

David S. Rhodes, Director
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Public Reading Room (EPRR)
ADESH Records
PRS Database