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January 24, 2016

DCN: NMED-2016-02

Mr. David Cobrain  
New Mexico Environment Department  
Hazardous Waste Bureau  
2905 Rodeo Park Dr. East  
Building One  
Santa Fe, NM 87505

RE: Evaluation of the Response to the Disapproval for the Investigation Report for Technical Area 57 Aggregate Area (Fenton Hill), Los Alamos National Laboratory, EPA ID No. NM0890010515, HWB-LANL-15-007, dated October 28, 2015.

Dear Mr. Cobrain:

Attached please find the draft Evaluation of the Response to the Disapproval for the Investigation Report for Technical Area 57 Aggregate Area (Fenton Hill), Los Alamos National Laboratory, EPA ID No. NM0890010515, HWB-LANL-15-007, dated October 28, 2015 (IR RTC). As part of the evaluation, the Investigation Report for Technical Area 57 Aggregate Area (Fenton Hill), Revision 1 dated December 2015 (Revised IR) was reviewed to ensure that information addressing the issues raised in NMED's comments was incorporated into the report text.

Unless addressed in the attached, the response to the comment was deemed adequate as provided. The attached comments indicate an acceptable response; however, appropriate changes were not included in the revised text.

If you or any of your staff have questions, please contact me at (801) 451-2864 or via email at [paigewalton@msn.com](mailto:paigewalton@msn.com).

Thank you,

Paige Walton  
AQS Senior Scientist and Program Manager

Enclosure

cc: Neelam Dhawan, NMED (electronic)  
Mike Smith, AQS (electronic)  
Joel Workman, AQS (electronic)



**Evaluation of the Response to the Disapproval for the  
Investigation Report for Technical Area 57 Aggregate Area (Fenton Hill)  
Los Alamos National Laboratory  
EPA ID No. NM0890010515, HWB-LANL-15-007  
Dated October 28, 2015**

**New Mexico Environment Department (NMED) Technical Review Comments**

- 1. Evaluation of Facility Response to NMED Comment 2:** The facility response addresses the issue raised in the original comment. Important information related to the development of the home ranges listed in Tables G-5.5-1 and G-5.5-3 is provided in the first paragraph and the in-text table of the facility response. The information includes the references used by the Los Alamos National Laboratory (LANL) [Volume 1 of EPA's Wildlife Exposure Factors Handbook and LANL's Screening-Level Ecological Risk Assessment Methods, Revision 3 (Methods Document)] in determining the home ranges for the ecological receptors listed in Table G-5.5-1 and G-5.5-3. The in-text table is comprised of rows extracted from Table 3.3-1, Measures Required for the Wildlife Exposure Model, from the LANL Methods Document. The home ranges listed in this information correspond to those listed in Tables G-5.5-1 and G-5.5-3 for ecological receptors at Area of Concern (AOC) 57-006 and AOC 57-007, respectively. However, none of this information has been incorporated into Appendix G, Section G-5.5.4, Population Use Factors. Thus, the ecological risk assessment still does not include a description of how the home ranges listed in the two tables were determined.

In addition to the information provided in the first paragraph of the response and the excerpts from Table 3.3-1 of LANL's Methods Document, the discussion in Section G-5.5.4 should be revised to include more details regarding how the listed value of home range was determined. While the information provided in the far right column of the Table 3.3-1 excerpts is helpful in explaining how the home range was determined for some receptors (American Robin, Montane Shrew), it is too vague to determine which data were taken from the Wildlife Exposure Factors Handbook for determining the home range for other receptors. To clarify how the values of home range listed in Tables G-5.5-1 and G-5.5-3 were determined, the information provided in the far right column of the table excerpts for the American Kestrel, Deer Mouse, Desert Cottontail, and Red Fox should be expanded so it clear what data were used in determining the home range listed for these ecological receptors. In future documents, the appendices and tables should include the information presented in the first paragraph and the Table 3.3-1 excerpts of the response as well as additional details regarding the determination of the home range for the American Kestrel, Deer Mouse, Desert Cottontail, and Red Fox.

- 2. Evaluation of Facility Response to NMED Comment 4:** The facility response partially addresses the issue raised in the original comment. In the response, LANL provides information on the issues raised in NMED Comment 4 regarding five AOCs [AOCs 57-001(b), 57-001(c) 57-002, 57-004(a) and 57-004(b)] closed under a discharge plan issued by the New Mexico Oil Conservation Division (NMOCD). Specifically, the information in the response indicates:

- No investigations or remedial activities were conducted at the Fenton Hill site between submittal of the 1996 RCRA Facility Investigation (RFI) report and the 2014 investigation;
- The Phase II RFI, voluntary corrective action, and ecological risk assessment listed in the third paragraph of NMED Comment 4 were not performed;
- A meeting was held following the NMED staff site visit on September 9, 2015 that addressed the decommissioning of Milagro Pond including the collection of confirmation samples to determine if actions beyond the decommissioning of the pond are warranted; and
- The Department of Energy (DOE) and Los Alamos National Security, LLC request a meeting with NMED to discuss the five AOCs identified in NMED Comment 4.

Information on these five AOCs was presented in Appendix H of the IR. None of the information provided in the response was found in Appendix H of the Revised IR. In future reports, the appendices should include the information noted in the first three bullets above. In addition, LANL should contact NMED to formally request and schedule a meeting to discuss AOCs 57-001(b), 57-001(c) 57-002, 57-004(a) and 57-004(b).

3. **Evaluation of Facility Response to NMED Comment 5:** The facility response addresses the issue raised in the original comment. In the response LANL presents information supporting the assertion that the bottom of the drainline from the trailer to the leach field was likely at a depth of 1 foot below ground surface (bgs). The response also states that the drainline “could not be located in 2014, indicating it had been removed at some point and bedrock was encountered at about 2 ft [feet] bgs.” The balance of the response provides justification for the depth intervals sampled at locations 57-4011, 57-4012, and 57-4013 during the 2014 investigation and states that Section 6.3.4.1 of the main text and Section B-9.0 of Appendix B were revised to explain the depths sampled at the three locations in 2014. Section 6.3.4.1 and Section B-9.0 have been revised as indicated in the response. However, the text has not been revised to indicate that as part of the 2014 investigation LANL determined that the drainline had been removed. For completeness and to further clarify why the sampling depths at sampling locations 57-4011, 57-4012, and 57-4013 deviated from those proposed in the work, Section B-9.0 of Appendix B should have been revised to include that as part of the 2014 investigation LANL determined that the drainline had been removed. .
4. **Evaluation of Facility Response to NMED Comment 6:** The facility response addresses the issue raised in the original comment. The information provided in the facility response addresses the issue raised in NMED Comment 6. However, none of the information in the response has been incorporated into Sections G-2.3 or G-5.1 of Appendix G. Thus, Appendix G does not clearly establish that the depth interval for exposure of ecological receptors is 0 to 5 feet bgs for ecological risk analyses performed under the Consent Order. Note that Section G-2.3 notes that the exposure interval for the ecological risk assessment is 0 to 5 feet bgs but does not reference this depth to the LANL ecological risk assessment methods document and/or the investigation work plan. While Section G-5.1 does reference the Methods Document, the exposure interval is not stated. Section G-2.3 should have been

revised to include a reference to the Methods Document and the Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill) dated April 2012 for the exposure interval used in the ecological risk analyses described in Appendix G.