

May 12, 2011

DCN: NMED-2011-19

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



RE: Evaluation of Comment Number 3(e) from the Response to Notice of Disapproval for the Supplemental Interim Measure Report for Solid Waste Management Unit 01-001(f), Los Alamos National Laboratory, New Mexico, dated February 2, 2011.

Dear Mr. Cobrain:

This letter addresses the evaluation of Los Alamos National Laboratory's (LANL) response to Comment Number 3(e) from the Response to Notice of Disapproval (NOD) for the Supplemental Interim Measure Report for Solid Waste Management Unit (SWMU) 01-001(f). As noted in an email dated May 4, 2011, Ms. Leona Tsinnajinnie requested an evaluation of the response to Comment Number 3(e), including associated upper confidence limit (UCL) calculations.

The data packages containing analytical results of the confirmation samples are provided as Appendix D of the Supplemental Interim Measure Report for SWMU 01-001(f). It was noted that analytical results for many sampling locations, and with significant detections of Aroclor-1254 and Aroclor-1260, were not included in Table 5.1-1 and Plate 1 for consideration in this report, but may have been filtered based on sampling depth and exposure intervals. NMED may wish to review the data packages provided in Appendix D to verify the selection of data included for consideration in the report.

Section 5.1 of the report indicates that the confirmation samples were collected on July 22, 2010. This is inconsistent with the sampling dates provided in the data packages in Appendix D. The sampling dates provided in Appendix D indicate that the samples were collected from November 2009 to February 2010.

Section 5.1 of the report provides a 'before' value for the UCL calculation, which is based on characterization data collected before the removal action; and an 'after' value for the UCL which is based on confirmation data collected after the removal action. The response to comment 3(e) states that the 'after' UCL is calculated based on data provided in Table 5.1-1. It is assumed that the 'before' value was published in the *Investigation Report for Upper Los Alamos Canyon Aggregate Area*. For the 'after' value, although the ProUCL input spreadsheets were not provided, it appears that there are inconsistencies with the data that were included in the UCL calculations based on the ProUCL output spreadsheets that were provided.

1. For Aroclor-1254, the ProUCL output spreadsheet indicates that 115 records were utilized to calculate the UCL, and 12 of those records were nondetects. This is inconsistent with the data



provided in Table 5.1-1, which indicates that there should be 105 records, all of which are positive detections (i.e., no nondetect values).

2. For Aroclor-1260, the ProUCL output spreadsheet indicates that 116 records were utilized to calculate the UCL, and that 52 of those records were nondetects. This is inconsistent with the data provided in Table 5.1-1, which indicates that there are 105 records where 40 were nondetects.
3. For both Aroclor-1254 and 1260, UCLs that can be calculated utilizing ProUCL and data provided in Table 5.1-1 are inconsistent with the UCLs provided by LANL in Attachment 1 of the Response to NOD for the Supplemental Interim Measure Report for SWMU 01-001(f). Further, it appears that the UCLs provided by LANL in Attachment 1 may have been underestimated.
4. The text in Section 5.1 of the report states that the 'after' UCL for PCBs is 9.07 mg/kg. The text does not state whether this is for Aroclor-1254 or Aroclor-1260. Furthermore, this value of 9.07 mg/kg (Section 5.1) is not shown as a calculated value in the ProUCL output files in Attachment 1 of the Response to NOD for the Supplemental Interim Measure Report for SWMU 01-001(f) for either Aroclor-1254 or Aroclor-1260.

Based on these inconsistencies, and without the provision of the ProUCL input files, it is not clear which data were utilized to calculate the 'after' UCLs provided in Attachment 1. The ProUCL output files in Attachment 1 indicate that the data used to calculate UCLs are inconsistent with data provided in Table 5.1-1, and the UCL value listed in Section 5.1 of the text. Based on the data in Table 5.1-1, UCLs are likely to be significantly lower than the 'before' values. However, as there are many inconsistencies with the data utilized in the calculations, NMED may wish to request further clarification on the input data and calculation of the UCL provided as Attachment 1 of the Response to NOD, and listed in Section 5.1 of the report.

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

Thank you,.



Paige Walton
AQS Senior Scientist and Program Manager

cc: Leona Tsinnajinnie, NMED (electronic)
Joel Workman, AQS (electronic)
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