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**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

April 15, 2021

Arturo Duran  
Designated Agency Manager  
Environmental Management  
U.S. Department of Energy  
Los Alamos Field Office  
P.O. Box 1663 MS M984  
Los Alamos, NM 87544

**RE: 2020 ANNUAL LONG-TERM MONITORING AND MAINTENANCE REPORT FOR THE CORRECTIVE MEASURES IMPLEMENTATION AT FORMER 260 OUTFALL AREA  
LOS ALAMOS NATIONAL LABORATORY (LANL)  
EPA ID #NM0890010515  
LANL-20-064**

Dear Mr. Duran:

The New Mexico Environment Department (NMED) received the United States Department of Energy's (DOE) *2020 Annual Long-Term Monitoring and Maintenance Report for the Corrective Measures Implementation at Former 260 Outfall Area* (Report) on September 30, 2020. The Report is dated September 2020 and is referenced by EM2020-0400. NMED reviewed the Report and issued draft comments to DOE via email on February 10, 2021. DOE provided responses to NMED's comments on March 26, 2021 acknowledging the inadvertent omission from the Report of various regulated compounds including detections at multiple sampling locations.

NMED requires the following modifications be made in all subsequent submittals of the Long-Term Monitoring and Maintenance (LTMM) report:

- The plot for alluvial aquifer monitoring well CDV-16-02656 on Plate 1 shall be presented with a scale appropriate to the detected concentration of RDX in the next annual report. Based on the detection at this location, NMED recommends scale be set at 10 ug/L. This modification applies to all sample locations presented on Plate 1 and Plate 2.
- The PCB and dioxin/furan sampling activities and results shall be discussed for all sample locations in the text, Table 2.1-1, and all applicable sections in all subsequent submittals of the LTMM report.

Mr. Duran  
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NMED draft comments and DOE responses are attached to this correspondence.

Should you have any questions regarding this correspondence, please contact Christopher Krambis of my staff at (505) 231-5423.

Sincerely,

**Kevin  
Pierard**

Digitally signed by  
Kevin Pierard  
Date: 2021.04.15  
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Kevin M. Pierard, Chief  
Hazardous Waste Bureau

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File: 2021 LANL, 2020 Annual Long-Term Monitoring and Maintenance Report for the Corrective Measures Implementation at Former 260 Outfall Area  
HWB-LANL-20-064

**Response to Draft New Mexico Environment Department's Comments on the  
2020 Annual Long-Term Monitoring and Maintenance Report for Corrective Measures  
Implementation at Former 260 Outfall Area**

**September 2020**

**LANL-20-064**

**Dated February 10, 2021**

**INTRODUCTION**

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim (in italics). The U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office responses follow each NMED comment.

**GENERAL COMMENTS**

**NMED Comment**

1. *Sampling and analysis for Polychlorinated Biphenyls (PCBs) and Dioxins/Furans were scheduled for 17 of the long-term monitoring locations during the 2020 monitoring year (MY2020). This testing was scheduled on a quinquennial basis according to Table 6.4-1 (in blue shading) of the MY2020 Interim Facility-wide Groundwater Monitoring Plan (IFGMP) and Table A-3.0-1 of the Remedy Completion Report for Corrective Measures Implementation at Consolidated Unit 16- 021(c)-99. However, there is no discussion of this scheduled sampling in the text and in Table 2.1-1 of the 2020 Annual Long-Term Monitoring and Maintenance Report for Corrective Measures Implementation at Former 260 Outfall Area (Report).*

**DOE Response**

1. Polychlorinated biphenyls (PCBs) and Dioxins/Furans were inadvertently not discussed in the report. Please see response to General Comment 2 and Specific Comment 1.

**NMED Comment**

2. *July 2020 sampling results for PCBs and Dioxins/Furans were provided in Appendix B of the Report for only one location (i.e. Between E252 and Water at Beta) and for PCBs only at Bulldog Spring. However, the Report does not discuss the sampling associated with these results, nor does it provide results for these parameter groups for the rest of 15 monitoring locations that were included in the MY2020 schedule. Deviations from the IFGMP must be included in the Report and explanations must be provided for not conducting sampling at all scheduled locations.*

**DOE Response**

2. Page 1 of the report states "This annual Long-Term Monitoring and Maintenance Report covers the reporting period from August 2019 to July 2020 and typically includes information from two semiannual sampling events, one in August and the second in March. However, the March event did not take place for two reasons. From March 1 to March 23, approvals to use portable electronic devices (PEDs) in the TA-16 area were pending. Then, beginning on March 24, 2020, the U.S. Department of Energy Environmental Management Los Alamos Field Office transitioned to Essential Mission Critical Activities (EMCA) status in response to the COVID-19 pandemic (DOE 2020, 700826). The New Mexico Environment Department (NMED) was notified of the transition to EMCA status on March 31, 2020. As a result of the EMCA status, the March 2020 sampling operations were paused. The second semiannual sampling event was conducted in July 2020."

As discussed in section 2 of the report, when the sample campaign was implemented in July, following on the EMCA shutdown, many of these locations were dry or did not have sufficient water to enable collection of a sample (see Table 2.2-1, for example). Historically, Spring is a better time for sampling because of the benefit of early winter runoff conditions. Where there was sufficient water for sample collection in July, PCBs and dioxins/furans were analyzed, but only partially included in Appendix B. Please see response to Specific Comment 1.

#### **NMED Comment**

3. *The vertical scale used for RDX concentration in the monitoring location CDV-16-02656 RDX trend plot in Plate 1 – RDX spatial distribution in Cañon de Valle and S-Site Canyon is unnecessarily large. A more appropriate scale should be used in future submittals of the Report.*

#### **DOE Response**

3. The plots for CDV-16-02656 on Plate 1 will be presented with a different scale in the next annual report.

### **SPECIFIC COMMENTS**

#### **NMED Comment**

1. *Section 2.1 Sampling, Page 4.*

**DOE Statement:** *Table 2.1-1 summarizes the monitoring locations (i.e., TA-16 260 monitoring group), parameters measured, and sampling frequencies for the springs, alluvial groundwater, and surface waters that make up the 2019 long-term monitoring program. The suite of compounds measured includes HEXMOD (i.e., RDX, HMX, TNT, and degradation byproducts), VOCs, metals, SVOCs, general inorganics, radionuclides, and nitrogen-15/oxygen-18 isotopes in nitrate.*

**NMED Comment:** *Explain why PCBs and Dioxins/Furans are not included (see General Comment No. 1).*

#### **DOE Response**

1. As stated in the General Comment 1 response, PCB and dioxin/furan sampling was inadvertently not discussed in the report. PCB and dioxin/furan analysis was performed on samples collected from Burning Ground Spring, 16-61439, CDV-16-611937, Martin Spring, Bulldog Spring, and Between E252 and Water at Beta. PCB Aroclors were not detected in any samples except at Martin Spring where Aroclor-1260 was measured at 0.0452 µg/L. Dioxins and furans were not detected in any samples except for heptachlorodibenzofurans at Between-E252 and Water at Beta ( $1.15E^{-5}$  µg/L) and Bulldog Spring ( $5.73E^{-6}$  µg/L), and octachlorodibenzofuran at Martin Spring ( $1.12E^{-5}$  µg/L). The PCB and dioxin/furan sampling activities and results will be discussed in the upcoming 2021 Annual Long-Term Monitoring and Maintenance Report for Corrective Measures Implementation at Former 260 Outfall Area.