



**DEPARTMENT OF ENERGY**  
Environmental Management Los Alamos Field Office (EM-LA)  
Los Alamos, New Mexico 87544

EMLA-2020-1584-02-001

September 3, 2020

Mr. Kevin Pierard  
Bureau Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6313

**Subject:** Response to the Review, Monitoring Year 2020 Annual Periodic Monitoring Report for the Technical Area 54 Monitoring Group, Pajarito Canyon and Mortandad Canyon Watersheds, May 2020, Dated August 4, 2020

Dear Mr. Pierard:

The U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) are providing responses to the comments in the New Mexico Environment Department's "Review, Monitoring Year 2020 Annual Periodic Monitoring Report for the Technical Area 54 Monitoring Group, Pajarito Canyon and Mortandad Canyon Watersheds, May 2020," dated August 4, 2020.

These comment responses are submitted in accordance with Section XXIII(E) of the June 2016 Compliance Order on Consent, as modified on February 27, 2017.

If you have any questions, please contact Steve Veenis at (505) 309-1362 ([steve.veenis@em-la.doe.gov](mailto:steve.veenis@em-la.doe.gov)) or Hai Shen at (505) 257-7943 ([hai.shen@em.doe.gov](mailto:hai.shen@em.doe.gov)).

Sincerely,

**Arturo Duran**

Digitally signed by Arturo  
Duran  
Date: 2020.09.01 07:14:22  
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Arturo Q. Duran  
Compliance and Permitting Manager  
Environmental Management  
Los Alamos Field Office

CC (letter and enclosure[s] emailed):

Laurie King, EPA Region 6, Dallas, TX  
Raymond Martinez, San Ildefonso Pueblo, NM  
Dino Chavarria, Santa Clara Pueblo, NM  
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**Pamela T. Maestas**

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**From:** Martinez, Cynthia, NMENV <cynthia.martinez1@state.nm.us>  
**Sent:** Tuesday, September 8, 2020 11:42 AM  
**To:** Pamela T. Maestas  
**Subject:** RE: Submittal to NMED on 9/3/2020 of TA-54 PMR Comment Response

Hello,  
Received...  
I was out last week, just getting to emails.

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**From:** Pamela T. Maestas <pamela.maestas@em-la.doe.gov>  
**Sent:** Thursday, September 3, 2020 8:26 AM  
**To:** Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>  
**Cc:** Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>; Emily M. Day <Emily.Day@em-la.doe.gov>; Regulatory Documentation <RegDocs@EM-LA.DOE.GOV>; Martinez, Cynthia, NMENV <cynthia.martinez1@state.nm.us>; cheryl.rodriguez@em.doe.gov; Cheryl W. Fountain <Cheryl.Fountain@EM-LA.DOE.GOV>  
**Subject:** [EXT] Submittal to NMED on 9/3/2020 of TA-54 PMR Comment Response

Mr. Pierard,  
Attached for submittal is a pdf of the following:

- Response to the Review, Monitoring Year 2020 Annual Periodic Monitoring Report for the Technical Area 54 Monitoring Group, Pajarito Canyon and Mortandad Canyon Watersheds, May 2020, Dated August 4, 2020 (EMLA-2020-1584-02-001, letter and enclosure)

Please acknowledge receipt of this submittal by responding to this email.  
Let me know if you have any questions.  
Thank you.

**Pamela T. Maestas**  
**Regulatory Documentation Manager**  
Newport News Nuclear BWXT-Los Alamos, LLC  
c. 505-927-7882  
[regdocs@em-la.doe.gov](mailto:regdocs@em-la.doe.gov)



**Response to the Review, Monitoring Year 2020 Annual Periodic Monitoring Report for the  
Technical Area 54 Monitoring Group, Pajarito Canyon and Mortandad Canyon Watersheds,  
May 2020, Los Alamos National Laboratory (LANL), EPA ID# NM0890010515, HWB-LANL-20-034,  
Dated August 4, 2020**

**INTRODUCTION**

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. The U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office responses follow each NMED comment. All information associated with analysis of radionuclides is voluntarily provided to NMED in accordance with DOE policy.

**COMMENTS**

**NMED Comment**

1. *Results for prometon and sulfolane are not reported in Table C-1 or Table C-2 in Appendix C of the Report. Section 5.3 of the Report and Tables 5.4-1, C-1 and H-4 of the MY2020 IFGMP include these two parameters in the annual sampling plan for most wells in the group during MY2020. Deviations regarding sampling for these constituents were not provided in Table 2.1-1 of the Report. Please provide the results or provide an explanation for why the results are not provided in the Report along with the other newly added parameters for MY2020.*

**DOE Response**

1. Prometon and sulfolane were added to the New Mexico Water Quality Control Commission toxic pollutants list in December 2018. General Engineering Laboratories, LLC (GELC) was contracted to perform the analysis; however, they were not certified for prometon and sulfolane analyses under the U.S. Department of Energy Consolidated Audit Program (DOECAP). GELC became DOECAP certified by December 24, 2019.

As a result, prometon and sulfolane results from samples collected before GELC was DOECAP certified for prometon and sulfolane analyses (between October 1, 2019, and December 24, 2019) were held within the Environmental Information Management System (EIM) until the samples were reanalyzed and reported under GELC's DOECAP prometon and sulfolane certifications. The hold flag on the prometon and sulfolane results within EIM was not removed. As a result, the data were held within EIM and not included in the data pull for this report.

All wells scheduled to be analyzed for prometon and sulfolane were successfully sampled and analyzed with the exception of R-23i Screen 3 (S3). This well had mechanical issues and was canceled. The well is listed in Table 2.1-1 as a deviation.

Appendix C will be revised to include the prometon and sulfolane data that were previously held within EIM as part of Revision 1 of the periodic monitoring report.

## **NMED Comment**

- 2. Results for metals, PFAS, low-level tritium and general inorganics are not provided for Well R-40 Si. However, Tables 2.0-1 and 2.1-1 of the Report indicate R-40 Si was sampled and purged on April 22, 2019 and October 18, 2019. Table 5.4-1 of the MY2020 IFGMP indicates Well R-40 Si was to be sampled annually for metals, PFAS, low-level tritium and general inorganics. Deviations regarding sampling for these constituents were not provided in Table 2.1-1 of the Report. Please provide the results or provide an explanation for why the results are not available.*

## **DOE Response**

2. Well R-40 Si is on the watch list for deep monitoring wells because of apparent reducing conditions. The samples showed residual drilling foam and reducing conditions. There are elevated iron and manganese concentrations present. Recent data suggest improving trends, with increasing dissolved oxygen and decreasing iron and manganese concentrations. Samples for this well were collected in accordance with N3B standard operating procedure N3B-SOP-ER-3003, Revision 1, "Groundwater Sampling."

Analytical results for constituents other than tritium should be coded as "screening" for the analytical laboratory's quality control (QC) reporting option, and will not be included within the report.

Low-level tritium was incorrectly coded as "screening" in the EIM database. The laboratory's QC reporting option has been corrected to "standard." Appendix C will be revised to include the low-level tritium results as part of Revision 1 of the periodic monitoring report.