



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

EMLA-2020-1597-02-001

October 6, 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 New Mexico Environment Department's Draft Comments on the 2020 Annual Periodic Monitoring Report for the Material Disposal Area C Monitoring Group, Mortandad Canyon Watershed, May 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 New Mexico Environment Department's draft comments on the "2020 Annual Periodic Monitoring Report for the Material Disposal Area C Monitoring Group, Mortandad Canyon Watershed," 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) or Hai Shen at (505) 257-7943 (hai.shen@em.doe.gov).

Sincerely,

Arturo Duran
Digitally signed by Arturo Duran
Date: 2020.09.22
06:34:11 -06'00'

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
Richard Carpenter, City of Santa Fe, NM
Harry Burgess, Los Alamos County, NM
Jack Richardson, Los Alamos County, NM
Chris Catechis, NMED-DOE-OB
Steve Yanicak, NMED-DOE-OB
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Pamela T. Maestas

From: Martinez, Cynthia, NMENV <cynthia.martinez1@state.nm.us>
Sent: Tuesday, October 13, 2020 11:36 AM
To: Pamela T. Maestas
Subject: RE: Submittal to NMED on 10/6/2020 of 2020 MDA C PMR Comment Response

Hello,
Received...
Thank you

From: Pamela T. Maestas <pamela.maestas@em-la.doe.gov>
Sent: Tuesday, October 13, 2020 11:34 AM
To: Martinez, Cynthia, NMENV <cynthia.martinez1@state.nm.us>
Subject: [EXT] RE: Submittal to NMED on 10/6/2020 of 2020 MDA C PMR Comment Response

Hi Cynthia,
Can you please acknowledge receipt of the document listed below?
Thank you.

From: Pamela T. Maestas <pamela.maestas@em-la.doe.gov>
Sent: Tuesday, October 6, 2020 2:57 PM
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>; Zoe A. Duran <zoe.duran@em-la.doe.gov>; Steve J. Veenis <Steve.Veenis@em-la.doe.gov>
Subject: Submittal to NMED on 10/6/2020 of 2020 MDA C PMR Comment Response

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

- Response to New Mexico Environment Department's Draft Comments on the 2020 Annual Periodic Monitoring Report for the Material Disposal Area C Monitoring Group, Mortandad Canyon Watershed, May 2020 (EMLA-2020-1597-02-001, 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



1200 Trinity Drive, Suite 150
Los Alamos, NM 87544

**Response to the New Mexico Environment Department's Draft Comments on the
2020 Annual Periodic Monitoring Report for the Material Disposal Area C Monitoring Group,
Mortandad Canyon Watershed, May 2020, LANL-20-033,
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 analyses of radionuclides is voluntarily provided to NMED in accordance with DOE policy.

SPECIFIC COMMENTS

NMED Comment

1. Section 3.0 Regulatory Criteria, Page 3:

***DOE Statement:** "Base-flow monitoring locations are assigned to one of two screening categories—perennial or intermittent-ephemeral—based upon the hydrology of the water body being monitored. This category, along with a site use and hardness value, determines the screening values used for data at each monitoring location. Hardness-dependent screening values used to screen data at each base-flow monitoring location are determined from the 20.6.4.900 New Mexico Administrative Code (NMAC) "Water Quality Standards for Interstate and Intrastate Surface Waters." Hardness-dependent acute and hardness-dependent chronic aquatic life criteria for metals are calculated using the hardness-dependent equations in accordance with the requirements of 20.6.4.900.1 NMAC. Hardness-dependent acute and hardness-dependent chronic criteria were used for total recoverable aluminum and dissolved cadmium, chromium. Table 2.1-1 summarizes the deviations from the planned monitoring scope for this PMR."*

***NMED Comment:** Section 5.2.1 and 6.2.1 state that there are no baseflow monitoring locations within the MDA C monitoring group. Please explain the purpose of including this narrative in Section 3.0.*

DOE Response

1. Although there are no base-flow monitoring locations within the Material Disposal Area C (MDA C), there are base-flow monitoring locations in Technical Area 16 (TA-16) 260 and the General Surveillance monitoring groups. This text in the MDA C periodic monitoring report (PMR) was included for consistency among the PMRs, and to ensure text was not excluded in other PMRs that include base-flow monitoring locations.

In monitoring year (MY) 2021 (October 2020–September 2021), a separate base-flow PMR will include all base-flow monitoring locations. The base-flow text will then be removed from all other PMRs.

NMED Comment

2. Section 5.3 Sampling Program Modifications, Page 9.

DOE Statement: “Proposed modifications to the currently planned periodic monitoring of the MDA C monitoring group for the 2021 monitoring year include increased sampling frequency for high explosives per recommendation in the “Investigation Report for Royal Demolition Explosive in Deep Groundwater”

NMED Comment: Please provide a similar narrative for the sampling frequency modification to low-level 1,4-dioxane and nitrosamines from annual to biannual for the 2021 monitoring year.

DOE Response

- DOE will revise the report to provide a similar narrative for the low-level 1,4-dioxane and nitrosamines sampling frequency modification from annual to biannual for MY 2021.

NMED Comment

3. Appendix C, Table C-1 Analytical Results from the Periodic Monitoring Event Reported in this Periodic Monitoring Report, Page C-11.

NMED Comment: No results are reported in Table C-1 for prometon for any of the wells, or for low-level tritium for R-46 and R-60. The MY2020 IFGMP proposed annual sampling for these two constituents for all three wells. Please provide the results or provide an explanation for not including the results in the PMR.

DOE Response

- 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 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.

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 PMR.

Well R-46 was sampled for low-level tritium on November 21, 2019. Well R-60 was sampled for low-level tritium on November 15, 2019. Low-level tritium results for R-46 and R-60 were incorrectly coded as “screening” for the laboratory’s quality control (QC) reporting option, and therefore not included as part of the PMR.

The laboratory 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 PMR.