RE: DISAPPROVAL
PERMITTEE-INITIATED INTERIM MEASURES REPORT
PARCEL 24 – IGLOO BLOCK A, REVISION 1
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-18-007

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (Permittee) Final, Rev.1, Permittee-Initiated Interim Measures Report Parcel 24 – Igloo Block A (Report), dated May 29, 2019. NMED has reviewed the Report and hereby issues this Disapproval. The Permittee must address the following comments.

1. Response to November 19, 2018 Comment #8

Permittee Statement: “Table 1 from NMED’s Disapproval letter dated November 19, 2018 has been reviewed and checked against site data and the Army has four categories of responses:

1) MI Samples: No action is proposed in conjunction with Parcel 9 Igloo drain pipe and soil removal.”
NMED Comment: While no action is proposed in conjunction with this project, the Parcel will not be eligible for Corrective Action Complete status and transfer to DOI until the issues regarding MI samples are adequately addressed. Propose to address both the outstanding igloo drain pipe issues and the igloo apron issues in a Phase 2 Interim Measures Work Plan. The Phase 2 Interim Measures Work Plan must be submitted to NMED no later than January 26, 2020.

2. Response to November 19, 2018 Comment #9

Permittee Statement: “The goal of 20% RPD [relative percent difference] for soil field duplicates is extremely stringent for soil samples, given their characteristic heterogeneity (and, in fact, a limit of ≤50% RPD was given in the IMWP).”

NMED Comment: While NMED agrees that a RPD of 20% is stringent for soil samples, the Permittee selected the criteria rather than NMED. The statement regarding 50% RPD, which was repeated multiple times in the Response to Comments, is not accurate. While the Final Rev. 2 Interim Measures Work Plan Parcel 21 – Solid Waste Management Unit 1 – TNT Leaching Beds (Work Plan) does include one statement alluding to 50% RPD being acceptable, Table 4-2 of the Work Plan lists the Precision Control Limit RPD for lead in a solid matrix (soil) as ≤20%. Table 4-4 of the Work Plan also indicates an overall RPD Goal of ≤20%. Provide an explanation as to why the text of the Work Plan indicates one RPD goal while multiple other locations within the Work Plan indicate a different RPD goal. This is also an issue for the Parcel 21 TNT Leaching Bed Interim Measure. The preponderance of the information in the Work Plan lists the RPD Goal as ≤20%.

As further evidence, the Quality Control Summary Report in Appendix C of the Report specifically states, “[a]s specified in the Work Plan, cumulative precision for soil samples was deemed to be high when the relative percent difference (%RPD) between a set of paired results exceeded 20% or, at low levels (i.e., when one or both results was less than five times the magnitude of the reporting limit), the absolute difference in results [S-FD] was greater than twice the magnitude of the reporting limit (the higher of the two reporting limits for the paired results was used, if they differed from one another).” The NMED evaluated the RPD data in light of the majority of the stated RPD goals.

It also appears that data, which was qualified by the QA/QC contractor in Table 5-1 of Appendix C, was removed from the table in the contractor’s report by the Permittee. Overriding the QA/QC contractor’s recommendations without acknowledgement or discussion is inappropriate. Data that fails the RPD criteria must be qualified. No matter how stringent the criteria may seem, the Permittee established the criteria and must adhere to it. This applies not only to the duplicate pairs, but must be discussed relative to all associated samples collected on the same day. The Permittee must qualify all data associated with the multiple failed RPD% duplicate samples. Since all of the duplicate samples were collected on
one day, and two out of the four duplicates failed the 20% RPD criteria for lead, all lead data collected on March 12, 2018 must be qualified.

For all future sampling conducted under the Permittee’s RCRA Permit, the 10% requirement for field duplicates must be met daily, and at least one duplicate sample must be collected every day that other samples are collected. Based on these issues, all of the data collected for this project should be qualified since the duplicate sample requirement was not met.

The Permittee must acknowledge errors and provide complete information and supported statements to justify their use of qualified data. The Permittee stated that the data were validated according to the Work Plan in response to NMEDs comment, but they were not. The Permittee must provide an explanation for the inaccurate statements and validate the data in accordance with the approach proposed in the Work Plan.

3. **Response to November 19, 2018 Comment #10**

**Permittee Statement:** “However, as noted above in Comment Response #9, qualifiers may appropriately be applied to the results for primary sample-field duplicate pairs when goals for cumulative precision are exceeded and the reason for the qualification is clearly indicated. In this case, the detections of lead reported for samples 24A917-EFR-D-SO and 24A-EF-D-SO-DUP01 and detections of lead and arsenic reported for samples 24A903-EFR-D-SO and 24A-EF-D-SO-DUP03 have been qualified with “J” validation qualifiers to indicate that the results may not be fully representative of the sampled locations.”

and

“All laboratory QC data associated with the primary sample-field duplicate pairs collected from location 24A903-EFR-D-SO and 24A917-EFR-D-SO support the conclusion that the data are usable and representative of site conditions.”

**NMED Comment:** The Permittee does not appear to understand the purpose of the field duplicate sample analysis. When the duplicate pair fails the precision criteria, all samples associated with the duplicate pair, not just the duplicate pair itself, must be qualified. The Permittee must review previous work by the contractor on this project to ensure that QA/QC procedures were followed appropriately.

In addition, laboratory QC data cannot support a conclusion that data are representative of site conditions. The laboratory is not involved with sampling activity in the field, and its QA/QC procedures ensure accuracy in the lab, not in the field. The field duplicate samples provide information on whether the data is representative of site conditions by analyzing for precision. The Permittee failed to provide precise data collection. Laboratory QC cannot overcome errors made in the field. Remove the statements from the revised Report and provide a discussion of potential issues with the Permittees field sampling activities.
4. Binder Identification

**NMED Comment:** For all submittals contained in binders, the Permittee must provide a spine identifier that includes the title, revision number, facility, and date. Include a spine identifier for the revised Report.

5. Document Certification, page i

**NMED Comment:** The Permittee provided a Document Certification page that was not signed. All documents submitted by the Permittee to the NMED must include the certification provided in 40 CFR 270.11(d)(1) in its entirety and without any modification above the signature line(s) on each document. Ensure that the revised Report includes the required certification.

6. Section 1.0, Introduction, Page 1-1

**Permittee Statement:** "ZAPATA executed the PIIM letter work plan scope; however, it should be noted that New Mexico Environment Department (NMED) Soil Screening Levels (SSLs) outlined in the 2019 guidance (NMED, 2019) were implemented at the time of field sampling, as opposed to the 2015 levels presented in the Notification of PIIM for Parcel 24."

**NMED Comment:** The statement is not accurate. Field sampling occurred in February through April 2018. The 2019 guidance was not published until February 2019. Correct the error in the revised Report.

7. Section 2.3, Confirmation Sampling, page 2-2

**Permittee Statement:** “However, only four duplicate samples were collected for Parcel 24 (approximately 4%); this error was a result of concurrent sampling at Parcels 21 and 24 where a duplicate percentage was continuously calculated based on the number of samples collected from both projects. The duplicate percentage for the concurrent projects exceeds 10%.”

**NMED Comment:** The duplicate percentage for concurrent projects is irrelevant. The requirement for collection of field duplicate samples only pertains to the individual project. Remove the statement from the revised Report. In addition, to conclude that there are no issues with missing duplicate samples, as well as the approach taken in collecting duplicates, is inappropriate. Table 1 below shows the initial sampling conducted for this project and illustrates the problem.
Table 1: Field Duplicate Samples

<table>
<thead>
<tr>
<th>Date</th>
<th># of samples collected</th>
<th># of duplicate samples required</th>
<th># of duplicate samples collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/6/18</td>
<td>11</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2/7/18</td>
<td>20</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2/8/18</td>
<td>26</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2/15/18</td>
<td>8</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3/12/18</td>
<td>19</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

The Permittee collected no duplicate samples for the first four days of sampling where 65 samples were collected. This indicates that the quality assurance/quality control process was not followed. The methodology does not provide the quality assurance required by NMED. For all future sampling, the 10% requirement for field duplicates must be met daily, and at least one duplicate sample must be collected every day that a sample is collected.

Further, the Permittee failed to discuss the implications regarding the failed RPD duplicates which suggest problems with the methods used to collect and homogenize samples. Provide a discussion in the revised Report of the potential issues related to the failed RPD values for duplicate samples.

8. Appendix B, Field Documentation

NMED Comment: The Permittee included many field reports for days where no work was conducted at Parcel 24. Remove all field reports that are not pertinent to the project.

9. Appendices C & D

NMED Comment: The Permittee has been directed many times to include sequential pagination for all pages in the Appendices in all submitted documents. The pages in Appendices C & D do not include pagination relative to the appendix where they are found. Revise the Report to include sequential pagination in all appendices.

10. Appendix C, Quality Control Summary Report

NMED Comment: The Permittee has included the analytical laboratory reports for in-situ soil sampling in the Quality Control Summary Report. This is not appropriate. Level II analytical laboratory reports must be provided in the Report in a separate appendix. In addition, the appendix including the lab reports, submitted electronically, must contain bookmarks indicating the beginning of each analytical laboratory report and the analytical laboratory report number provided in Table 2 of the Report. The Permittee was previously provided direction on this issue. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action. Revise the Report to include an
Messrs. Patterson and Smith
July 22, 2019
Page 6

Analytical Laboratory Report appendix including the Level II lab reports and bookmarks. In addition, remove the lab reports from the Quality Control Summary Report appendix.

The Permittee must submit a revised Report that addresses all comments contained in this Disapproval. Two hard copies and two electronic versions (on separate discs) of the revised Report must be submitted to NMED. The Permittee must also include a red-line strikeout version in electronic format showing where all revisions to the Report have been made. The revised Report must be accompanied with a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. The revised Report must be submitted to NMED no later than September 27, 2019. In addition, the Permittee must submit the Phase 2 Interim Measures Work Plan as outlined in Comment 1 no later than January 26, 2020.

All documents submitted by the Permittee to the NMED subsequent to receipt of this letter shall include the certification included in 40 CFR 270.11(d)(1) in its entirety and without any modification above the signature line(s) on each document.

Should you have any questions, please contact Ben Wear of my staff at (505) 476-6041.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc:  D. Cobrain, NMED HWB
     B. Wear, NMED HWB
     M. Suzuki, NMED HWB
     C. Hendrickson, EPA Region 6 (6LCRRC)
     L. Rodgers, Navajo Nation
     S. Begay-Platero, Navajo Nation
     M. Harrington, Pueblo of Zuni
     C. Seoutewa, Southwest Region BIA
     G. Padilla, Navajo BIA
     J. Wilson, BIA
     B. Howerton, BIA
     R. White, BIA
     C. Esler, Sundance Consulting, Inc.

File:  FWDA 2019 and Reading, Parcel 24