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**OFFICE OF THE DEPUTY CHIEF OF STAFF, G-9**  
**600 ARMY PENTAGON**  
**WASHINGTON, DC 20310-0600**

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Base Realignment and Closure Operations Branch

Mr. Rick Shean  
Chief, Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303

RE: Final Groundwater Periodic Monitoring Report, July through December 2020, Fort Wingate Depot Activity, McKinley County, New Mexico. EPA# NM6213820974

Dear Mr. Shean:

This letter provides responses to the comments issued in the Disapproval Letter, Final Groundwater Periodic Monitoring Report, July through December 2020, from the New Mexico Department (NMED), dated September 9, 2021, HWB-FWDA-21-003. In addition to the comment response provided in this letter, two (2) hard copies and one (1) electronic (CD) copy of the revised Final Groundwater Periodic Monitoring Report, July through December 2020, Revision 1 is enclosed for your review and consideration. The electronic transmittal includes a redline-strikeout version of the above-mentioned report showing where all revisions to the report were made.

**Comments:**

**1. NMED Comment:** The Permittee provided large quantities of data with no indication where to locate a specific sample within a specific analytical laboratory report. NMED previously provided comments to the Permittee regarding this issue. The Permittee must provide a link for each specific sample to a specific laboratory report. This is a requirement for all data submitted in all reports. Provide a table that provides this information in the revised Report.

In addition, these laboratory reports are level IV reports because raw data (e.g., calibration curves) are included. The Permittee has been directed not to submit level IV analytical laboratory reports. Remove all of the Level IV analytical reports from the revised Report and replace them with Level II analytical reports. Failure to follow NMED direction constitutes noncompliance and may result in an enforcement action.

**Permittee Response:** Comment acknowledged. Although NMED only requires Level II data analysis, the Army receives Level III and Level IV data for review and data validation per Army policy. Considerable effort was made to manually remove the excess pages. A Table of Contents listing all the wells with links to the relevant lab report and a page listing is now provided in the beginning of Appendix D-2. These links are for the overall lab report for each well and do not include each analyte, as this would require an extensive number of links (possibly over 1,000).

**2. Permittee Statement:** "This Groundwater Periodic Monitoring Report (PMR) documents groundwater monitoring activities conducted at Fort Wingate Depot Activity (FWDA) from July

through December 2020 in accordance with the Final 2017 Interim Facility-Wide Groundwater Monitoring Plan, Version 10, Revision 1, Fort Wingate Depot Activity, McKinley County, New Mexico (Groundwater Monitoring Plan [GWMP], Sundance Consulting, Inc. [Sundance], 2017)."

**NMED Comment:** Groundwater monitoring activities must be conducted in accordance with the groundwater monitoring plan specific to the year the monitoring activities are conducted. In the revised Report, provide an explanation for why the 2020 groundwater monitoring activities were conducted in accordance with the 2017 groundwater monitoring plan.

**Permittee Response:** Comment acknowledged. Work was done according to the most currently NMED approved work plan, which at the time was the 2017 GWMP (version 10) from Sundance Consulting. Now that the 2022 GWMP is approved by NMED, that document will be used for the upcoming 2022 groundwater monitoring activities. To emphasize why the 2017 GWMP was used in 2020, the report was revised and now reads in Section ES, Page ES-1, Lines 2-6

"This Groundwater Periodic Monitoring Report (PMR) documents groundwater monitoring activities conducted at Fort Wingate Depot Activity (FWDA) from July through December 2020, in accordance with the most currently approved, in effect at the time, sampling was conducted, Groundwater Monitoring Plan (GWMP) Final 2017 Interim Facility-Wide Groundwater Monitoring Plan, Version 10, Revision 1, Fort Wingate Depot Activity, McKinley County, New Mexico, Sundance Consulting, Inc. [Sundance], 2017.

**3. Permittee Statement:** "Nitrate, explosives, total petroleum hydrocarbons as diesel range organics (TPH-DRO), one volatile organic compound (VOC), perchlorates, 1,4-dioxane, and metals were detected in groundwater samples at concentrations above their associated groundwater screening levels (SL) as selected per the hierarchy listed in Attachment 7 of the RCRA permit (NMED, 2015)."

**NMED Comment:** According to Table 3-1, Groundwater Screening levels, Detection limits, and Control limits, the limits of quantitation (LOQ) of multiple analytes exceed applicable screening levels. Therefore, the presence or absence of the contaminants with LOQs that exceed applicable screening levels remains unknown. Clarify the statement in the revised Report.

In addition, according to Table 5-7, Summary of 1,4-Dioxane Analytical Results, 1,4-dioxane was detected below the screening level of 4.59 µg/L in the groundwater sample collected from well MW27 in October 2020. Resolve the discrepancy in the revised Report. Furthermore, NMED acknowledges that the issue regarding the detection limit of 1,4- dioxane exceeding the applicable screening level was resolved during the October 2020 sampling event.

**Permittee Response:** Concur.

- a. 1,4-Dioxane was removed from the list of contaminants that exceeded the screening level in section ES, page ES-1 line 37 as the SL is 4.6 µg/L and the detection was 1.2 J µg/L.
- b. The paragraph describing screening level exceedances in the Executive Summary was revised by adding in Section ES, Page ES-1, Lines 39-42:

"There are a total of 42 data quality exception compounds where the Limit of Detection (LOD), Limit of Quantitation (LOQ), or both, exceed the screening level. Therefore, the presence or

absence of the contaminants with LOQs that exceed applicable screening levels remains unknown.”

**4. Permittee Statements:** "[O]nly 4 wells will continue to be sampled for 1,4-dioxane for two consecutive events in year 2021."

and,

"The three wells installed in 2020 and the sole well (MW27) where 1,4-dioxane was detected, will continue to be sampled for 1,4-dioxane for two consecutive events."

**NMED Comment:** The proposed sampling plan for 1,4-dioxane is not acceptable. Comment 2 of NMED's Approval with Modifications Revised Final 2022 Interim Northern Area Groundwater Monitoring Plan, dated March 8, 2021, states, "the Permittee must conduct 1,4-dioxane analysis in addition to the analyses required for each (35-) wells during the April 2021 sampling event." In addition, Comment 2 of NMED's Final 2022 Interim Northern Area Groundwater Monitoring Plan Revision 2, Army's Responses to the Approval with Modifications dated March 8, 2021, dated August 3, 2021, states, "[i]f chlorinated solvents are detected in 2021 and 2022, the Permittee must conduct 1,4-dioxane analysis again in 2023, even if 1,4-dioxane was already analyzed and not detected in 2020. The 1,4-dioxane data collected in 2020 for the 32 wells are not usable for any decision-making purpose." NMED's previous comments must be addressed in the subsequent groundwater sampling event, if it has not been addressed already. In addition, revise all relevant sections of the Report (e.g., Section 5.5, New Findings) to comply with the directions provided by the comments.

**Permittee Response:** Comment acknowledged. 1,4-Dioxane analysis will be included in 2023 for any well that has a chlorinated solvent detection in 2021 or 2022. The 1,4-Dioxane data collected in 2020 for the 32 new wells will not be used for any decision-making purpose. The report was revised by adding the following sentence in Section 5.5, Page 5-6, Lines 48-50:

“Also, per NMED request (NMED, 2021), 1,4-Dioxane analysis will be included in 2023 for any well that has a detection of a chlorinated solvent in 2021 or 2022.”

**5. Permittee Statement:** "[W]ell BGMW08 is believed to take approximately three months to fully recharge after being purged dry."

**NMED Comment:** NMED does not recall that a well recovery test was conducted for BGMW08. If such test was previously conducted, provide the data to support the statement in the revised Report. Otherwise, provide an explanation for why the well is believed to take approximately three months to fully recharge after being purged dry in the revised Report or remove the statement.

**Permittee Response:** Comment acknowledged. A well recovery test was not conducted for BGMW08, but using the data from the quarterly gauging events, now graphed in Appendix G, demonstrates that even six months after purging dry, that the well may not be fully recovered by the time it is purged dry every six months for sampling. The report was revised to add a graph as Appendix G and to state in section 1.2, page 1-3, lines 23-26:

“In addition, well BGMW08 is believed to take longer than six months to fully recharge after being purged dry, based upon quarterly gauging records. A graph of the groundwater elevations for BGMW08 is included as Appendix G.”

**6. Permittee Statement:** "Monitoring wells were considered dry when water level measurements were recorded less than six inches from the bottom of their well screens (refer to Table 2-1 for well specifications)."

**NMED Comment:** According to Table 4-1, Northern Area Groundwater Elevations, 22 of 39, the depths to water (DTW) in well TMW40S measured during the July and October 2020 gauging events are recorded as 58.59 and 58.69 feet below ground surface (bgs), respectively. Table 4-1 indicates well TMW40S is screened from 50.0 to 60.0 feet bgs. More than one foot of groundwater from the bottom of the well screen was present during the July and October 2020 gauging events. However, Figure 4-1, Northern Area Alluvial Groundwater Contour Map-July 2020 and Figure 4-2, Northern Area Alluvial Groundwater Contour Map- October 2020 labeled well TMW40S as a "Dry" well. Resolve the discrepancy in the revised Report. In addition, groundwater samples were not collected from well TMW40S during the October 2020 sampling event. Based on the definition of a "Dry" well provided by the statement, well TMW40S contained sufficient groundwater to be sampled and the groundwater samples should have been collected.

Similarly, According to Table 4-1, 25 of 39, the DTW in well TMW56 measured during the July and October 2020 gauging events are recorded as 48.55 and 48.13 bgs, respectively. Table 4-1 indicates well TMW56 is screened from 30.0 to 50.0 feet bgs. More than one foot of groundwater from the bottom of the well screen was present during the July and October 2020 gauging events. However, Figures 4-1 and 4-2 labeled well TMW56 as a "Dry" well. Resolve the discrepancy in the revised Report. In addition, groundwater samples were not collected from well TMW56 during the October 2020 sampling event. Groundwater samples should have been collected from well TMW56.

The Permittee must collect the required groundwater samples from wells TMW40S and TMW56 if groundwater level is measured as more than six inches from the bottom of the screened intervals in the future or explain why groundwater samples cannot be collected from these wells.

**Permittee Response:** Comment acknowledged. Wells TMW40S and TMW56 do have at least one foot of water column when first gauged, but after purging dry, do not recharge to within 6" of the bottom of the well and thus are considered dry. To help clarify the sentence in Section 2.1, Page 2-1 Lines 15-17, the words "or do not recharge after purging" were added to:

"Monitoring wells were considered dry when water level measurements were recorded less than six inches from the bottom of their well screens, or do not recharge after purging (refer to Table 2-1 for well specifications)."

**7. Permittee Statement:** "The GWMP has been revised annually and submitted to NMED from 2009 through 2019."

**NMED Comment:** The groundwater monitoring plans are required to be updated annually in accordance with the Permit Section V.A.4, but were not updated annually. For example, the 2018 update was not submitted. The last groundwater monitoring plan was submitted in April 2020. Accordingly, the statement is not accurate. Correct the statement for accuracy in the revised Report.

**Permittee Response:** Concur. The sentence was removed and replaced in Section 3.0, Page 3-1, Lines 14-15 with:

"The GWMP is required to be revised annually and submitted to NMED."

**8. Permittee Statements:** "The Northern Area alluvial groundwater elevations, with 10-foot interval contours for July 2020, are shown on Figure 4-1, and the groundwater elevations for the October 2020 event are shown on Figure 4-2."

and,

"The groundwater flow direction in the alluvium is from potentiometric highs in the north and south toward a potentiometric low west of the Administration Area (Figures 4-1 and 4- 2). Groundwater flow direction from the Administration Area is generally to the west."

and,

"The 32 new monitoring wells installed in 2019, of which 24 are alluvial wells, were gauged during the July 2020 water level measurement event."

**NMED Comment:** According to Figure 5-3, Northern Area Explosives in Alluvial Groundwater - October 2020, the RDX plume appears to be expanding from the south (former TNT Leaching Beds Area - e.g., TMW03) to directly north (e.g., TMW23), rather than west (e.g., TMW21). The groundwater elevation contour interval (10-foot) may be causing the discrepancy in the interpreted groundwater flow direction. Since 24 new alluvial wells were installed in 2019, it may be possible to draw groundwater elevation contours with a 5-foot rather than 10-foot interval. Evaluate the possibility of presenting groundwater elevations with a 5-foot contour interval. Revise all applicable figures, if 5-foot contour interval is evaluated to be appropriate.

**Permittee Response:** Comment acknowledged. Groundwater elevation figures (Figures 4-1 through 4-4) have been revised using 5-foot contour intervals starting in 2021 with the January – June 2021 PMR. However, even with 5-foot contour interval, the potentiometric surface under the Admin Area is relatively flat (less than 3-foot difference). However, groundwater flow from the former TNT Leaching Beds Area is in a more north-northwest direction until reaching the relatively flat potentiometric surface under the Admin Area, where it is controlled by the convergence of the south-southwest flow direction of the northern part of the study area. The alluvial Nitrate plume appears to mimic this hydrogeologic conceptual model as the Nitrate plume migrates in a north-northwest direction from the southern part of the Study Area until reaching the central Admin Area and begins migrating in a more westerly direction (Figure 5-1), while the alluvial Explosives plume (Figure 5-3) migrates north and stops. To better reflect the more northerly flow direction of the southern portion of the alluvial groundwater, the southern groundwater flow arrow was updated to point more north on all alluvial figures (Figures 4-1, 4-2, 5-1, 5-3, 5-5, 5-7, 5-9, 5-11, 5-12, and 5-13).

**9. Permittee Statements:** "As directed in an NMED Letter of Disapproval dated August 7, 2017, water-level elevation contours were not prepared for the bedrock wells (NMED, 2017) since the groundwater flow direction has not been fully characterized in the bedrock aquifer."

and,

"The 32 new monitoring wells installed in 2019, of which eight are bedrock wells, were gauged during the July 2020 water level measurement event, as shown in Figure 4-3."

**NMED Comment:** Comment 7 of NMED's Disapproval Final Groundwater Periodic Monitoring Report January through June 2020, dated July 15, 2021, states, "[w]ith these new wells, there may be an adequate number of data points to prepare water-level elevation contours for the bedrock aquifer. Evaluate whether there are a sufficient number of data points to prepare water-level contours for the bedrock aquifer and present groundwater contour maps for the bedrock aquifer in future groundwater periodic monitoring reports, as appropriate. No revision required. The Permittee is reminded that data provided from the wells installed for the RFI are not considered valid until the Groundwater Supplemental RFI Report has been reviewed and approved by NMED." This comment also applies to this Report since the comment has not been addressed at this time.

In addition, Comment 5 of the July 15, 2021 Disapproval states, "[t]he Permittee failed to submit the Groundwater Supplemental RFI Report to NMED on the required date of February 8, 2019. The report is over two years past due and subject to enforcement action. Data provided from the wells installed for the RFI are not considered valid until the Groundwater Supplemental RFI Report has been reviewed and approved by NMED." The Permittee continues to be out of compliance with their Permit and may be subject to an enforcement action.

**Permittee Response:**

- a. Concur. Groundwater contours for the bedrock aquifer (Figures 4-3 and 4-4) will be added (with 5-foot intervals) starting in 2021 with the January – June 2021 PMR.
- b. Comment acknowledged. The RFI was submitted to NMED on September 30, 2021

**10. Permittee Statement:** "Groundwater-specific conductance values measured during the October 2020 sampling event in the alluvium aquifer ranged from 0.67 millisiemens per centimeter (mS/cm) in well MW24 to 9.10 mS/cm in well TMW08; and in the bedrock aquifer, the range was 0.755 mS/cm in well TMW53 to 28.10 mS/cm in well BGWM07. Specific conductance values correspond to USEPA or NMED secondary water quality standards for total dissolved solids (TDS) concentrations (40 CFR 143)."

**NMED Comment:** Although the ranges of specific conductance values measured in October 2020 are discussed, it is not clear whether or not these values exceed the USEPA or NMED secondary water quality standards for TDS concentrations. Include the discussion in the revised Report.

**Permittee Response:** Concur. A discussion was added to explain if the specific conductance field measurements would exceed the USEPA/NMED secondary water quality standards for TDS concentrations in Section 5.1, Page 5-1 Lines 20-25. The text now states:

"Specific conductance values can be converted to TDS by multiplying the conductivity by an empirically-determined conversion factor. This conversion factor may vary from 0.55 to 0.9, depending on the soluble components of the water and on the temperature of measurement (American Public Health Association [APHA], 1992). Due to the range of the appropriate conversion factors at the site, some wells may exceed the USEPA secondary MCL for TDS of 500 mg/L (USEPA, 2021)."

**11. Permittee Statement:** "Measured ORP values (<~200 mV) indicate reducing conditions are present in groundwater in some areas of FWDA. Measured ORP values are offset from the actual potential (Eh) by approximately 200 mV."

**NMED Comment:** Provide a reference to the conversion method. In addition, explain the purpose of converting ORP to Eh in the response letter.

**Permittee Response:** Concur. Field instruments cannot measure Eh directly but can measure ORP, which is then converted to Eh. A reference was added to the reference section and the conversion formula was added to the notes section of Table 5-1. In addition, the reference to the formula in Table 5-1 was added in the text Section 5.1, Page 5-1, Lines 41-44 to state:

"Measured ORP values are offset from the actual potential (Eh) by approximately 200 mV (YSI Environmental, 2005). The formula used for converting ORP to Eh is presented in the notes section of Table 5-1."

**12. NMED Comment:** Section 5.1 provides a discussion for four water quality parameters, which are specific conductance, pH, dissolved oxygen (DO) and oxidation/reduction potential (ORP). According to Table 5-1, Stable Groundwater Parameters, two additional water quality parameters (temperature and turbidity) were also measured. Include a discussion for these two additional water quality parameters in Section 5.1. Revise the Report accordingly.

**Permittee Response:** Concur. A discussion was added for temperature and turbidity in the water quality section in the text in Section 5.1, Page 5-1.

**13. Permittee Statement:** "Changes in RDX concentrations over time are plotted for wells TMW03, TMW04, TMW23, and TMW40S in Appendix F."

**NMED Comment:** Comment 10 of the NMED's Disapproval Final Groundwater Periodic Monitoring Report January through June 2020, dated July 15, 2021, states. "[i]nclude the groundwater elevations in the plots in the future groundwater periodic monitoring reports, as appropriate." Revise the plots to include the groundwater elevations to evaluate the potential causes of the fluctuation of the RDX concentrations.

**Permittee Response:** Comment acknowledged. Groundwater elevations have been added to the plots in Appendix F. As this report was submitted on July 9, 2021 (before the July 15, 2021, NMED letter) these plots did not have the requested groundwater elevations. All future reports will include groundwater elevations on the plots.

**14. Permittee Statement:** "The following VOCs were detected in groundwater samples collected from alluvial and bedrock monitoring wells during the October 2020 groundwater sampling event (the maximum detected concentrations are shown in parentheses below and bold values exceed the selected screening levels).

- 1,2-dichloroethane (1,2-DCA) (110 µg/L at alluvial monitoring well MW18D)
- Carbon disulfide (1.2 µg/L in alluvial monitoring well TMW47)
- Chloromethane (0.38 µg/L in bedrock well TMW17)
- Methylene chloride (1.4 µg/L in bedrock well BGMW07)."

**NMED Comment:** According to Figure 5-8, Northern Area VOCs in Bedrock Groundwater-October 2020, the toluene concentration in the groundwater sample collected from bedrock well

TMW18 is recorded as 0.19 J µg/L. The detection of toluene is not discussed in Section 5.2.4. Include the discussion regarding the detection of toluene in the revised Report.

**Permittee Response:** Concur. The toluene detection of 0.19 µg/L J in well TMW18 was added to Section 5.2.4, Page 5-4 line 8.

**15. Permittee Statement:** "The Army is currently evaluating the options of using a different and/or multiple labs to decrease the number of compounds that do not meet the screening level."

**NMED Comment:** The statement indicates that the Permittee is in process of gathering information requested by the February 1, 2021 email from Mr. Wear of NMED to Mr. Cushman of FWDA. If so, reference the email and list specific information required by NMED to be evaluated for clarity. Once all information is gathered and ready to be evaluated by NMED, submit the information as a separate document; do not include it in an annual groundwater periodic monitoring report.

**Permittee Response:** Comment Noted. The Army compiled and submitted the requested information to NMED in December 2021.

**16. Permittee Statement:** "One TPH-DRO plume in the alluvial groundwater unit (Figure 5-12), [is] located in the Administration Area."

**NMED Comment:** A TPH-GRO plume was previously present but absent during this sampling period. According to Table 5-6, Summary of TPH and SVOC Analytical Results, the TPH-GRO concentrations in the groundwater samples collected from all relevant wells in October 2020 are recorded as < 10 µg/L, which is lower than the screening level for TPH-GRO (10.1 µg/L). The Report indicates that the TPH-GRO concentrations did not exceed the screening level. However, according to Table 3-1, Groundwater Screening Levels, Detection Limits, and Control Limits, the limit of quantitation (LOQ), limit of Detection (LOD), and detection limit (DL) of TPH-GRO are listed as 100, 20, and 10 µg/L, respectively. The DL is the method detection limit that applies to the instrument at the lab and not to individual samples. Use of the DL to indicate the TPH-GRO concentration is not accurate and is a misrepresentation of the data. The Permittee must use the LOD rather than the method detection limit in all analytical data summary tables for all analytes whose LOD exceed the screening level. In this case, the presence/absence of TPH-GRO plume remains unknown and must be stated as such in the revised Report.

**Permittee Response:**

- a. Comment acknowledged. Presence or absence of contaminants with LOQs that exceed the screening levels remain unknown, and per comment #3 above, additional text was added to the ES, the TPH-GRO discussion in Section 5.2.5, and in Section 5.4. In Section 5.2.5, Page 5-4, Lines 23-25 the sentence was revised to state:

"TPH-GRO was not detected above laboratory detection limits (DL) during this monitoring event, but its presence or absence cannot be confirmed because the Limit of Detection (LOD) from the lab is above applicable screening levels."



- b. Comment acknowledged. Tables 5-3, 5-6, 5-8, 5-9, and 5-10 were updated accordingly to reflect LOD instead of DL for the analytes whose LOD exceed the screening level.

**17. Permittee Statements:** “The collocated perchlorate and nitrate plumes appear to have a common source at the building 528 Complex (SWMU 27).”

**NMED Comment:** The nitrate plume may have originated from the TNT Leaching Beds (SWMU 1) rather than the building 528 Complex (SWMU 27) or from both sources. Correct the statement for accuracy in the revised Report.

**Permittee Response:** Concur. The sentence was revised in Section 6.0, Page 6-1, Lines 32-34 to state:

“The nitrate bedrock plume may have originated from the former TNT Leaching Beds (SWMU 1), while the collocated perchlorate plume may have originated from the building 528 Complex (SWMU 27).”

**18. NMED Comment:** Table 3-1 presents a list of analytes with applicable screening levels (SL), detection limits (DL), limits of detection (LOD), and limits of quantitation (LOQ). Each SL for an analyte is compared to the LOD and LOQ and the analytes with LODs and/or LOQs that exceed the SL are identified in Table 3-1. These analytes are identified as data quality exceptions in Table 3-1 and Section 5.4. However, according to all analytical data summary tables (Tables 5-2 through 5-12), the values of DL are referenced to indicate “Not Detected (ND)”. The DL is the method detection limit that applies to the instrument at the lab and not to individual samples. Use of the DL to indicate a value for ND data not accurate and is a misrepresentation of the data. The Permittee must use the LOD rather than the method detection limit in all analytical data summary tables for all analytes with LODs that exceed the screening level. Revise the Report accordingly.

**Permittee Response:** Comment acknowledged. Tables 5-3, 5-6, 5-8, 5-9, and 5-10 were updated accordingly to reflect LOD instead of DL for the analytes whose LOD exceed the screening level.

**19. NMED Comment:** According to Table 5-2, the nitrite concentration in the groundwater sample collected from well BGMW07 in October 2020 is recorded as < 1.2 mg/L, which exceeds the screening level of nitrate (1 mg/L). It remains unknown whether the nitrite concentration in the sample collected from well BGMW07 exceeded the applicable screening level of 1 mg/L. The analytical report identified as 20J052, page 107 of 187, in Appendix D-2, Emax Electronic Data Deliverables, indicates that the dilution factor used to analyze this nitrite sample was recorded as 40, which is significantly larger than those used for the other samples. Explain why such a large dilution factor was necessary for the analysis of this sample and provide a justification in the revised Report. The Permittee must direct analytical laboratories to minimize dilution factors, where applicable, to be able to report the concentrations of analytes below applicable screening levels (SLs).

In addition, Figure 5-1, Northern Area Nitrate and Nitrite in Alluvial Groundwater- October 2020 and Figure 5-2, Northern Area Nitrate and Nitrite in Bedrock Groundwater- October 2020 indicate that the concentrations reported below detection limits are designated as "Not Detected (ND)"; however, it is misleading because the detection limits are not presented in the figures. Revise the figures to report the ND concentrations using the detection limit values (e.g., < 1.2

mg/L for BGMW07) (note that this does not apply to data quality exceptions where the LODs exceed the SLs). This provision also applies to Figures 5- 5, 5-6, 5-11, 5-12 and 5-13 of the Report.

**Permittee Response:**

- a. Comment acknowledged. The increased turbidity and/or matrix interference from other compounds forced the lab to dilute the sample 40x. There has historically been significant matrix interference for samples collected from well BGMW07 and a discussion was added in the Data Quality Exception Section 5.4, Page 5-6, lines 37-39 to state:

“During this sampling event, the increased turbidity and/or matrix interference from other compounds in well BGMW07 forced the laboratory to dilute the nitrate sample by a factor of 40 which caused the detection level to increase to 1.2 mg/L which is above the applicable screening level of 1.0 mg/L.”

- b. Comment acknowledged. Figures (5-1, 5-2, 5-5, 5-6, 5-11, 5-12, and 5-13) were revised to reflect ND values.

**20. NMED Comment:** The analytical data for groundwater samples collected from well TMW32 is split into two pages. For clarity, the dataset for a single well must not be presented on separate pages. Correct the table in the revised Report.

**Permittee Response:** Concur. Individual well data will not be split on separate pages if possible. Table 5-6 was revised to keep the TMW32 data together.

If you have questions or require further information, please contact me at [George.h.cushman.civ@army.mil](mailto:George.h.cushman.civ@army.mil), 703-455-3234 (Temporary Home Office, preferred) or 703-608-2245 (Mobile).

Sincerely,



George H. Cushman IV  
BRAC Environmental Coordinator  
Fort Wingate Depot Activity  
BRAC Operations Branch  
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Enclosures

CF:

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