April 3, 2023

Conrad Valencia
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U.S. Department of Energy
National Nuclear Security Administration ("NNSA")
Sandia Field Office
P.O. Box 5400
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Via email to conrad.valencia@nnsa.doe.gov

RE: NMED Comments on Sandia National Laboratories' Tijeras Arroyo Use Attainability Analysis

Dear Conrad Valencia,

On August 23, 2022, the New Mexico Environment Department ("NMED" or "Department") Surface Water Quality Bureau ("SWQB") received a revised Use Attainability Analysis ("UAA") dated July 14, 2022, prepared by Sandia National Laboratories, U.S. Department of Energy, National Nuclear Security Administration ("SNL"). SNL prepared the UAA in accordance with surface water quality regulations (20.6.4.15(B)(2) NMAC) to evaluate the factors affecting the attainment of the aquatic life and recreational designated uses for Tijeras Arroyo from the Rio Grande to the Four Hills bridge in Albuquerque, New Mexico (Assessment Unit NM-9000.A_070), specifically natural, ephemeral, intermittent, or low flow conditions, in order to support a proposed designated use amendment. Such amendments are required to be done through a rulemaking proceeding consistent with the State Rules Act [New Mexico Statue Annotated ("NMSA") 1978, Chapter 14, Article 4] and Water Quality Control Commission ("WQCC") regulations (20.1.6 NMAC). If the WQCC adopts the proposed amendments, the U.S. Environmental Protection Agency ("EPA") must then approve the amendments in accordance with 40 Code of Federal Regulation ("CFR") §131.20 and 40 CFR §131.6 for purposes of the Clean Water Act ("CWA").

SNL included content in the revised UAA to address NMED and EPA comments on SNL's original draft UAA, dated December 18, 2019 (submitted to NMED on June 8, 2020), and elements discussed during a meeting between SNL and NMED on April 15, 2022.

The Department provides the following comments on the revised UAA. These comments may not be inclusive, and the Department reserves the right to bring forth additional findings as appropriate.

Section 2 – Use Attainability Analysis

- The definition for "existing use" is referenced as 20.6.4.7(E)(3) NMAC however, the definition is now in 20.6.4.7(E)(4) NMAC per the most recent version of 20.6.4 NMAC (https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/18/2022/11/2022-09-24-SRCA-NMAC_Integrated_Rule.pdf). The Department recommends correcting the reference citation accordingly.

Section 3 – Reason for this Use Attainability Analysis

- Please merge/move this section and information to Section 1 – Introduction.

Section 4 – Antidegradation and Existing Uses

- The Department recommends deleting this section and merging the existing use information into "General Site Conditions" (see bullets below).
- To evaluate existing aquatic life and recreation uses, the Department recommends discussing the "General Site Conditions" first (e.g., watershed characteristics, historical and current human activities, ecoregion/climate, and hydrological conditions, including aquatic life and streamflow data). Please move "General Site Conditions" up to Section 3. This information and data should be used to provide the supporting evidence to conclude that secondary contact and limited aquatic life use are the *existing uses* for Tijeras Arroyo, which will still be protected if the proposed amendments are adopted. SNL should also speak to how the existing aquatic life and recreation uses differ from the designated aquatic life and recreation uses described in 20.6.4.98 NMAC.
- SNL notes that this UAA evaluates aquatic life and recreation uses in Tijeras Arroyo, therefore any information on other designated uses (e.g., wildlife habitat, livestock watering, etc.) do not need to be discussed. SNL is not proposing any changes or amendments to other designated uses.
- Pursuant to 40 CFR §131.10(b), when designating a use of a water body and the appropriate criteria for those uses, "the state shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters." Currently, the UAA does not address downstream uses or how the protection of those uses will be maintained should the designated aquatic life and recreational uses be amended to less stringent criteria. The Department requests the UAA clearly address this requirement in this section. This could be as simple as a statement or short paragraph at the end of the *new* Section 3 (General Site Conditions) that explains that the proposed amendments should still be protective of downstream uses because the current uses in Tijeras Arroyo cannot be attained due to *natural* flow conditions.

Section 5 – Endangered and Threatened Species Review

- In Section 5.1, the UAA states "[t]he location of the critical habitat is not available" for several of the listed threatened and endangered species. However, the Department verified that the United States Fish and Wildlife Service ("USFWS") Information for Planning and Consultation ("IPaC") Tool (reference provided through the UAA) identifies critical habitat for several species in and around Tijeras Arroyo and the Rio Grande (downstream receiving water). The Department requests the UAA include the critical habitats for all threatened and endangered species and describe the locations in relation to National Pollutant Discharge Elimination System ("NPDES") outfalls, the portion of Tijeras Arroyo being considered for designated use amendments, and the downstream receiving waterbody (Rio Grande).

Section 6 – General Site Conditions

- Please move "General Site Conditions" up to Section 3 (see also Section 4 comments above). This information and data should be used to provide the supporting evidence to conclude that secondary contact and limited aquatic life use are the *existing uses* for Tijeras Arroyo, which will still be protected if the proposed amendments are adopted. SNL should also speak to how the existing aquatic life and recreation uses differ from the designated aquatic life and recreation uses described in 20.6.4.98 NMAC.
- In Section 6.8.1 regarding flow gaging, the map referenced as Figure 13 in the UAA does not provide adequate reference location for the Rio Grande in relationship to the United States Geological Survey ("USGS") stream gage. Figure 13 does not identify the Rio Grande on the legend nor is the Rio Grande labeled on the map, so one cannot determine where the USGS gage is in

relationship to the Rio Grande. The Department recommends adding language in the section that describes the location of the USGS gage in relationship to the assessment unit Rio Grande to Four Hill Bridge (NM-9000.A_070), Tijeras Arroyo watershed, and its location relative to the Rio Grande.

- In Section 6.9.3 regarding NPDES Permits, there are four NPDES dischargers identified in the UAA "SNL/NM, KAFB, the City of Albuquerque, and Bernalillo County" but Figure 13 identifies a total of 10 outfalls. The UAA does not provide enough content to determine which outfalls are associated with each discharger nor does the UAA provide adequate characterization of each of these discharges to Tijeras Arroyo. The Department requests the UAA include the name of the permittee, the outfall identification/NPDES permit number, and the type of discharge (i.e., treated domestic wastewater, stormwater, treated industrial wastewater).
- Reminder that figures, tables, and possibly sections will have to be re-numbered with the reorganization.

Section 10 – Quality Control and Quality Assurance

- In Section 10.2 regarding data collection and management of the demonstration, the UAA states "All analytical data packages, analysis request and chain-of-custody documents, and data validation reports are submitted to a Sandia record depository for cataloging and storage in accordance with internal procedures, DOE requirements, and the document control requirements of ISO 9001, Quality Management, and ISO 14001, Environmental Management Systems." The Department requests a copy of ISO 9001, Quality Management, and ISO 14001 be provided as an Appendix to the UAA.

Section 11 – Summary and Conclusions

- The UAA states "[a]side from occasional allowable non-stormwater discharges from municipal activities (such as water main breaks or fire hydrant testing). The only flows that occur in the Rio Grande to Four Hills Bridge reach are the results of localized storm events. No other permitted discharges occur to the reach (NPDES or otherwise)." This statement is inconsistent with Section 6.9.3 NPDES Permits and Figure 13 of the Demonstration. The NPDES Permit section identifies four dischargers and Figure 13 identifies 10 stormwater outfalls to Tijeras Arroyo between the Rio Grande and the Four Hills Bridge (Assessment Unit NM-9000.A_070). The Department requests the UAA address the inconsistency between the two sections.
- The UAA states "[t]herefore, the potential anthropogenic impacts on water quality are not a factor in this UAA, which is basing the replacement of designated uses on natural, low flow conditions." The Department recommends SNL add the federal regulation 40 CFR 131.10(g)(2) that allows states to designate a use or sub-category of a use, or remove a use that is *not* an existing use, if the State or other entity conducts a use attainability analysis as specified in paragraph (j) of 40 CFR §131.10(j) that demonstrates attaining the use is not feasible because of one of the six factors, specifically 40 CFR §131.10(g)(2).

General Comments

- There are grammatical errors associated with certain Figures and Tables. Specifically on Page 47, Figure 13, where the title on the Figure reads "Surface Waters Features Figure 12." The mislabeling of the figure is confusing and does not allow one to reference the correct figure. Additionally on Page 49, Figure 15, the "Average Monthly Days with Rainfall Versus Average Monthly Days with Flow", the graph identifies two data points for February whereas, the other months only have one point. One of the February points should be removed so that the graph is consistent and the regression line evaluated with only one point for each month.

- The Appendices A through J are saved as one file. The file is very large and causes issues when reviewing electronically. The NMED requests that the appendices be separated so they can be easily viewable when accessed electronically.

Again, these comments may not be inclusive, and the Department reserves the right to bring forth additional finding as appropriate. If you have any questions regarding these comments or the process, please contact Miguel Montoya by email at miguel.montoya@env.nm.gov or by phone at 505-819-9882.

Sincerely,

Shelly Lemon Digitally signed by Shelly Lemon
Date: 2023.04.03 12:32:42 -06'00'

Shelly Lemon, Chief
Surface Water Quality Bureau

Cc: David Stuhan, Sandia National Laboratory (dstuhan@sandia.gov)
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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September 16, 2022

Ms. Jennifer Fullam
Standards, Planning & Reporting Team Leader
Surface Water Quality Bureau
New Mexico Environment Department
1190 S. St. Francis Drive
Santa Fe, NM 87505

Re: UAA for Tijeras Arroyo: Rio Grande to Four Hills Bridge Reach

Dear Ms. Fullam:

Thank you for the opportunity to review the Use Attainability Analysis (UAA) conducted for the Rio Grande to Four Hills Bridge prepared by National Technology & Engineering Solutions of Sandia, LLC (NTESS) on behalf of the United States Department of Energy (DOE)/National Nuclear Security Administration (NNSA)/Sandia Field Office (SFO). In general, the recent draft of the UAA has been restructured to address some of the EPA's previous concerns. The EPA reviewed the draft UAA provided on July 14, 2022, by Sandia National Laboratories (SNL) and is providing the following comments.

5.1 Evaluation of Endangered and Threatened Species Review

The EPA recommends addressing the functional difference in the CWA §101(a)(2) uses as described in 20.6.4.97 and 20.6.4.98 NMAC and application of the non-§101(a)(2) uses in the evaluation of endangered and threatened species (Section 5.1), specifically the difference in applicable aquatic life criteria. The designated uses for ephemeral waters are limited to livestock watering, wildlife habitat, limited aquatic life, secondary contact and use-specific acute criteria described in 20.6.4.900 NMAC, or other criteria adopted on a segment-specific basis. In addition, human health-organism only criteria would apply only for persistent pollutants if adopted on a segment-specific basis.

6.9.3 NPDES Permits

The EPA suggests including more information regarding downstream protections. SNL identified four dischargers' names but showed a total of 11 outfalls in Figure 13, it is not clear which outfalls belong to each discharger. SNL should identify pollutants associated with each outfall or off the site as stormwater and whether this has an effect on the Rio Grande given dilution since there are threatened, endangered species, and critical habitats downstream.

Sincerely,

Jasmin Diaz

Jasmin Diaz
Water Quality Standards