Memorandum

Buckman Direct Diversion

Date: February 20, 2023

To: Buckman Direct Diversion Board

From: Rick Carpenter
Kyle S. Harwood
Jay Lazarus
James P. Bearzi

Subject: Rio Grande Water Quality Update pursuant to BDDB Resolution No. 2022-2
Calendar Year 2023

This memorandum is provided pursuant to Buckman Direct Diversion Board ("BDDB") Resolution No. 2022-2, to review the water quality issues and BDDB actions, and to present anticipated water quality issues for 2023 so the BDDB can prioritize engagement with the issues.

A copy of Resolution No. 2022-2 is attached to this memo for reference.

1. Memorandum of Understanding ("MOU") with the U.S. Department of Energy ("DOE")

The BDDB and DOE (collectively, "the Parties") entered into a fourth MOU in February 2022 that addresses their respective commitments through 2024 concerning stormwater and sediment migration from the Los Alamos National Laboratory ("LANL") to the Rio Grande above the BDD diversion. Issues addressed in 2022 include:

- Ongoing operation and maintenance of the Early Notification System ("ENS"), including resolution of data transmission issues.
- Installation of a new flow measurement station (known as E110.7) in lowermost Los Alamos Canyon in July 2022.
- Ongoing sampling, data collection and data sharing with DOE and the New Mexico Environment Department ("NMED").
- Conducting an Annual Review meeting with the Parties in May 2022 to discuss issues including ENS operation, sediment and stormwater sampling studies conducted by DOE in the Los Alamos Canyon watershed, and sampling and analysis by the parties in the Rio Grande.
- Observation of DOE inspection activities of ENS stations in October 2022.
- Interaction with the Pueblo de San Ildefonso concerning monitoring and maintenance of existing ENS stations on Pueblo lands.

Recommendations for 2023: Continue to work with DOE in accordance with the terms of the MOU to monitor discharges of stormwater from the LANL property to the Rio Grande. Staff and consultants will

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SANTA FE COUNTY

participate in the Annual Review (anticipated to occur in May). Staff and consultants will consider removal of E062 if requested by DOE. Staff will continue to work with DOE as operation, maintenance, and data transmission issues arise. The BDD Intake Sampling Program will continue.

2. **New Mexico's Triennial Review of State Surface Water Quality Standards**

The BDDB's consultant provided testimony in the hearing in front of the Water Quality Control Commission ("WQCC") held in July, 2021. The Commission's Statement of Reasons and Decision on the petition was issued on March 9, 2022. The WQCC adopted the amendments for state implementation purposes on September 24, 2022. U.S. Environmental Protection Agency ("USEPA") approval for Clean Water Act compliance purposes is pending.

Recommendations for 2023: The next Triennial Review process will begin this year, although the public may not be invited to review and comment until 2024 when the next hearing should occur. While no specific actions are anticipated in 2023, staff and consultants will monitor NMED rulemaking proceedings related to water quality issues, provide updates to the BDDB regarding significant developments, and engage in those proceedings as appropriate.

3. **Waters of the United States (WOTUS)**

The BDDB filed an amicus brief in 2021 in State of California et al., v. Wheeler et al., Case No. 3:20-cv-03005 (N.D. Cal.) to support the plaintiff States in their litigation to stop the USEPA from adopting the Navigable Waters Protection Rule ("NWPR") adopted during the Trump administration. The Biden administration sought to repeal the NWPR, and on December 30, 2022, the USEPA and the U.S. Army Corps of Engineers announced the final "Revised Definition of 'Waters of the United States'" rule. The most significant change for the BDDB is that WOTUS will now cover – as it did under the rules adopted during the Obama administration – intermittent and ephemeral waters (such as those that drain the Pajarito Plateau where LANL resides) if they significantly affect a navigable waterway such as the Rio Grande. On January 18, 2023, the rule was published in the *Federal Register*; the rule will be effective on March 20, 2023.

Recommendations for 2023: No action is anticipated, but staff and consultants will continue to monitor rulemakings relating to WOTUS and related litigation to stay current on the legal and regulatory landscape affecting the BDD source water quality. See also Issue #8 below.

4. **CWA §303(d)/305(b) Integrated Report and List of Impaired Waters ("Integrated Report")**

NMED prepares an Integrated Report every two years in compliance with Sections 303(d) and 305(b) of the Clean Water Act. The Integrated Report serves as a source of information on water quality and pollution control programs as well as how NMED assesses surface water quality data against water quality standards. The BDDB has provided comments to NMED on the last two (2020 and 2022) Integrated Reports. The BDDB's comments on the 2022-2024 Integrated Report centered on NMED's delays in implementing Total Maximum Daily Loads ("TMDLs") to address impairment of the Rio Grande and streams on the Pajarito Plateau. NMED has issued the final Integrated Report and responded to the Board's comments, stating that eight assessment units within water quality standards segment 20.6.4.114 have an estimated 2021 TMDL date. NMED plans to address TMDL data needs for the Rio Grande (Cochiti Reservoir to San Ildefonso boundary) assessment unit during the 2023-2024 SWQB

Middle Rio Grande water quality survey, with TMDLs to follow the data assessments in 2027.The USEPA approved the 2022-2024 Integrated Report on April 26, 2022.

Recommendations for 2023: The 2024-2026 Integrated Report process will be initiated in 2023. The Assessment Methodology will likely be released for public comment this summer, and the draft List of Impaired Waters and Integrated Report released for a 45-day public comment period in December, 2023. Staff and consultants will closely monitor release of the draft Report and the BDDB should be prepared to comment as appropriate.

5. **LANL National Pollutant Discharge Elimination System (NPDES) Permits**

The BDDB provided comments to NMED in 2020 on the State certification of LANL's surface water permits for its industrial outfalls (NPDES Permit No. NM002835) and stormwater discharges (NPDES Permit No. NM0030759). The Board's comments centered on technical aspects of the permits, and how they relate to the cleanup activities for legacy pollution at LANL. The LANL operators petitioned for review of the State certification of the two permits and conditions imposed in the certification process, and hearings were granted although not scheduled. NMED and LANL have since entered into Settlement Agreements resolving the disputed issues for each of the certifications, and modified certifications of each of the NPDES permits were issued in 2022. Of particular interest to the Board is the per- and polyfluoroalkyl substances ("PFAS") monitoring requirements in the Agreement governing regulated stormwater discharges for the certification of NPDES Permit No. NM0030759. See also Issue #13.

Recommendations for 2023: No specific actions are anticipated. Staff and consultants will monitor these and other LANL permits, particularly when LANL is required to seek renewals or seeks to modify the existing permits. Staff and consultants will also acquire and assess monitoring results under the Agreement.

6. **NMED/LANL Consent Order**

The BDDB has submitted several sets of comments to NMED in the past four years regarding its concerns about cleanup and enforceability of the 2016 Compliance Order on Consent between NMED and DOE ("2016 Consent Order"). While NMED has not responded to these comments in writing, NMED did sue DOE to compel renegotiation of the 2016 Consent Order. The Board's comments have focused on its disapproval of the 2016 Consent Order as compared to the 2005 Consent Order, and the need for public engagement in the LANL clean-up process as the BDDB has recommended on several occasions. NMED is seeking, as part of the relief in its lawsuit, that a new Consent Order be developed under the supervision of the court. The Board has urged NMED to engage the public and seek public comment if a new draft Consent Order is an outgrowth of any agreement to settle the litigation. NMED

and DOE are in ongoing discussions about elements of the 2016 Order with which NMED is dissatisfied. To continue negotiations, the parties must seek stays from the court every 90 days by submitting a progress report. The last such report was submitted to, and an additional 90-day stay granted by, the court on January 11, 2023.

Recommendations for 2023: No specific action is anticipated, but staff and consultants will monitor the litigation between NMED and DOE and participate, if allowed and appropriate, in the development of a new Consent Order to ensure that Rio Grande water quality is a priority consideration in the cleanup of legacy waste at LANL.

7. **DOE's Sitewide Environmental Impact Statement ("SWEIS") for LANL**

On April 4, 2021, the BDDB adopted Resolution 2021-2 requesting that DOE develop a new SWEIS under the National Environmental Policy Act ("NEPA") instead of merely updating the existing SWEIS. DOE's National Nuclear Security Administration ("NNSA") agreed, and solicited comments from the public concerning the scope of a new SWEIS. The BDDB provided formal scoping comments in September 2022. The NNSA expects the draft SWEIS to be released for public comment in mid-2023.

Recommendations for 2023: Staff and consultants will monitor notices for the SWEIS and be prepared to develop comments for the BDDB's consideration when the draft SWEIS is released.

8. **Los Alamos County Municipal Separate Storm Sewer System ("MS4") Permit**

Prior to 2022, the USEPA was in the process of drafting a NPDES MS4 permit for Los Alamos County, the New Mexico Department of Transportation, and DOE to regulate stormwater discharges in Los Alamos County outside of LANL. A significant portion of these discharge locations are in the Los Alamos Canyon watershed. In January 2022 EPA put the draft permit development on hold in order to develop the required showing that the canyons are jurisdictional waters under the Clean Water Act. This effort may be further influenced by the WOTUS rule that will be effective in March 2023. See Issue #3 above.

Recommendations for 2023: Staff and consultants will monitor the development of this permit as it would cover numerous uncontrolled discharges that are in addition to those covered by the LANL stormwater NPDES permit. Staff and consultants should be prepared to develop comments on the draft permit, if released, for the BDDB's consideration.

9. **Natural Resources Damage Assessment ("NRDA")**

BDD staff, consultants, and counsel met with the New Mexico Office of the Natural Resource Trustee ("ONRT") in late 2021 to discuss the NRDA process, and how BDD's steps to mitigate potential contamination from LANL (e.g., the ENS and treatment) via stormwater and sediment migration in Los Alamos Canyon could factor into the ONRT's assessment of damages based on injury to state resources such as the Rio Grande. It was emphasized that the BDDB expects the ONRT and other trustees to give appropriate weight to the surface water resources upon which the BDD relies.

Recommendations for 2023: No specific action is anticipated, but staff and consultants will continue to monitor progress of ONRT evaluation of NRDA and incorporation of LANL impacts on the Rio Grande.

10. **NukeWatch New Mexico LANL Consent Order Litigation**

Nuclear Watch New Mexico ("NukeWatch") sued the DOE under the citizen suit provisions of the Resource Conservation and Recovery Act ("RCRA") alleging noncompliance with the 2005 Consent Order. The parties have reached an agreement to settle NukeWatch's remaining claims, which included a requirement for DOE to install a flow measurement station in lowermost Los Alamos Canyon to be a component of the BDD's ENS. This provision has since been satisfied by installation of ENS station E110.7.

Recommendations for 2023: No specific action is anticipated. The Settlement Agreement has been accepted by the court, and with establishment of E110.7 the portions of the Settlement Agreement pertinent to the BDDB are complete.

11. **Hexavalent Chromium ("Cr-VI") Water Rights Protest**

DOE and Los Alamos County filed an application ("the Application") with the New Mexico Office of the State Engineer ("NMOSE") to move water rights from existing points of diversion to extraction wells used in the remediation Interim Measure ("IM") for the Cr-VI groundwater plume. In 2020 the BDDB protested the application asserting that, among other deficiencies, DOE failed to provide information about impacts to the Rio Grande. Although two settlement conferences occurred in 2022, the protest is still pending. Also in 2022, NMED took several regulatory actions that could affect the factual basis of the Application, including directives to cease injection of treated water at the current locations under the IM, and to consider land application of treated water under strict conditions. The outcome of these directives could affect the factual basis of the Application, potentially leading to its modification or even withdrawal.

Recommendations for 2023: Staff and consultants will monitor the regulatory actions and, if appropriate, engage with the applicants and NMED in their resolution. The BDDB will continue participation in protest of this application in an effort to resolve the issues to the BDDB's satisfaction by ensuring appropriate information is provided demonstrating that the proposed diversions will not impact the Rio Grande.

12. **New Mexico NPDES Primacy**

New Mexico is one of three states that does not have authority from the federal government to implement the NPDES permitting program under the Clean Water Act. Currently NPDES permits are

issued by the USEPA. The BDDB has from time to time expressed its support for state primacy, including in a meeting with NMED leadership in 2022. NMED subsequently provided to the BDDB a study it commissioned examining the state's capacity to implement such a program and the additional resources and revenue required to sustain it.

Recommendations for 2023: No specific action is anticipated.

13. **PFAS Monitoring**

In January 2023, the LANL permittees submitted the first Annual Data Report for per- and polyfluoroalkyl substances ("PFAS") under the settlement agreement of their petition to review State certification of the LANL Stormwater NPDES Permit (NM0030759). Three of the 15 locations proposed to be sampled were in the Los Alamos Canyon watershed, none of which were sampleable. Three locations – all outside of the Los Alamos Canyon watershed – were sampled, with various PFAS detected.

Recommendations for 2023: No specific action is anticipated, although staff and consultants will interface, as appropriate, with the LANL permittees regarding PFAS detections in surface water, stormwater, and groundwater.

THE BUCKMAN DIRECT DIVERSION BOARD
RESOLUTION NO. 2022-2

A RESOLUTION
OF THE BUCKMAN DIRECT DIVERSION BOARD CONCERNING
THE MISSION, GOALS AND VALUES OF THE BOARD REGARDING
RIO GRANDE WATER QUALITY

WHEREAS, the Buckman Direct Diversion Board ("BDDB") was formed in 2005 pursuant to a Joint Powers Agreement executed by the City of Santa Fe and Santa Fe County;

WHEREAS, the Joint Powers Agreement ("JPA") delegated to the BDDB all powers necessary to plan for, finance, design and construct the Buckman Direct Diversion Project ("Project") and to operate and manage the Project in all aspects;

WHEREAS, the JPA states that "the Board may adopt By-Laws, Rules and Regulations as it deems necessary to conduct their affairs consistent with this Agreement." JPA, Article 5;

WHEREAS, the BDDB's core purpose is to provide the City of Santa Fe and Santa Fe County a safe and reliable source of drinking water that meets or exceeds regulatory requirements by diverting and treating surface water from the Rio Grande;

WHEREAS, the BDD Project, a critical component of regional Santa Fe conjunctive water resource management, diversifies the regional water supply under both normal and drought conditions, decreases reliance on non-sustainable groundwater pumping, and thereby allows for the provision of a regional drought reserve;

WHEREAS, the quality of water that is diverted is of paramount importance and priority to the BDDB;

WHEREAS, the BDDB seeks to monitor, protect, and positively affect the water quality of the Rio Grande and its tributaries to ensure that the BDD Project continues to produce safe drinking water for the Santa Fe service area; and

WHEREAS, the BDDB's proactive water quality initiatives also provide for wise management of the costs and the technical challenges of treating Rio Grande water at the BDD Water Treatment Plant.

NOW, THEREFORE, BE IT RESOLVED BY THE BUCKMAN DIRECT DIVERSION BOARD that the BDDB hereby adopts the following goals and values with respect to its water quality objectives:

1) Focus resources on specific Rio Grande segments and their tributaries that have the greatest potential to affect the water quality at the BDD Project intake.

2) Foster the BDDB's engagement with key partners, stakeholders and regulators including the U.S. Department of Energy, the U.S. Environmental Protection Agency, Los Alamos County, and the New Mexico Environment Department.

3) Monitor and ensure adequate surveillance of the Rio Grande and its tributaries to promptly identify and address possible sources of pollution, contamination, and treatment challenges.

4) Maintain the capacity to substantively address unforeseen water quality issues as they might arise, including those related to pollution, contamination, fire, climate change, and drought.

5) Manage public funds responsibly, fairly, and with integrity to continuously improve and enhance the value of our service to the public.

6) Support federal, state, regional, and local efforts to manage the water quality of the Rio Grande.

7) Foster public confidence through clarity, honesty, and transparency, particularly with respect to communication of Rio Grande water quality sampling and monitoring; and

8) Sustain the highest possible water quality of the Rio Grande above and at the BDD intake, by appropriately monitoring BDD source waters that may be affected by upstream discharges, climate change, fire and drought.

9) Implement its water quality work by:

i. In the first calendar quarter of each year, review the prior year's water quality issues and BDDB actions.

ii. In the first calendar quarter of each year, receive a staff presentation of anticipated water quality issues for the current calendar year so the BDDB may prioritize its engagement with those issues.

iii. Periodically receive updates at appropriate milestones or when new issues arise, such as new permit applications, new litigation, policy initiatives of other stakeholders, or requests from the public.

PASSED, APPROVED, and ADOPTED this 1 day of December, 2022.

Carol Romero-Wirth
Chairperson

ATTEST:

Kristine Mihelcic — 1-31-2023
Kristine Bustos-Mihelcic — Date:
City Clerk

APPROVED AS TO FORM:

Nancy R. Long — 01/31/2023
Nancy R. Long — Date:
BDDB Counsel