

NPDES PERMIT NO. NM0031228
FACT SHEET

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT

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DATE PREPARED

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PERMIT ACTION

First-time issuance of a National Pollutant Discharge Elimination System (NPDES) permit. It is proposed that the facility be issued a NPDES permit for a 5-year term in accordance with regulations contained in 40 Code of Federal Regulations (CFR) 122.46(a).

40 CFR CITATIONS: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of June 10, 2022.

RECEIVING WATER – BASIN

The water intake and discharge location will be the El Vado Reservoir of the Rio Grande Basin subject to Section 20.6.4.120 New Mexico Administrative Code (NMAC).

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
ML	Method Minimum Level
MG	Million gallons
MGD	Million gallons per day
NF	Nano Filtration
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
POTW	Publicly owned treatment works
RP	Reasonable potential
SS	Settleable solids
SIC	Standard industrial classification
SSM	Sufficiently sensitive method
s.u.	Standard units (for pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load

TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
UF	Ultra-Filtration
USGS	United States Geological Service
WLA	Waste Load allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

N/A

II. APPLICANT LOCATION and ACTIVITY

As described in the application, El Vado Dam is located in Rio Arriba County, New Mexico. Under the Standard Industrial Classification (SIC) Code(s) 1629, the applicant states its plan to install a geomembrane system on the steel face of El Vado Dam. The installation will cover the full 224,298 sq. ft. of the face of dam. The scope of work also includes injecting grout behind the steel plates and into the foundation to enhance the dam's stability and impermeability.

El Vado Dam, located on the Rio Chama about 160 miles north of Albuquerque, was built by the conservancy district in 1934-1935 and was rehabilitated by the Bureau of Reclamation in 1954-1955. The dam embankment is rolled gravel fill with a steel membrane on the upstream face. The dam is 230 feet high and has a crest length of 1,326 feet. The reservoir has a total capacity of 196,500 acre-feet.

The Bureau of Reclamation has undertaken remediation of the 87-year old dam at the southern end of the reservoir. Grouting operations, involving injecting grout behind the steel faceplates of the dam and into the subsurface at the toe of the dam, are critical elements of the dam's remediation. Remediation work is now ongoing at the dam and is expected to involve grouting in 2022 and 2023. The proposed grouting operations involve using El Vado Reservoir water to produce grout and subsequently clean grout lines and equipment. The applicant then proposes to discharge the grouting process water into the reservoir once it has been treated to meet the conditions described in this permit. The grouting operations are planned to occur in three phases. The Phase I grout components include an untested additive and will therefore not be discharged. The Phase II and III grout components are the same, although Phase III is a thinner mix (more added water). The Phase II and III grout process water is proposed to be discharged back to El Vado Reservoir following treatment by the permittee.

All Phase I grout water and solids will be collected in an 18,000-gallon steel roll-off tank or a lined basin (approximately 29 ft by 29 ft in size). In Phase I, the grout process water and solids will be transported directly to Associated Asphalt and Materials, LLC, in Santa Fe, NM. Grout process water transport is expected to occur approximately weekly in Phase I, and Phase I is expected to last a total of 10 workdays.

At the end of Phase I, the tank/basin will be inspected by the permittee to ensure it is clean of all Phase I solids residue and ready for use for Phase II and III. During Phase II & III, the grout process water effluent will first flow into a large settling basin (approximately 50 ft x 100 ft x 3 ft deep). The size of the large basin will be adequate to store, with one foot of freeboard, approximately 74,805 gal. This volume translates into approximately 12 days of storage, retention, and settling for the Phase II and III flows. After the addition of the grout process water to the basin the pH will be checked. If the pH is not within a range consistent with the NMWQS (6.6-8.8 s.u.), pH will be adjusted as needed. The plan for pH adjustment involves the addition of citric acid. Citric acid is a weak organic acid which occurs naturally in citrus fruits and is

routinely used in food processing. Citric acid was chosen by the contractor because it would leave no residual precipitate and is available in anhydrous form, which increases the safety of chemical handling and storage. Once the pH reaches a level in the proposed range, the grout water will be decanted to another smaller lined sedimentation basin (approximately 29 ft x 29 ft). After further settling, the effluent will then be decanted and discharged into El Vado Reservoir. The contractor estimates that grout process water effluent will be released in a batch type discharge, taking place once per day, when grouting operations are running. The maximum expected discharge rate is 9608 gallons/day. The semi-dried solids will be removed and put in a lined dumpster. The contractor estimates that solids will be removed weekly or biweekly. The timing of removal will depend on the amount of accumulation. Solids will be removed for disposal once there is approximately one foot of accumulation. Solids will be transported to Associated Asphalt and Materials, LLC.

To assess the potential impacts of the proposed discharge on water quality, a pilot study was conducted on a sample of the Phase II grout mix to be used for the dam remediation. The grout mix was prepared as described in the grouting protocol using El Vado Reservoir water collected and delivered the same day from the reservoir. The mix was prepared in a 55-gallon drum, which is consistent with how it will be prepared on the project site. While preparing the grout mix, the contractor found that overly turbid samples would present problems for analysis by sensitive laboratory equipment. In order to obtain samples that could be adequately analyzed, 5 gallons of reservoir water was added. The prepared sample was allowed to gravity settle for one day. The contractor then sent samples to a lab for whole effluent toxicity testing, testing for pollutants listed in the NPDES Application Form 2D, the 2022 NMWQS, as well as human health pollutants required to be tested by the NMIP.

The pilot test sample represents a concentrated and untreated version of the actual expected effluent. The pilot test sample was not treated to reduce pH, as the actual effluent will be before discharge. The addition of 5 gallons of reservoir water that was added to the pilot study sample represented a 0.34 to 1 volumetric dilution of the grout. Based on previous experience with similar projects, the grouting contractor expects the actual effluent that will be discharged to have a water to grout ratio of approximately 4:1 during grouting operations. The prepared sample was allowed to gravity settle for one day, which is a much shorter time frame than the expected 7-day settling time at peak flows for the actual effluent. To determine the reasonable potential of the sampled pollutants to exceed NMWQS, the expected 4:1 water to mix ratio was used in the analysis. This ratio equates to 58.82 gallons of reservoir added for every one portion of grout mix in the expected effluent. One portion of grout mix is defined as the portion used for analysis in the pilot study (14.75 gallons).

Pollutant characteristic data was not evaluated for Phase I grout process water. Therefore, Phase I process water is not authorized to be discharged under the proposed permit. Proposed discharges authorized under this individual permit are limited to effluent that results from Phase II & III of the grouting process. Equipment and materials that will be used for all phases of grouting must be thoroughly cleaned of Phase I grout before they can be used for the subsequent phases.

Other aspects of this project have coverage under a separate USACE Section 404 Permit / Section 401 Certification as well as separate USEPA 2022 Construction General Permit (CGP) permit coverage. The grout process water discharge into the El Vado Reservoir is not covered under any other permit and therefore requires coverage under a NPDES individual permit. The discharge is located at Latitude 36° 35' 44.65" North, Longitude 106° 43' 57.77" West. The discharge from the facility is to El Vado Reservoir, subject to Section 20.6.4.120 New Mexico Administrative Code (NMAC). El Vado Reservoir impounds and releases flows into the Rio Chama River, subject to Section 20.6.4.118 NMAC. The Rio Chama River is designated as a National Wild and Scenic River from the El Vado Ranch launch site (immediately south of El Vado Dam) downstream 24.6 miles. Additionally, the Jicarilla Apache Nation Reservation borders El Vado Reservoir to the North, West and South. The tribe does not currently have EPA approved water quality standards.

The general and specific water quality standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, effective as of May 22, 2020, for purposes of State implementation and approved by the EPA for Clean Water Act Purposes on July 24, 2020). The draft permit also considered limits based on the 2022 New Mexico Water Quality Standards as approved by the New Mexico Water Quality Control Commission, and effective as of April 23, 2022. Although the 2022 NMWQS have not yet been approved by the EPA, a second analysis was conducted and is included in the draft permit to ensure compliance with the 2022 NMWQS if they are approved by the EPA before this permit is issued. Analyses under both the 2020 and the 2022 NMWQS resulted in the same permit limits.

III. EFFLUENT CHARACTERISTICS

Table 1 includes pollutants with quantifiable results obtained from the pilot test conducted on May 13, 2022. Pollutants that were measured and found to be non-detectable are omitted.

TABLE 1: Quantifiable Pilot Test Pollutant Characterization Results

PARAMETER	Pilot Test Concentration (mg/L)*
Selenium, Dissolved	0.0150
Quinoline	0.0732
MBAS	0.127
Formaldehyde	0.3
Ammonia Nitrogen	0.326
Total PCBs	4.89e-7
Nitrogen, Organic	0.663
Aluminum	0.919
Kjeldahl Nitrogen, TKN	0.989
Magnesium	1.34
Turbidity (NTU)	40.7
Suspended Solids	204

Calcium	354
Hardness (colorimetric) as CaCO ₃	895
Dissolved Solids	2000
Dioxin (Total 2,3,7,8-TCDD Equivalence)	1.7E-10

*Concentrations are in mg/L unless otherwise noted.

IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water,” more commonly known as the “swimmable, fishable” goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). This is a new permit issuance. An EPA NPDES Application for an Individual Permit to Discharge (Form 1 & 2D) was received on December 23, 2021. The application was deemed administratively complete on January 24, 2022.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

A. OVERVIEW OF TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 require that NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the

discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT - The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and O&G.

BAT - The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

2. Effluent Limitations Guidelines for TSS and Settleable Solids

There are currently no federally established technology-based effluent limitation guidelines for discharges of the type that is proposed in this permit. The settling and decanting processes proposed by the applicant are expected to remove most added sediment out of the effluent, but to ensure the discharge is protective of NMWQS, the following narrative criteria apply:

The discharge shall meet the New Mexico narrative standards as stated in subsection A, NMAC 20.6.4.13 which states that:

- (1) Surface waters of the state shall be free of water contaminants including fine sediment particles (less than two millimeters in diameter), precipitates or organic or inorganic solids from other than natural causes that have settled to form layers on or fill the interstices of the natural or dominant substrate in quantities that damage or impair the normal growth, function or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.
- (2) Suspended or settleable solids from other than natural causes shall not be present in surface waters of the state in quantities that damage or impair the normal growth, function or reproduction of aquatic life or adversely affect other designated uses.

Technology based limits established in this permit are based on the BPJ of the permit writer.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality-based limits are required where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state WQS. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance

with applicable State WQS and applicable State water quality management plans to assure that WQ of the receiving waters are protected and maintained or attained. WQS 20.6.4.11.E(1) NMAC [2020 and 2022] states “Mixing zones are not allowed for discharges to lakes, reservoirs, or playas; these effluents shall meet all applicable criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.” The draft permit is also based on the New Mexico’s Water Quality Standards as approved by the New Mexico’s Water Quality Control Commission effective as of April 23, 2022.

2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. State Water Quality Standards

The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, effective as of May 22, 2020, for purposes of State implementation and approved by EPA for Clean Water Act Purposes on July 24, 2020). General criteria are applicable as specified in 20.6.4.13 NMAC. The discharge from the facility is to El Vado Reservoir, subject to Section 20.6.4.120 New Mexico Administrative Code (NMAC).

The designated uses for El Vado Reservoir, subject to Section 20.6.4.120 NMAC are irrigation storage, livestock watering, wildlife habitat, public water supply, primary contact, and coldwater aquatic life.

4. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. pH

The limiting pH numeric criteria in 20.6.4.900 NMAC for the coldwater aquatic life designated use is pH within the range of 6.6 to 8.8 standard units (s.u.). The NMIP states that discharges to lakes and reservoirs are not allowed to have mixing zones, therefore this criteria must be met at the end-of-pipe. A limitation and monitoring requirements for pH of 6.6 to 8.8 s.u. are proposed in the draft permit.

b. Temperature

The limiting temperature numeric criteria in 20.6.4.900 NMAC for the coldwater aquatic life designated use is a 6T3 temperature of 20°C (68°F), and a maximum temperature 24°C (75°F). Due to a lack of information on similar projects, it is uncertain if this discharge has reasonable potential to have a temperature exceedance. Therefore, a monitoring requirement is proposed in the draft permit.

c. Turbidity

According to 20.6.4.13.J. NMAC, discharges shall not cause turbidity to increase more than 10 NTU over background turbidity when the background turbidity, measured at a point immediately upstream of the activity, is 50 NTU or less, nor to increase more than 20% when the background turbidity is more than 50 NTU.

1. Reporting Turbidity Measurements at Reservoir (01R) and Discharge (01D) Sample Points

The Sampling and Analysis section of the NMWQS (20.6.4.14 (C) NMAC) states that acute and chronic toxicity of effluent to aquatic life should be determined using the procedures specified in U.S. EPA “Short-Term Methods For Estimating The Chronic Toxicity Of Effluents And Receiving Waters To Freshwater Organisms” (4th Ed., 2002, EPA 821-R-02-013), or latest edition thereof if adopted by EPA at 40 CFR Part 136.

For further guidance on turbidity test methods, the USEPA 2022 CGP was reviewed. The CGP turbidity monitoring guidance can be reasonably applied in this permit the guidance in the CGP has been compiled/peer-reviewed by experts and incorporated feedback from the public. The CGP requires that samples must be measured using a turbidity meter that reports results in nephelometric turbidity units (NTUs) and conforms with a 40 CFR Part 136 approved method. The CGP also requires the permittee to conduct a calibration verification on the meter used prior to each day’s use, consistent with the manufacturer’s instructions. These same turbidity test method requirements are proposed in this permit.

Reservoir Sample Point, 01R must be located at least 250-feet away from Outfall 001. The Discharge Sample Point, 01D must be sampled after discharge from Outfall 001, but before the discharge enters the reservoir. The difference in measurements is expected to be due primarily, if not exclusively to the discharge of the grouting process water.

The permittee shall report all turbidity measurements taken at the Reservoir Sample Point (01R) and the Discharge Sample Point (01D) within the reporting period. Reservoir Sample Point 01R shall be reported as STORET Code No. 52330 and Discharge Sample Point 01D shall be reported as STORET Code No. 52350. These values shall not be averaged for reporting purposes.

2. Determining Turbidity Test Results

- (a) If turbidity reported at Reservoir Sample Point 01R is 50 NTU or less:

If the difference of the measured turbidity at the Sample Points 01R and 01D is greater than 10 NTU, assign a “1” to the turbidity test; otherwise, assign a “0”.

- (b) If turbidity reported at Reservoir Sample Point 01R is greater than 50 NTU:

If the difference of the measured turbidity at Sample Points 01R and 01D is greater than 20% of the turbidity recorded from Reservoir Sample Point 01R, assign a “1” to the turbidity test; otherwise, assign a “0”.

3. Reporting Total Turbidity Test Failures

- (a) If turbidity test failures occur during the reporting period:

Sum the numerical values assigned to each turbidity test taken within the reporting period. Enter this amount for STORET Code No. 51517 in the report.

- (b) If no turbidity test failures occur during the reporting period:

Enter a “0” for STORET Code No. 51517 in the report.

4. Example Calculations

In this example, the permittee is required to sample four (4) times within a reporting period:

Sample 1

Reservoir Sample Point 01R turbidity measurement: 20 NTU
Discharge Sample Point 01D turbidity measurement: 25 NTU

Reservoir Sample Point 01R turbidity is less than 50 NTU, therefore 2(a) criteria will be used. The difference of the turbidity at Sample Points 01R and 01D is 5 NTU, which is less than the 10 NTU criteria. Therefore, this sample is a “Pass” and would have a value of “0”.

Sample 2

Reservoir Sample Point 01R turbidity measurement: 20 NTU
Discharge Sample Point 01D turbidity measurement: 40 NTU

Reservoir Sample Point 01R turbidity is less than 50 NTU, therefore 2(a) criteria will be used. The difference of the turbidity at Sample Points 01R and 01D is 20 NTU, which is greater than the 10 NTU criteria. Therefore, this sample is a “Fail” and would have a value of “1”.

Sample 3

Reservoir Sample Point 01R turbidity measurement: 100 NTU
Discharge Sample Point 01D turbidity measurement: 115 NTU

Reservoir Sample Point 01R turbidity is greater than 50 NTU, therefore 2(b) criteria will be used. Twenty percent (20%) of the Reservoir Sample Point 01R turbidity is 20 NTU. The difference of the turbidity at Sample Points 01R and 01D is 15 NTU, which is less than the 20 NTU criteria. Therefore, this sample is a “Pass” and would have a value of “0”.

Sample 4

Reservoir Sample Point 01R turbidity measurement: 100 NTU
Discharge Sample Point 01D turbidity measurement: 150 NTU

Reservoir Sample Point 01R turbidity is greater than 50 NTU, therefore 2(b) criteria will be used. Twenty percent (20%) of the Reservoir Sample Point 01R turbidity is 20 NTU. The difference of the turbidity at Sample Points 01R and 01D is 50 NTU, which is greater than the 20 NTU criteria. Therefore, this sample is a “Fail” and would have a value of “1”.

Sample Reporting

The permittee will report all turbidity measurements from Sample Points 01R and 01D. The permittee shall also sum each pass/fail test result. In this example:

Sample 1:	0
Sample 2:	1
Sample 3:	0
Sample 4:	1
Total:	2

Therefore, the permittee would enter a “2” for STORET Code No. 51517.

d. Dissolved Oxygen

The dissolved oxygen criteria for the coldwater aquatic life designated use is 6 mg/L or more. Because the facility is not expected to add any oxygen demanding pollutants, DO modeling is not required and a limit is not proposed.

e. Toxics

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant.

The facility is a minor industrial with a highest expected monthly average flow of 0.008 MGD. For industrial facilities, the highest monthly average flow over the most recent 24-months is used

for reasonable potential calculations. Because this is a new facility that does not have previous discharges, the highest expected monthly average flow of 0.008 MGD was used.

The facility discharges to a reservoir and according to WQS 20.6.4.11.E(1) NMAC [2020 and 2022] states “Mixing zones are not allowed for discharges to lakes, reservoirs, or playas; these effluents shall meet all applicable criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.”

As a result, the CD for this facility is evaluated as follows:

Critical Dilution, $CD = Q_e / (FQ_a + Q_e)$

where:

Q_e = facility flow (0.008 MGD)

Q_a = critical low flow of the receiving waters ($Q_a = 0$)

F = fraction of stream allowed for mixing (1.0)

$CD = 0.024 \text{ CFS} / [(1.0) (0) + 0.024] = 1$

$CD = 100\%$

The reasonable potential analysis was performed using the pilot study results for those parameters with numeric criteria that were detected in the pilot study. The expected discharge dilution ratio was used in the RP calculations to ensure that limits were set based on pollutant concentrations expected in the actual effluent. To calculate the concentration of the pollutants of concern in the expected effluent the following dilution equation was used:

$$(C_1 * V_1) = (C_2 * V_2) \rightarrow C_2 = (C_1 * V_1) / V_2$$

Where:

C_1 = concentration of pollutant in the pilot test.

V_1 = volume of El Vado Reservoir water added to one portion of grout mix in the pilot study (5 gallons).

C_2 = expected concentration of pollutant in the effluent to be discharged.

V_2 = expected volume of El Vado Reservoir water that will be present in addition to (but not including) one portion of grout mix in the effluent due to the rinsing of grout hoses and grout mixing containers (58.82 gallons).

The reasonable potential analysis was conducted with the EPA approved NMWQS (effective as of May 22, 2020, for purposes of State implementation and approved by EPA for Clean Water Act Purposes on July 24, 2020). A second reasonable potential analysis was conducted with the NMWQS (as approved by the New Mexico Water Quality Control Commission, and effective on April 23, 2022), although these standards have not yet been approved by EPA. This second analysis was conducted and is included in the draft permit to ensure compliance with the 2022 NMWQS if they are approved by the EPA before this permit is issued.

For more information see the RP spreadsheet of the fact sheet (attached).

1. Dioxin (Total 2,3,7,8-TCDD equivalence)

Dioxin/total 2,3,7,8-TCDD equivalence was detected in the concentrated and untreated pilot study sample. Although it was not tested using an approved 40 CFR Part 136 method, the concentration from the pilot study had a reported detection level below the EPA Region 6 MQL and was compared to the NMWQS. The concentration reported from the pilot study did not show potential to exceed the NMWQS. Additionally, it is significant to note that dioxin has a very low water solubility, and most of the dioxin occurring in water will adhere to sediments and suspended silts (Dioxin Factsheet, USEPA). The applicant proposes to dispose of all sediments that are collected in the sedimentation basins/containers off-site at a specialized facility. As a result, there is no proposed limit for dioxin/total 2,3,7,8-TCDD equivalence in this permit.

To ensure that the discharge does not exceed the WQS for dioxin/total 2,3,7,8-TCDD equivalence and to be consistent with 40 CFR Part 136 requirements, it is proposed to sample for dioxin/ total 2,3,7,8-TCDD equivalence in the initial discharge (within 30 minutes of the first discharge), using a SSM. This data will be used to ensure compliance with WQS, or in case of an exceedance, this data could be the basis for reopening/modifying the permit to include a dioxin limit.

2. Polychlorinated biphenyls (PCBs)

PCBs were detected in the concentrated and untreated pilot study sample. When the reasonable potential was calculated with the expected discharge dilution ratio, there was no RP to exceed NMWQS. As with dioxin, most PCBs occurring in water will adhere to sediments and suspended silts (PCB Factsheet, USEPA). The applicant proposes to dispose of all sediments that are collected in the sedimentation basins/containers off-site at a specialized facility. As a result, there is no proposed limit for PCBs in this permit.

Although there is no RP for PCBs to exceed NMWQS, PCBs are a persistent and toxic pollutant. To ensure that the discharge does not exceed the WQS for total PCBs, it is proposed to sample for PCBs in the initial discharge (within 30 minutes of the first discharge), using a SSM. This data will be used to ensure compliance with WQS, or in case of an exceedance, this data could be the basis for reopening/modifying the permit to include a limit on PCBs.

3. Other Toxics

Quinoline, formaldehyde, and MBAS were found to be present in the concentrated and untreated pilot study sample. MBAS is an acronym for “methylene blue active substance” and is a measure of the concentration of anionic surfactants. None of these three chemicals have numeric WQS in New Mexico. NMAC 20.6.4.13.F states that ... “surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.”. The WET test conducted on the concentrated and untreated pilot study sample found that there

was no toxicity due to these pollutants. To promptly ensure that the actual discharge isn't releasing these pollutants in toxic amounts, it is proposed that a WET test sample is collected within 30 minutes of the first discharge.

4. Additional Effluent Pollutant Characterization Testing

This is a new discharge with a lack of similar project effluent characterization data. To promptly ensure that the actual discharge does not exceed NMWQS, it is proposed that a sample is taken during the initial discharge (within 30 minutes of the first discharge). This sample shall be tested for all pollutants believed to be present in the discharge, as was determined by the pilot study and application. A list of these pollutants can be found in Part I.B of the proposed permit. This requirement is consistent with 40 CFR 122.21(k)(5)(vi).

EPA Region 6 established additional permit application pollutant data requirements for the protection of NMWQS for human health pollutants in December 2007. The elements of that policy are contained in the NMIP. The NMIP requires data submitted for human health parameters to analyze the applicable parameters, and not use "believed absent" in reporting results. The analytical results must be tested to the MQL listed in Appendix A of Part II of the proposed permit, be defensible and represent periods of normal facility activity. Although the pilot study did include testing for the applicable human health parameters and had non-detects for all of them except PCBs and dioxin, most of the parameters were not tested using a sufficiently sensitive method as defined at 40 CFR 122.21(e)(3). In order to be consistent with 40 CFR 122.21(k)(5)(vi) and the NMIP, the proposed permit requires these pollutants to be sampled for during the initial discharge (within 30 minutes of the first discharge). These pollutants must be tested for using a sufficiently sensitive method as defined at 40 CFR 122.21(e)(3). This data will be representative of periods of normal facility activity, as required by the NMIP, and will be used to ensure compliance with WQS, or in case of an exceedance, this data could be the basis for reopening/modifying the permit to include a limit.

f. Monitoring Frequencies for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1). Sample type and frequency established in the proposed permit is based on the recommended type and monitoring frequencies for industrial wastewater permits with normal flow frequencies of once per day as defined in Table 10 of the March 12, 2012, NMIP. Project operations are only expected to create a discharge when rinsing out the grout lines and grout mixing containers from the project, therefore an expected discharge of once per day is reasonable. The NMIP does not have a recommended sampling frequency for turbidity, but it recommends a sampling frequency of three times per week for TSS. Because TSS and turbidity are measurements of a similar parameter (sediment), it is proposed that the sampling frequency for turbidity is three times per week. Due to the intermittent and short-term nature of the discharge, it is proposed that the discharge flow can be estimated based on a reasonable scientific method, and that estimate does not need to be subject to the accuracy provisions established at Part III.C.6.

Parameter	Frequency	Sample Type
Flow	1/Day	Estimated
pH	1/Day	Grab
Temperature	1/Day	Grab
Turbidity (Ambient Reservoir and Discharge)	3/Week	Grab
Turbidity	1/Week	Calculated

Footnotes:

*1 Samples only need to be taken when discharging.

*2 Regulations at 40 CFR Part 136 generally require "grab" samples to be preserved or analyzed within 15 minutes of collection.

*3 "Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. Flow may be estimated using sound analytical techniques.

D. WHOLE EFFLUENT TOXICITY

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 12 (page 43) of the NMIP outlines the type and frequency of WET testing for different types of discharges. Based on the plant design flow and the type of receiving stream, the critical condition for the facility is 100%. The permittee shall conduct a 48-hour acute test, once every six months, using *Ceriodaphnia dubia* and *Daphnia pulex*.

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The permittee shall conduct separate whole effluent toxicity tests in accordance with the table below:

APPLICABLE TO FINAL OUTFALL(S) 001	
REPORTED AS FINAL OUTFALL	001
CRITICAL DILUTION (%)	100%
EFFLUENT DILUTION SERIES (%)	32%, 42%, 56%, 75%, 100%
TEST SPECIES AND METHODS	Daphnia pulex/ Method 2021.0 (EPA/821/R-02-012 or latest version)
	Pimephales promelas/ Method 2000.0 (EPA-821-R-02-012 or latest version)

E. FINAL EFFLUENT LIMITATIONS

See the draft permit for limitations.

VI. FACILITY OPERATIONAL PRACTICES

A. OPERATION AND REPORTING

The permittee must submit Discharge Monitoring Report's (DMR's) quarterly, beginning on the effective date of the permit, lasting through the expiration date of the permit or termination of the permit, to report on all limitations and monitoring requirements in the permit.

VII. 303(d) LIST

El Vado Reservoir was assessed in 2016 to determine if it attained water quality standards and supported its designated uses through the State of New Mexico Clean Water Act 303(d)/305(b) process. It is fully supporting of irrigation storage, livestock watering, wildlife habitat, primary contact, and coldwater aquatic life. The public water supply use has not been assessed as of the 2022-2024 State of New Mexico Clean Water Act §303(d)/§305(b) Integrated List.

The receiving water, El Vado Reservoir is not listed for impairment in the 2022-2024 State of New Mexico Clean Water Act §303(d)/§305(b) Integrated List, therefore no WQ-based effluent limitations are proposed based on the §303(d) list.

VIII. ANTIDegradation

Water quality standards include a framework and methodology known as “antidegradation” for deciding if, when, and how water quality may be degraded. Antidegradation applies to all activities with the potential to adversely affect water quality or existing or designated uses, including any new point source discharges. The New Mexico Environment Department (NMED), acting under authority delegated by the Water Quality Control Commission, implements water quality standards in the State of New Mexico, including the antidegradation policy and implementation plan. As such, NMED “requires the highest and best degree of wastewater treatment practicable and commensurate with protecting and maintaining the designated uses and existing water quality.” (20.6.4.8(B) New Mexico Administrative Code or NMAC).

The U.S. Bureau of Reclamation (USBOR) and their contractors are proposing a new point source discharge related to grouting operations and cleaning grout lines and equipment. This new point source discharge is not covered by the U.S. Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). The USBOR proposes to discharge to El Vado Lake (Reservoir).

El Vado Reservoir is a classified water of the state and described in Section 20.6.4.120 NMAC. Designated uses of El Vado Reservoir are irrigation storage, livestock watering, wildlife habitat, public water supply, primary contact, and coldwater aquatic life. Pursuant to New Mexico's antidegradation regulations and procedures, the NMED Surface Water Quality Bureau (SWQB) conducted an antidegradation review of USBOR's proposed discharge to El Vado Reservoir.

SWQB evaluated water quality data from the SWQB's 2012 and 2014 water quality surveys, supplemented by the USBOR Carpi USA pilot study source water data, to determine baseline water quality and assimilative capacity of the receiving water (20.6.4.120 NMAC El Vado Reservoir). SWQB also evaluated data provided in the NPDES application and pilot study grout mix supernatant concentrations to estimate the proposed effluent discharge concentration.

As a result of the antidegradation review, NMED-SWQB concludes that the proposed discharge will not result in “significant degradation” as defined in New Mexico’s Antidegradation Policy Implementation Procedure and characterized by the baseline water quality evaluation.

NMED-SWQB determined that the antidegradation review process is complete and the permitting process may proceed. The summary of the antidegradation calculations and results are attached.

SWQB is still evaluating if additional monitoring is needed during the actual discharge of wastewater, and will provide those requirements, if necessary, in the State’s Clean Water Act Section 401 certification.

IX. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet Antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR 122.44(l), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance. This is a new permit issuance with no previous effluent limitations.

X. ENDANGERED SPECIES CONSIDERATIONS

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, USBR has reviewed this project for its effect on listed threatened and endangered species and designated critical habitat. The USBR identified seven federally endangered (E)/threatened (T) species listed under the Endangered Species Act that are within the project area: Canada lynx (*Lynx canadensis*)(T), New Mexico meadow jumping mouse (*Zapus hudsonius luteus*)(E), Mexican Spotted Owl (*Strix occidentalis lucida*)(T), Southwestern willow flycatcher (*Empidonax traillii extimus*)(E), and Yellow-billed cuckoo (*Coccyzus americanus*)(T). USBR determined that no critical habitat in the project area will be disturbed by the dam rehabilitation for any of the listed species that could occur there. The following analysis was supplied by the USBR for the listed species identified in the project area:

- “Canada Lynx: If it occurred near the project area it would only be incidental. Habitat downstream and upstream of the construction area are not going to be altered by the project so no effect for this species.
- New Mexico Meadow Jumping Mouse: Does not occur in the project area. Since project will not effect flows upstream or downstream of construction area all wetlands and potential NM Meadow Jumping Mouse habitat will not be effected by the project. No effect for the species.
- Mexican Spotted Owl: Does not occur in the project area. No effect on the species.
- Southwest Willow Flycatcher: Does not occur in the project area. Since the project will not effect flows upstream or downstream the species habitat on the Rio Chama will not be effected. No effect for the species.

- Yellow Billed Cuckoo: Does not occur in the project area. Since the project will not effect flows upstream or downstream the species habitat on the Rio Chama will not be effected. No effect for the species.”

The ‘no effect’ determination was formalized in the April 2020 Environmental Assessment (EA) for the project. Below is the rationale that USBR provided in the EA for elimination of ESA-listed species from further study:

“Based on the temporary changes to the river and reservoirs during the dam work, species downstream of El Vado reservoir would not be affected based on how operations will be done during the construction period. There are no listed species within El Vado Reservoir or the proposed construction limits.”

EPA ran an IPaC report for the El Vado Reservoir Dam and surrounding shoreline that is expected to be impacted from the project (obtained from <http://ecos.fws.gov/ipac>) on November 10, 2022 that checked for federally endangered (E)/threatened (T) species listed under the Endangered Species Act. The official species list that was received from the USFWS found that there were no critical habitats within the El Vado Dam project area. The official species list identified species that may be present in the project area and many of those were the same federally endangered/threatened species as USBR identified, but included two additional species that USBR did not identify and did not include the Canada Lynx.

The Jemez Mountains Salamander (*Plethodon neomexicanus*) was identified in the official species list (obtained by EPA from IPaC on November 10, 2022). Based on a review of the distribution of the Jemez Mountains Salamander (*Plethodon neomexicanus*), it is not expected to be impacted by this discharge because it is restricted to the Jemez Mountains around the rim of the collapsed caldera (large volcanic crater), with some occurrences on topographic features (e.g., resurgent domes) on the interior of the caldera (78 FR 55601). The proposed discharge is not located in the Jemez Mountains caldera area. Because the proposed activity and the draft permit are consistent with WQS, and therefore protective of wildlife, EPA has concluded that the issuance of this permit will have “no effect” on the Jemez Mountains Salamander.

The Mexican Wolf (*Canis lupus baileyi*) was also identified in the official species list (obtained by EPA from IPaC on November 10, 2022). Based on a review of the life-history needs of the Mexican Wolf, it is not expected to be impacted by this discharge because it’s prey requirements, range requirements, and other necessary species needs will not be impacted by this project. Additionally, the proposed discharge is not located within the Mexican Wolf Experimental Population Area. Because the proposed activity and the draft permit are consistent with WQS, and therefore protective of wildlife, EPA has concluded that the issuance of this permit will have “no effect” on the Mexican Wolf.

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, and based on the analysis completed by USBR, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. After review, EPA has determined that the issuance of this permit will have “no effect” on listed threatened and endangered species nor will it adversely modify designated critical habitat.

XI. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), mandates that federal agencies consider the potential effects of a proposed Federal undertaking on historic properties. Historic properties are defined as any prehistoric or historic district, site, building, structure, or object included in, or eligible for, inclusion in the National Register of Historic Places (NRHP). USBR completed an analysis of potential effects of the project on historic properties for the April 2020 EA. The findings from the EA are summarized below:

Reclamation completed a Class I literature review and a Class III cultural resource inventory for the project area. A single site was identified within the project area: El Vado Dam.

In accordance with 36 CFR 800.4, the site was evaluated for significance in terms of NRHP eligibility. Based upon these considerations, Reclamation concurred with a previous recommendation that El Vado Dam is a historic resource eligible for inclusion on the NRHP and the New Mexico State Historic Preservation Officer concurred with this determination on March 23, 2020.

The Proposed Action would cause an alteration to the characteristics of the dam which make it eligible for the NRHP and would, therefore, have an adverse effect on the property according to 36 CFR 800.16(i).

In compliance with 36 CFR 800.4(dx2) and 36 CFR 800.11(e), a copy of the cultural resource inventory report and a determination of historic properties affected was submitted to the New Mexico SHPO, the Advisory Council on Historic Preservation, tribes which may attach religious or cultural significance to historic properties possibly affected by the Proposed Action for consultation, and other interested parties.

Pursuant to 36 CFR 800.6(c), a Memorandum of Agreement (MOA) was developed to resolve the adverse effects to the dam. Signatories to the MOA included USBR, SHPO, and the Rio Chama Acequia Association. The MOA was executed prior to project implementation, in September 2020.

XII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards are promulgated or revised. In addition, if the State amends or approves a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

XIII. ENVIRONMENTAL JUSTICE CONSIDERATIONS

Executive Order 13985, *Advancing Racial Equity and Supporting for Underserved Communities through the Federal Government* signed on January 20, 2021, directs each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as

appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities.” The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. “Overburdened” communities can include minority, low-income, tribal, and indigenous populations or communities that potentially experience disproportionate environmental harms and risks. As part of an agency-wide effort, the EPA Region 6 will consider prioritizing enhanced public involvement opportunities for EPA-issued permits that may involve activities with significant public health or environmental impacts on already overburdened communities. For more information, please visit <http://www.epa.gov/ejscreen>.

As part of the Permit development process, the EPA conducted a screening analysis to determine whether this Permit action could affect overburdened communities. The EPA used EJScreen 2.0, a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify Permits for which enhanced outreach may be warranted.

The study area was chosen at the proposed Outfall 001 into El Vado Reservoir and included a 4-mile buffer around the outfall. The EJ Screen score for the state percentile of the facility was at the 74th percentile, and this is below the 80th percentile cut-off for engaging in enhanced outreach around the availability of the Draft Permit for review and comment. Therefore, the El Vado Dam Project is not considered to be discharging in a potential EJ community, nevertheless the Jicarilla Apache Nation Reservation borders the Dam to the North, West and South. A Tribal Consultation will be offered to the Jicarilla Apache Nation Reservation during the comment period to provide the Tribe with a meaningful consultation for Agency actions that may potentially affect them.

XIV. VARIANCE REQUESTS

No variance requests have been received.

XV. COMPLIANCE HISTORY

This is a first-time issue; no compliance history exists.

XVI. CERTIFICATION

The permit is in the process of certification by the State Agency following regulations promulgated at 40 CFR §124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers, to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

XVII. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XVIII. ADMINISTRATIVE RECORD

The draft NPDES permit, and data used to write the permit can be reviewed or obtained by contacting EPA's Region 6 office. Draft permits, fact sheets, and other information can also be found by visiting the U.S. EPA NPDES website at www.epa.gov/npdes-permits. The following information was used to develop the proposed permit:

A. APPLICATION MATERIALS(s)

An EPA NPDES Application for a Permit to Discharge (Form 1 & 2D) was received on December 23, 2021. The application was deemed administratively complete on January 24, 2022.

Pilot Test for El Vado Grouting Operations. Prepared by Martha Monserrate, P.E.. Contractor for the U.S. Bureau of Reclamation. July 7, 2022.

El Vado Grout Waste Management Plan. Prepared by Martha Monserrate, P.E.. Contractor for the U.S. Bureau of Reclamation. July 12, 2022.

B. 40 CFR CITATIONS

Citations to 40 CFR are as of June 10, 2022. Sections 122, 124, 125, 133, 136.

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, effective, effective July 24, 2020. <https://www.epa.gov/sites/default/files/2014-12/documents/nmwqs.pdf>.

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, March 15, 2012. https://www.epa.gov/sites/default/files/2020-02/documents/ip_nmed_edit_v10_march_15_2012_r.pdf.

2022 - 2024 State of New Mexico Clean Water Act §303(d)/§305(b) Integrated List

2022-12-05 - NMED - NM0031228 USBOR El Vado Antidegradation - No Significant Degradation

2022-12-05 - NMED - NM0031228 USBOR El Vado Antidegradation Analysis Calculations

D. MISCELLANEOUS REFERENCES

USFWS Official Species List for the El Vado Reservoir Dam and surrounding shoreline (obtained from <http://ecos.fws.gov/ipac>) on November 10, 2022.

Federal Register / Vol. 78, No. 175 / Tuesday, September 10, 2013 / Rules and Regulations. Pages 55599-55627.

Federal Register / Vol. 80, No. 11 / Friday, January 16, 2015 / Rules and Regulations. Pages 2488-2512.

Jemez Mountain Salamander. U.S. Fish and Wildlife Service.
<https://www.fws.gov/species/jemez-mountains-salamander-plethodon-neomexicanus>

El Vado Dam – Safety of Dams Modification Project Draft Environmental Assessment, April 2020. U.S. Bureau of Reclamation.

Memorandum of Agreement Between the Bureau of Reclamation and the New Mexico State Historic Preservation Officer Regarding the El Vado Repair Project. September 2020.

Consumer Factsheet on: DIOXIN (2,3,7,8-TCDD). USEPA.
<https://archive.epa.gov/water/archive/web/pdf/archived-consumer-fact-sheet-on-dioxin.pdf>.

Polychlorinated biphenyls (PCBs)(Arochlors). USEPA.
<https://www.epa.gov/sites/default/files/2016-09/documents/polychlorinated-biphenyls.pdf>

Emails from Tami Knight, Consultant for the U.S. Bureau of Reclamation –to Bryn Copson, EPA, dated January 12, 2022; January 17, 2022; January 24, 2022, March 11, 2022, March 15, 2022, and March 16, 2022 on clarification about the submitted NPDES Application Forms and project details.

Emails from Martha Monserrate, Contractor for the U.S. Bureau of Reclamation –to Bryn Copson, EPA, dated March 9, 2022; April 4, 2022; April 6, 2022, April 7, 2022, April 11, 2022, April 19, 2022, May 12, 2022, June 28, 2022, July 7, 2022, July 13, 2022, August 29, 2022, September 28, 2022 on pilot study information and effluent treatment specifications.

Emails from Erin Shea, NMED, to Bryn Copson, EPA, dated March 28, 2022, March 28, 2022, April 8, 2022, July 18, 2022, July 27, 2022, August 22, 2022, and September 23, 2022 on pilot study information and comments on permit conditions.

Emails from Michael Vollmer, USBR, to Bryn Copson, EPA, dated March 10, 2022 and March 16, 2022 on ESA and NHPA information related to the El Vado Dam repair project.

Emails from Jared Baxter, USBR, to Bryn Copson, EPA, dated March 10, 2022 on ESA information related to the El Vado Dam repair project.