

NPDES PERMIT NO. NM0031236
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

August 6, 2026

PERMIT ACTION

It is proposed that the facility be issued an 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 2, 2026

RECEIVING WATER – BASIN

Carlisle Creek (Segment 20.6.4.98 NMAC) to Gila River of the Upper Gila-Mangas Basin

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
COD	Chemical oxygen demand
USACE	United States Army Corps 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
F&WS	United States Fish and Wildlife Service
mg/l	Milligrams per liter (one part per million)
ug/l	Micrograms per liter (one part per billion)
MGD	Million gallons per day
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
SIC	Standard industrial classification
s.u.	Standard units (for parameter 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
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service

WLA	Wasteload 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

The facility is a new discharger.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, Jim Crow Mine is located in Grant County, New Mexico. Under the Standard Industrial Classification (SIC) Code(s) 1041, the applicant states it operates an underground silica mine that includes small amounts of gold and silver ore.

The Jim Crow Imperial Mine is an active underground hard-rock mining operation. The ore body consists predominantly of silica-based material (approximately 90% silica content) bearing gold and silver mineralization. Mining is conducted through conventional underground methods, with ore extracted from depth via a vertical shaft system. Ore is brought to the surface via the mine's primary shaft, which serves as the principal means of hoisting mined material from underground workings. Upon reaching the surface, ore is transported by truck to a mill processing facility located in Duncan, Arizona, for further beneficiation and recovery of precious metal content. Natural groundwater accumulates within the mine workings at a rate of approximately 15 gallons per minute from the mine body. To manage accumulated water and maintain safe and operable underground conditions, the mine conducts active dewatering operations. Water is discharged at a rate of approximately 100 gallons per minute, operating on a schedule of approximately 10 hours per day, continuing until the accumulated water volume has been fully pumped out.

This permit authorizes discharges from mine dewatering and does not authorize stormwater or any other discharges including discharges from onsite ponds. Applicant will pursue coverage under the Multi-sector General Permit for Stormwater Discharges for any stormwater discharges. More information is available at <https://www.epa.gov/npdes-permits/npdes-stormwater-program-region-6>.

The discharges from Outfall 001 flow into Carlisle Creek (Segment 20.6.4.98 NMAC) of the Upper Gila-Mangas Basin. AU Unit: NM-2502.A_02.

III. EFFLUENT CHARACTERISTICS

Outfall 001: Latitude 32° 49' 00.00" N, Longitude 108° 58' 53.00" W

Quantifiable Data submitted in Form 2D and via lab reports is as follows:

Parameter	Max	Avg
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	(mg/L unless noted)	
Flow (MGD)	0.0288	N/A
pH, minimum, standard units (s.u.)	7.6	N/A
pH, maximum, standard units (s.u.)	7.8	N/A
Temperature (Summer)	22°C	N/A
Aluminum*, total	1.0	N/A
Mercury*, total	0.0005	N/A
Barium, total	2.5	1.25
Boron, total	1.1	0.55
Iron, total	1.0	0.5
Molybdenum, total	2.3	1.15
Manganese, total	2.2	1.28
Cadmium*, total	0.0010	N/A
Chromium*, total	0.015	N/A
Copper*, total	0.010	N/A
Lead*, total	0.020	N/A
Nickel*, total	0.025	N/A
Selenium, total	2.0	1.0
Silver*, total	0.005	N/A
Zinc*, total	0.020	N/A
Sulfate (as SO ₄)	6.0	3.0
Magnesium, total	34.0	28.0

Table 1. The table includes pollutant data submitted on the application and lab reports provided by the permittee.

*Pollutants reported as non-detect, at levels above MQL's and SSM. Detection limits are reported in the chart. Half of the detection limit was used for RP analysis.

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.

In some mining facilities leachate from waste rock site or seepage of mine water settling pond or tailing pond may reach surface water through hydrologic connection. This permit does not authorize any discharge through hydrologic connection nor discharges at locations other than Outfall 001 as specified in the permit.

An application submitted on September 16, 2025, was deemed incomplete. Additional information was received on October 8, 2025, November 20, 2025, January 15, 2026 and January 20, 2026; and the application was deemed to be complete on January 30, 2026. Antidegradation was initiated with NMED. Antidegradation analysis letter was received from NMED by EPA on April 7, 2026. It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR §122.46(a).

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.

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 Limitation Guidelines

The provisions of Subpart J—Copper, Lead, Zinc, Gold, Silver, and Molybdenum Ores of 40 CFR 440 are applicable to discharges from mines that produce silver and gold bearing ores. Application of Subpart J is appropriate since gold and silver will be produced during mining operations. In addition, the SIC code of the facility, 1041, makes application of Subpart J appropriate. There are no applicable ELGs for Silica. EPA has promulgated regulations under the Clean Water Act (CWA) that establish effluent limitations guidelines for existing sources, standards of performance for new sources and pretreatment standards for new and existing

sources. The CWA and EPA regulations define when a source is a new source. A discharger is defined as a new source in CWA sections 306(a)(2) and 307(c) and §§ 122.2 (for direct dischargers) and 403.3(m) (for indirect dischargers). In general, a facility is a new source if it begins construction after either the date of promulgation of new source performance standards applicable to the direct dischargers or the date of publication of a proposed new source performance standard applicable to an indirect discharger. The mine began production as early as 1895 and therefore was established prior to the publication date of 40CFR440 (January 17, 1983) therefore new source performance standards do not apply. BPT at §440.102 and BAT at §440.103 will apply.

Pollutants with ELG's established at 40 CFR Part 440.102 (BPT) are Copper, Zinc, Lead, Mercury, pH, and TSS. Pollutants with ELG's established at 40 CFR Part 440.103 (BAT) are Copper, Zinc, Lead, Mercury, and Cadmium. Water quality-based effluent limitations are established in the proposed draft permit for copper daily maximum limits of .30 mg/l and 30 day average limits of 0.15 mg/l, zinc daily maximum limits of 1.5 mg/l and 30 day average limits of 0.75 mg/l, lead daily maximum limits of 0.6 mg/l and 30 day average limits of 0.3 mg/l, mercury daily maximum limits of 0.002 mg/l and 30 day average limits of 0.001 mg/l, cadmium daily maximum limits of 0.10 mg/l and 30 day average limits of 0.05 mg/l, pH range of 6.0 – 9.0 s.u. and TSS daily maximum limits of 30.0 mg/l and 30 day average limits of 20.0 mg/l are all found at (§440.102(a) and -§440.103(a)).

A summary of the technology- based limits for the facility is:

Effluent Characteristic	Discharge limitations Daily Max (mg/l unless noted)	Discharge Limitations 30-day Avg (mg/l unless noted)
Copper, total	0.30	0.15
Zinc, total	1.5	0.75
Lead, total	0.6	0.3
Mercury, total	0.002	0.001
Cadmium, total	0.10	0.05
pH (range)	6.0 -9.0 s.u.	-
TSS	30.0	20.0

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. 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 surface WQS of the receiving waters are protected and maintained or attained.

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 NMWQS (20.6.4 NMAC effective on June 13, 2024). The discharge is to Carlisle Creek, which is classified as an intermittent water (20.6.4.98 NMAC). The designated uses of the receiving water are livestock watering, wildlife habitat, primary contact and marginal warmwater aquatic life.

Designated uses established under the State's Water Quality Standards may be removed or made less stringent only if a Use Attainability Analysis (UAA) demonstrates that attaining the current designated use is not feasible due to one of the factors listed in 40 CFR 131.10(g). A UAA has not been conducted for Carlisle Creek; therefore, numeric criteria applicable to designated uses of 20.6.4.98 NMAC applies to this discharge and use-specific criteria in 20.6.4.900 NMAC include numeric criteria for both acute and chronic 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

For marginal warmwater aquatic life and primary contact, criteria for pH is between 6.6 and 9.0 s.u. pursuant to 20.6.4.900.D and H(6) NMAC.

b. 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 criteria, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of Form 1 and 2D, to apply for an NPDES permit or reissuance of an NPDES permit. The forms were designed and promulgated to "make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the Rule. These forms became

effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

Based on the pollutant data provided by the facility, a water quality screen has been run to determine if discharged pollutant concentrations demonstrate RP to exceed WQS for the various designated uses. If RP exists, the screen would also calculate the appropriate permit limit needed to be protective of such designated uses. The screen is based on the NMIP as of March 15, 2012. The receiving stream hardness value, 20 mg/L, represents the default values, and it was used in the screen for any hardness-dependent WQS. The water quality screen is included in the Fact Sheet. Receiving stream TSS value provided by the permittee was ND with a MQL of 10 mg/l. Therefore 10 mg/l was used in the water quality screen. EPA typically uses 30 mg/l for intermittent streams, however EPA believes that using the more representative concentration obtained from the sample of the stream would ensure protection.

Total Aluminum, Dissolved Cadmium, Dissolved Manganese, Dissolved Nickel, Dissolved Silver, and Total Mercury demonstrated RP to exceed WQS consistent with the designated uses for the receiving water. Therefore, effluent limitations and monitoring requirements for Total Aluminum, Dissolved Cadmium, Dissolved Manganese, Dissolved Nickel, Dissolved Silver and Total Mercury are established at Outfall 001. In accordance with 40 CFR 122.45(c), total recoverable metal concentration must be established as effluent limitations. The exceptions listed in that sub-section refers to technology-based, not WQ-based, criteria. The permittee must report total or total recoverable metal concentrations for compliance purpose. Because State WQS nickel and silver were dissolved-based criteria, the linear partition coefficient for nickel and silver to convert dissolved nickel and silver concentration to total concentration is used to calculate the maximum daily effluent limitation. However, because a partition coefficient for aluminum is not available, the effluent limitation for total aluminum is based on the dissolved criteria.

During the public notice period the permittee may submit data for aluminum, nickel, and silver in the dissolved form for a water quality screening directly with numeric criteria in the proper form. In addition, the permittee may submit receiving stream hardness to be used in the water quality screening. The permit proposes to include monitoring for hardness (CaCO₃) for later RP analysis.

Note that for pollutants reported as non-detect, at levels above MQL's and SSM (marked with an asterisk in Table 1.), EPA used ½ of the detection level listed on the lab results for the purposes of RP analysis. During the comment period, the permittee may also retest for pollutants marked with an asterisk in Table 1, with the appropriate detection levels and provide lab results to EPA for re-analysis of reasonable potential

1. Aluminum, total recoverable

Aluminum demonstrated RP to exceed WQS consistent with the designated uses for the receiving water. Therefore 30-day average will be limited to 0.151 mg/l and daily max will be limited to 0.151 mg/l. 30 Day average and daily max loading limitations will be .036 lbs/day.

2. Cadmium, dissolved

Cadmium demonstrated RP to exceed WQS consistent with the designated uses for the receiving water. Therefore 30-day average will be limited to 0.00014 mg/l and daily max will be limited to 0.00014 mg/l. 30-Day average and daily max loading limitations will be 0.000034 lbs/day.

3. Manganese, dissolved

Manganese demonstrated RP to exceed WQS consistent with the designated uses for the receiving water. Therefore 30-day average will be limited to 0.97 mg/l and daily max will be limited to 0.97 mg/l. 30-Day average and daily max loading limitations will be 0.23 lbs/day.

4. Nickel, dissolved

Nickel demonstrated RP to exceed WQS consistent with the designated uses for the receiving water. Therefore 30-day average will be limited to 0.013 mg/l and daily max will be limited to 0.013 mg/l. 30-Day average and daily max loading limitations will be 0.007 lbs/day.

5. Silver, dissolved

Silver demonstrated RP to exceed WQS consistent with the designated uses for the receiving water. Therefore 30-day average will be limited to 0.0002 mg/l and daily max will be limited to 0.0002 mg/l. 30-Day average and daily max loading limitations will be 0.00016 lbs/day.

6. Mercury, total

Mercury demonstrated RP to exceed WQS consistent with the designated uses for the receiving water. Water quality based limits with 30-day average of 0.00077 mg/L and daily max of 0.00077 mg/l are more stringent than the technology based limit of 0.002 mg/L daily max and 0.001 mg/L 30-day average, therefore water quality based limits for zinc of 0.00077 mg/L 30-day average and 0.00077 mg/L daily max will be established in the draft permit. 30-Day average and daily max loading limitations will be 0.000185 lbs/day.

A summary of the water- quality based limits for the facility is:

Effluent Characteristic	Discharge limitations Daily Max (mg/l unless noted)	Discharge Limitations 30-day Avg (mg/l unless noted)	Discharge limitations Daily Max (lbs/day unless noted)	Discharge Limitations 30-day Avg (lbs/day unless noted)
Cadmium, dissolved	0.00014	0.00014	0.000034	0.000034
Aluminum, total recoverable	0.151	0.151	0.036	0.036
Nickel, dissolved	0.013	0.013	0.007	0.007
Silver, dissolved	0.0002	0.0002	0.00016	0.00016
Manganese, dissolved	0.97	0.97	0.23	0.23
Mercury, total	0.00077	0.00077	0.000185	0.000185
Hardness, dissolved	Report	N/A	N/A	N/A
pH (range)	6.6-9.0	N/A	N/A	N/A

In addition, discharge from industrial facilities for permits issued to protect NMWQS need to analyze at a minimum certain human health pollutants. See table below.

POLLUTANT (*1)	POLLUTANT (*1)	POLLUTANT (*1)
Antimony, (dissolved (D))	Zinc, (D)	Dieldrin
Arsenic, (D)	Aldrin	2,3,7,8-TCDD dioxin
Nickel, (D)	Benzo (a) pyrene	Hexachlorobenzene
Selenium, (D)	Chlordane	PCBs
Thallium, (D)	4,4' -DDT and derivatives	Tetrachloroethylene

c. PFAS

At this time, EPA has no data indicating that PFAS is present in the discharge. As explained at <https://www.epa.gov/pfas>, PFAS are a group of synthetic chemicals that have been in use since the 1940s. PFAS are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations can be contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase risk of adverse health effects. EPA is collecting information to evaluate the potential impacts that discharges of PFAS from industrial plants may have on downstream drinking water, recreational and aquatic life uses.

Although the New Mexico Water Quality Standards do not include numeric criteria for PFAS, the 2024 New Mexico Water Quality Standards narrative criterion supply guidance including:

20.6.4.7(E)(2) NMAC states: “**Emerging contaminants**” refer to water contaminants that may cause significant ecological or human health effects at low concentrations. Emerging contaminants are generally chemical compounds recognized as having deleterious effects at environmental concentrations whose negative impacts have not been fully quantified and may not have regulatory numeric criteria.

20.6.4.7(T)(2) NMAC states: “**Toxic pollutant**” means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.

Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the draft permit requires that the facilities conduct influent, effluent, and sludge sampling for PFAS according to the frequency outlined in the permit.

The purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis. EPA is authorized to require this monitoring and reporting by CWA § 308(a), which states:

“SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—

A. the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require;”.

EPA notes that there is currently not an analytical method approved in 40 CFR Part 136 for PFAS. As stated in 40 CFR § 122.44(i)(1)(iv)(B), in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters. Therefore, the draft permit specifies that until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Method 1633. The Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with method 1633, if appropriate. This is consistent with the December 5, 2022 USEPA Memorandum, *Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs*, from Radhika Fox (<https://www.epa.gov/newsreleases/epa-issues-guidance-states-reduce-harmful-pfas-pollution>).

In October 2021, EPA published a PFAS Strategic Roadmap that described EPA’s commitments to action for 2021 through 2024. This roadmap includes a commitment to issue new guidance recommending PFAS monitoring in both state-issued and federally-issued NPDES permits using EPA’s recently published analytical method 1633. In anticipation of this guidance, EPA has included PFAS monitoring in the draft permit using analytical Method 1633 (<https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas>).

As a result, influent and effluent PFAS monitoring has been included in the draft permit at a monitoring frequency of once per permit term (5 years). See draft permit for further reporting requirements.

d. Bottom Deposits and Turbidity

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. Turbidity attributable to other than natural causes shall not reduce light transmission to

the point that the normal growth, function, or reproduction of aquatic life is impaired or that will cause substantial visible contrast with the natural appearance of the water.

e. Critical dilutions

Critical dilutions are used to establish certain permit limitations and conditions. The State of New Mexico WQS allows a mixing zone for establishing pollutant limits in discharges. Both the NMWQS and NMIP establish a critical low flow designated as 4Q3, as the minimum average four consecutive day flow which occurs with a frequency of once in three years.

In accordance with NMIP, critical dilution in intermittent or ephemeral streams shall be 100% effluent. The facility is required to do a chronic WET test using *Ceriodaphnia dubia* and *Pimephales promelas*.

f. Monitoring Frequency 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 frequency is based on the March 15, 2012, Procedures for Implementing NPDES Permits in New Mexico (NMIP). Regulations at 40 CFR Part 136 define instantaneous grab as being analyzed within 15 minutes of collection. Parameters shall be monitored as specified below:

Parameter	Frequency	Sample Type
Flow	1/Day	Estimate
Copper, total	3/Week	Grab
Zinc, total	3/Week	Grab
Lead, total	3/Week	Grab
Mercury, total	3/Week	Grab
Cadmium, dissolved	3/Week	Grab
Cadmium, total	3/Week	Grab
Aluminum, total recoverable	3/Week	Grab
Nickel, dissolved	3/Week	Grab
Silver, dissolved	3/Week	Grab
Manganese, dissolved	3/Week	Grab
Hardness, dissolved	1/Week	Grab
pH (range)	1/Day	Instantaneous Grab*
TSS	3/Week	Grab

*Regulations at 40 CFR Part 136 define "grab" as instantaneous grab, analyzed within 15 minutes of collection.

D. WHOLE EFFLUENT TOXICITY

Based on the nature of the facility and the discharge, there is potential for toxicity. In Section C.e. above; "Critical Conditions", it was shown that the critical dilution, CD, for the facility is 100%. Based on the nature of the receiving water; intermittent, and the critical dilution; 100%, the NMIP directs the WET test to be a chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* at a

once per 5 year frequency consistent with the NMIP. The test series will be 0% (control), 32%, 42%, 56%, 75%, and 100%.

During the period beginning the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001. Discharges shall be limited and monitored by the permittee as specified below:

Final Effluent Limits

WHOLE EFFLUENT TOXICITY TESTING (Chronic Static Renewal/ NOEC) *	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<i>Ceriodaphnia dubia</i>	REPORT	1/5 years	24-Hr Composite
<i>Pimephales promelas</i>	REPORT	1/5 years	24-Hr Composite

*Monitoring and reporting requirements begin on the effective date of this permit. See Part II of the permit, Whole Effluent Toxicity Testing Requirements, for additional WET monitoring and reporting conditions. Grab samples are allowed per method, if needed.

E. OPERATION AND E-REPORTING

The applicant is required to monitor the facility's discharge on a regular basis; and report the results quarterly if discharging. The monitoring results will be available to the public.

Electronic Reporting Rule

The EPA published the electronic reporting rule in the federal register (80 FR 64063) on October 22, 2015. The rule became effective on December 21, 2015. One year after the effective date of the final rule, NPDES regulated entities that are required to submit DMRs (including majors and non-majors, individually permitted facilities and facilities covered by general permits) must do so electronically. All DMRs shall be electronically reported effective December 21, 2016, per 40 CFR 127.16. If you are submitting on paper before December 21, 2016, you must report on the Discharge Monitoring Report (DMR) Form EPA. No. 3320-1 in accordance with the "General Instructions" provided on the form. No additional copies are needed if reporting electronically; however, when submitting paper form EPA No. 3320-1, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and other agencies as required. (See Part III.D.IV of the permit.). To submit electronically, access the NetDMR website at www.epa.gov/netdmr and contact the R6NetDMR@epa.gov in-box for further instructions. PA and authorized NPDES programs will begin electronically receiving these DMRs from all DMR filers and start sharing these data with each other.

Sufficiently Sensitive Analytical Methods (SSM)

The permittee must use sufficiently sensitive EPA-approved analytical methods (SSM) (under 40 CFR part 136 or required under 40 CFR chapter I, subchapters N or O) when quantifying the presence of pollutants in a discharge for analyses of pollutants or pollutant parameters under the permit. In case the approved methods are not sufficiently sensitive to the limits, the most SSM with the lowest method detection limit (MDL) must be used as defined under 40 CFR 122.44(i)(1)(iv)(A). If no analytical laboratory is able to perform a test satisfying the SSM in the region, the most SSM with the lowest MDL must be used after adequate demonstrations by the

permittee and EPA approval.

VI. 303(d) LIST

The receiving stream, Carlisle Creek is not listed for impairment in the Integrated List of Surface Waters of 2026-2028. Carlisle Creek from Gila River to headwaters is fully supporting for livestock watering and wildlife habitat and not assessed for primary contact and warmwater aquatic life in the 2026-2028 integrated report, therefore no WQ-based effluent limitations are proposed based on the 303(d) integrated list.

VIII. ANTIDEGRADATION

The NMAC, Section 20.6.4.8 “Antidegradation Policy and Implementation Plan” sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limits are protective of the receiving waters, which is protective of the designated uses of that water.

On April 3, 2026 in a letter from Shelly Lemon, Bureau Chief, Surface Water Quality Bureau, NMED concluded that “Pursuant to New Mexico’s *Antidegradation Policy Implementation Procedure for Regulated Activities*, Tier 1 defines the minimum level of protection for all waters and requires that water quality be maintained such that the existing and designated uses of the water are supported. Tier 1 applies as the default protection level for intermittent waters. Therefore, for discharge to an intermittent waterbody, JC Imperial, LLC, is required to meet applicable water quality criteria in 20.6.4 NMAC at “end of pipe” prior to discharge to the Carlisle Creek”.

IX. ENDANGERED SPECIES CONSIDERATIONS

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. According to the most recent listing of species available for the State of New Mexico, the following species may be present in the area where the proposed NPDES discharge occurs: Mexican Spotted Owl (*Strix occidentalis lucida*)(T), Yellow-billed Cuckoo (*Coccyzus americanus*)(T), Gila Chub (*Gila intermedia*)(E), Gila Topminnow (*Poeciliopsis occidentalis*)(E), Gila Trout (*Oncorhynchus gilae*)(T), Loach Minnow (*Tiaroga cobitis*)(E), and the Spikedace (*Meda fulgida*). There are no critical habitats at this location. Because the proposed activity does not include any construction activities that will alter habitat and the draft permit is consistent with WQS, EPA has concluded that the issuance of this permit will have “no effect” on the Mexican Spotted Owl, Yellow-billed Cuckoo, Gila Chub, Gila Topminnow, Gila Trout, Loach Minnow and Spikedace. The draft permit is consistent with the States WQS, and therefore protective of species.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The issuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the issuance.

XI. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit when new information, such as effluent characteristics, approval of new State Water Quality Standards, or approval of new TMDL, becomes available.

XII. VARIANCE REQUESTS

No variance requests have been received.

XIII. 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.

XIV. FINAL DETERMINATION

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

XV. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Forms 1 and 2D

B. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, June 13, 2024.

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, March 2012.

State of New Mexico Clean Water Act §303(d)/§305(b) Integrated Report, 2026-2028.