NPDES PERMIT NO. NM0028746 FACT SHEET

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

APPLICANT

Westmoreland San Juan Mining LLC P.O. Box 561 Waterflow, NM 87421

ISSUING OFFICE

U.S. Environmental Protection Agency Region 6 1201 Elm Street, Suite 500 Dallas, Texas 75270

PREPARED BY

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DATE PREPARED

October 2, 2023

PERMIT ACTION

Proposed re-issuance of the current permit issued on October 4, 2018, with an effective date of October 5, 2018, and an expiration date of October 4, 2023.

RECEIVING WATER – BASIN

Westwater Arroyo, Shumway Arroyo, San Juan River - San Juan River Basin

DOCUMENT ABBREVIATIONS

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

403	Lowest four-day average flow rate expected to occur once every three-years
RAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD.	Biochamical oxygen demand (five day unless noted otherwise)
	Dischemical oxygen demand (nve-day diffess fisted otherwise)
DFJ	Carbonassous hischemical avusan demand (five dev unless noted otherwise)
CDU	Caliboliaceous biochemical oxygen demand (inve-day unless holed outerwise)
CED	Critical dilution
CFK	Code of Federal Regulations
CIS	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
DO	Dissolved oxygen
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
lbs	Pounds
MDL	Method detection limit
MG	Million gallons
MGD	Million gallons per day
ML	Minimum level
MQL	Minimum quantification level
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
NOEC	No observable effect concentration
NPDES	National Pollutant Discharge Elimination System
O&G	Oil and grease
POTW	Publicly owned treatment works
RP	Reasonable potential
SS	Settleable solids
SSM	Sufficiently Sensitive Method
SIC	Standard industrial classification
SIL SIL	Standard units (for parameter pH)
SWOR	Surface Water Quality Bureau
	Total dissolved solids
TMDI	Total maximum daily load
	Total maximum dany load
TRC	Total residual chiofine
155	Total suspended solids
UAA	Use attainability analysis
0505	United States Geological Service
WLA	waste Load allocation
WEI	whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

The changes from the current permit issued on October 4, 2018, with an effective date of October 5, 2018, and an expiration date of October 4, 2023, include:

- Outfall 014 associated with reclamation area has been added.
- Sample type for WET testing has been changed to "grab" from "24-hr composite"

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility is located on County Road 6800, about 16 miles west of Farmington, Waterflow in San Juan County, NM.

Under the SIC code 1221, the applicant conducts surface coal mining activities. According to the submitted application, the permittee no longer mines surface or underground coal. Previous operations included underground mining. Current operations are entirely surface reclamation. There were no discharge events in the previous permit term. The permittee has requested an additional outfall, Outfall 014, be included into the permit. The receiving waters are Westwater and Shumway arroyos (20.6.4.98 NMAC), and San Juan River (20.6.4.401 NMAC). Outfalls 001, 002, 010, 011, 012, 013 (planned for future) and 014 (added) are associated with reclamation areas. Outfalls 006, 007 and 008 are associated with coal stockpile, ready-line equipment and buildings areas. Outfall 009, associated with sanitary wastewater, is not authorized to discharge. Permitted outfall locations and receiving stream information are listed below. A map of the facility is attached.

OUTFALL NUMBER	RECEIVING WATER	LATITUDE	LONGITUDE
001	Westwater Arroyo	36°48'51"	-108°25'49"
002	Westwater Arroyo	36°48'33"	-108°25'42"
006	Shumway Arroyo	36°47'58"	-108°25'42"
007	Shumway Arroyo	36°47'49"	-108°25'44"
008	Shumway Arroyo	36°47'32"	-108°25'50"
009	Shumway Arroyo	36°47'29"	-108°25'50"
010	Shumway Arroyo	36°47'15"	-108°25'43"
011	Shumway Arroyo	36°46'43"	-108°25'28"
012	San Juan River	36°45'23"	-108°24'50"
013*	Shumway Arroyo	36°48'12"	-108°24'45"
014	Westwater Arroyo	36°48'26"	-108°25'33"

Note:

* Outfall is unconstructed

/III. EFFLUENT CHARACTERISTICS

Since the previous permit term, there has been no discharge from the permitted outfalls. There is no discharge data for this permit renewal.

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 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 reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a).

V. DRAFT PERMIT RATIONALE AND CONDITIONS

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

Regulations contained in 40 CFR §122.44 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.

For sewage wastewater, technology-based effluent limitations are established in the proposed draft permit for TSS and BOD, O&G, pH and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria and TRC. Since discharge of the sewage wastewater is not authorized, no limit is applicable.

For sediment ponds, technology-based effluent limitations are established in the proposed draft permit for SS. Water quality-based effluent limitations are established in the proposed draft permit for pH, aluminum, copper, TDS and monitoring of applicable WQ-based pollutants.

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, *E. coli* bacteria, 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 Limitation Guidelines

Since the previous permit does not authorize discharge of treated sanitary wastewater via Outfall 009, EPA continues to prohibit the discharge. Therefore, no limit is applicable at Outfall 009.

Since the previous permit issuance, there has no change in status regarding Outfalls 006, 007 and 008, which are associated with coal stockpile, ready-line equipment and buildings areas. Potential discharge(s) from the outfalls (sediment/evaporation ponds) are likely caused by major storm events. Discharge limitation is set for SS and pH pursuant to 40 CFR 434.63. EPA retains the permit condition/limits at these outfalls.

• Western Alkaline Coal Mining Operation, 40 CFR 434 Subpart H

As determined previously, Western Coal Mining Operation requirement (WCMO) is applicable to this facility pursuant to 40 CFR 434.80(f). Regulation at 40 CFR 434.81 is applicable to alkaline mine drainage and/or drainage at WCMO from possible brushing and grubbing areas, reclamation areas, topsoil stockpiling areas and regarded areas where the discharge, before any treatment, meets all the following requirements: pH is 6.0 or greater, dissolved iron concentration is less than 10 mg/L, and net alkalinity is greater than zero. A required Sediment Control Plan (SCP) has been submitted to EPA. The permittee must continuously implement and update (as necessary) the SCP, including all requirements according to 40 CFR 434.82. A copy of the SCP must be available to EPA/NMED upon request. Previous permit condition is retained for Outfall 001, 002, 010, 011, 012 and 013; outfall 014, newly added, is subject to permit conditions of this outfall group due to same purpose for the reclamation areas.

3. 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). Monitoring frequencies established in the previous permit are retained in this renewal one.

Parameter	Frequency*	Sample Type
Flow	Daily	Estimate
рН	Daily	Instantaneous Grab
SS	Daily	Grab

*When discharge occurs at any outfall

4. Per- and Poly-Fluoroalkyl Substances (PFAS)

EPA memorandum, dated April 28, 2022, details how the EPA addresses PFAS discharges in EPAissued NPDES permits. This coal mining category is not listed in the memorandum; no monitoring requirement for PFAS is required.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality based requirements are necessary where effluent limits more stringent than technologybased 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/Tribe WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State/Tribe WQS and applicable State/Tribe 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/Tribe narrative and numerical water quality standards are used in conjunction with EPA criterion 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 approved on February 8, 2023). The receiving waters are Westwater and Shumway arroyos, intermittent streams (20.6.4.98 NMAC) and San Juan River, perennial stream (20.6.4.401 NMAC). Applicable criteria must be met at end of pipe (discharge outfalls to intermittent streams) because the 4Q3 (critical low flow) is zero (no dilution is available). Designated uses of the intermittent streams are livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact. Designated uses of the perennial stream are public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact, marginal coldwater aquatic life and warmwater aquatic life. There is no effluent data to be evaluated, EPA proposes to retain all previous permit conditions for all outfalls. Outfall 014 (newly added) is subject to all permit conditions/limitations for Outfall 001, 002, 010, 011 and 013 due to same purpose of reclamation.

4. Perm 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. Bacteria

Since Outfall 009, associated with the treated sanitary wastewater, is not authorized to discharge, limitation of E. coli bacteria is not applicable to Outfall 009. Other outfalls are not subject to E. coli bacteria requirement due to not associated with any sanitary wastewater and nature of the operation.

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

The application states there is no discharge since the previous permit term; EPA is unable to determine reasonable potential to cause or contribute an exceedance of the state WQS. Thus, there is no additional limits proposed to outfalls. Should discharge(s) occur, the permittee must monitor all applicable pollutants in Form 2C to protect the designated uses pursuant to 20.6.4 900 NMAC. In addition to pollutants in Form 2C, the permittee must also conduct analysis of parameters listed in Part I.A.6 of permit; these parameters are subject to the NMWQS but are not listed in Form 2C. One representative sample for all associated outfalls in the substantial areas may be taken when discharges occur. Sampling frequency is once per permit term.

All pollutant must be tested to ensure compliance with the NMWQS using test methods under 40 CFR 136.3. The test results may be used for the next permit renewal application or permit modification in according with 40 CFR Part 122.62(s)(2).

c. TRC & DO

In the same manner as for the bacteria above, TRC & DO limitation are not applicable.

d. pH

For warmwater or marginal warmwater aquatic life, criterion for pH is 6.6 - 9.0 s.u. 20.6.4.900.H(5) or (6) NMAC. This water-based limitation is more protective than the technology-based limitation above (6.0 - 9.0 s.u.); therefore, pH of 6.6 - 9.0 s.u. (same as previously) is retained in the permit.

e. TDS - Colorado River Salinity Control Program

20.6.4.54 NMAC states, 'For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado River Basin states and the federal government to support and implement the salinity policy and program outlined in the most current "review, water quality standards for salinity, Colorado river system" or equivalent report by the Colorado river salinity control forum.' The most updated version found is 2020 Review. The previous limit is still applicable to this facility. EPA retains limit for TDS consistent with the requirements of 20.6.4.54 NMAC.

5. 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). Monitoring frequencies established in the previous permit are retained in this renewal one.

Parameter	Frequency (when discharge occurs)	Sample Type
pH	Daily	Instantaneous Grab
Aluminum	Daily	Grab
Copper	Daily	Grab
TDS	Daily	Grab
Form 2C constituents	Once/term	Grab

6. Removing Outfall

Removing any outfalls is allowed under 40 CFR 122.63(e)(2) with a minor permit modification.

D. WHOLE EFFLUENT TOXICITY

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. For outfalls associated with reclamation area and Outfall 009 (not authorized to discharge), WET monitoring is not required (footnote 7, page 44 of the NMIP). WET limits will not be established in the proposed permit because there was no discharge in the previous permit term. For Outfalls 006, 007 and 008, the WET testing is 7-day chronic test using Ceriodaphnia dubia and Pimephales promelas at once per permit term. EPA retains the previous WET testing, except sample type, in this proposed permit. The sample type has been changed to "grab" from "24-hr composite" because storm event may not last 24 hours or more.

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 must be 32%, 42%, 56%, 75% and 100%. The low-flow effluent concentration (critical low-flow dilution) is defined as 100% effluent.

VI. TMDL REQUIREMENTS

Westwater Arroyo is not listed in the 303(d) list; Shumway Arroyo (San Juan River to Ute Mtn Ute bnd.) is impaired with E. coli bacteria, which is not supporting designated use of primary contact. San Juan River (Navajo bnd at Hogback to Animas River) has been impaired with E. coli bacteria and sedimentation/siltation; designated uses of primary contact and marginal coldwater aquatic life are not supported. TMDLs for E. coli and fecal coliform bacteria were prepared in 2005. No TMLD for sedimentation/siltation is available. The treated sanitary wastewater at the facility, Outfall 009, is not authorized to discharge as stated in the previous permit. The required SCP has been in place to reduce/control sediment. Therefore, no additional requirement is established in term of water impairments/TMDLs in the draft permit. The permit has a standard reopener clause that would allow the permit to be changed if at a later date additional requirements on new or revised TMDLs are completed.

VII. 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 draft permit are developed from the Tribe/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 water, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

VIII. 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)(2)(i)(B), 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.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to a report updated on August 7, 2023 for discharge flowpath in San Juan County, NM obtained from http://ecos.fws.gov/ipac, there are six endangered (E) and threatened (T) species: Southwestern willow flycatcher (bird, E), Yellow-billed Cuckoo (bird, T), Colorado Pikeminnow (fish, E), Razorback Sucker (fish, E), Mancos Milk-vetch (plant, E) and Mesa Verde Catus (plant, T). There are no critical habitats for these species at the defined location, including the facility and immediate receiving waters. All species, except the cuckoo, were listed in the previous permit with determination of "no effect". The bird has been added since the previous permit issuance. There is currently no recovery plan for the cuckoo. There was no discharge in the previous permit term; EPA has found no information on the potential discharge that may affect the bird at this time. EPA believes the receiving waters are not suitable habitats for the bird.

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. The scope of the Federal Action is limited to the effects of authorizing the discharge and does not include the permittee's decision to cease discharging. After review, EPA has determined that the reissuance of this permit will have "no effect" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

- 1. EPA has received no additional information since the previous permit issuance which would lead to revision of its determinations.
- 2. The draft permit is consistent with the States WQS and does not increase pollutant loadings.
- 3. EPA determines that Items 1 & 2 result in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have "no effect" on listed species and designated critical habitat.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

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

XI. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if NMWQS are promulgated or revised. In addition, if the State develops 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.

XII. VARIANCE REQUESTS

None

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 of COE, to the Regional Director of FWS 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 draft permit:

A. APPLICATION(s)

EPA Application Forms 1, 2C and 2F dated August 7, 2023

B. 40 CFR CITATIONS

Sections 122, 124, 125, 133, 136, 434

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, July 24, 2020 and February 8, 2023

State of New Mexico CWA 303(d)/305(b) Integrated Report, 2022-2024

D. MISCELLANEOUS

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico – NMIP, March 15, 2012

2020 Review Water Quality Standards for Salinity Colorado River System

Permittee email dated August 15, 2023