NPDES PERMIT NO. NM0030996
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

October 1, 2019

PERMIT ACTION

Proposed re-issuance of the current permit issued on December 18, 2015, with an effective date of January 18, 2016, and an expiration date of October 31, 2019.

RECEIVING WATER – BASIN

Kim-me-nim-oli Valley Tributary – San Juan River Basin
Inditios Draw – Rio Grande River 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
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
MG	Million gallons
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
NOEC	No observable effect concentration
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
POTW	Publically owned treatment works
RP	Reasonable potential
SS	Settleable solids
SSM	Sufficiently Sensitive Method
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
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

The changes from the current permit issued on December 18, 2015, with an effective date of January 18, 2016, and an expiration date of October 31, 2019, include:

- Substitute unit (MPN) for E. coli bacteria has been added.
- Many outfalls (sediment ponds) have been removed; Outfall 56 has been added.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility is located at 35 miles north of Milan, off State Road 509, Grants, in McKinley County, NM.

Under the SIC code 1221, the applicant operates a surface coal mine that produces approximately 8 million tons of sub-bituminous coal annually; the production began in 2008. There are two immediate receiving waters for the outfalls stated below. Kim-me-ni-oli Valley Tributary flows into the Chaco River, a tributary of the San Juan River (about 100 miles northwest of El Segundo Mine), a tributary of the Colorado River. Inditos Draw, a tributary of Vought Draw, which flows into Arroyo Chico, then to the Rio Puerco (about 60 miles southeast the mine area), a tributary of the Rio Grande River. The outfalls are sediment ponds designed for at least a 10-year, 24-hour precipitation event and one sewage evaporation pond (018). The sewage evaporation pond (lagoon) is not intended to discharge to surface water; however, authorization to discharge is provided in the even discharge occurs most likely as a result of a storm event. This renewal permit authorizes possible discharge from an additional outfall (Outfall 056). Outfall locations and receiving stream information are listed below. A map of the facility is attached.

The water in the facility that originates from private wells is transferred via pipeline for use at the preparation plant and shops, dust suppression along mine roads, and storage for drinking and sanitary uses. All of the water collected in the storage tank is used for drinking and sanitary uses. Sewage is transferred to the lagoon. Water originating from other sources, such as storm water runoff, is collected in sediment ponds where it either evaporates or infiltrates. Some of the water collected in sediment ponds may also be used for dust suppression purposes or discharge to the receiving streams.

ID NUMBER	OUTFALL NUMBER	LATITUDE	LONGITUDE	RECEIVING WATER
SP2W1	001	35°39'02.01923"	107°51'22.65110"	Kim-me-ni-oli Valley Tributary**
SP1W2	002	35°38'28.45977"	107°50'19.10977"	Kim-me-ni-oli Valley Tributary**
SP2W5	003	35°39'01.37393"	107°51'57.32451"	Kim-me-ni-oli Valley Tributary**
SP2W4	004	35°38'59.06337"	107°51'54.08060"	Kim-me-ni-oli Valley Tributary**
~~SP3W1~~	~~005~~	~~35°38'46.44242"~~	~~107°52'22.49655"~~	~~Kim-me-ni-oli Valley Tributary**~~
~~SP2W3~~	~~006~~	~~35°38'57.60885"~~	~~107°52'12.02655"~~	~~Kim-me-ni-oli Valley Tributary**~~
~~SP1W6~~	~~007~~	~~35°38'25.87145"~~	~~107°50'46.92975"~~	~~Kim-me-ni-oli Valley Tributary**~~
~~SP2W2~~	~~009~~	~~35°38'29.57514"~~	~~107°51'21.92387"~~	~~Kim-me-ni-oli Valley Tributary**~~
~~SP1W7~~	~~010~~	~~35°38'33.08565"~~	~~107°51'17.77311"~~	~~Kim-me-ni-oli Valley Tributary**~~
~~SP1W4~~	~~011~~	~~35°38'50.26755"~~	~~107°51'13.36075"~~	~~Kim-me-ni-oli Valley Tributary**~~

ID NUMBER	OUTFALL NUMBER	LATITUDE	LONGITUDE	RECEIVING WATER
~~SP1W5~~	~~012~~	~~35°38'50.72868"~~	~~107°51'18.55134"~~	~~Kim-me-ni-oli Valley Tributary**~~
MSP35W8	013	35°39'48.68750"	107°52'08.31680"	Kim-me-ni-oli Valley Tributary**
MSP35W2	014	35°39'47.57080"	107°52'26.50500"	Kim-me-ni-oli Valley Tributary**
MSP35W3	015	35°39'57.04340"	107°52'22.27300"	Kim-me-ni-oli Valley Tributary**
MSP34W1	016	35°40'00.32390"	107°53'00.29690"	Kim-me-ni-oli Valley Tributary**
MSP34W2	017	35°40'00.17890"	107°53'09.11700"	Kim-me-ni-oli Valley Tributary**
SEWAGE LAGOON	018	35°38'57.74399"	107°51'30.10777"	Kim-me-ni-oli Valley Tributary**
~~MSP20W1~~	~~020~~	~~35°41'45.82480"~~	~~107°55'03.02510"~~	~~Kim-me-ni-oli Valley Tributary**~~
~~MSP21W1~~	~~021~~	~~35°41'44.47820"~~	~~107°54'36.72330"~~	~~Kim-me-ni-oli Valley Tributary**~~
~~MSP27W1~~	~~023~~	~~35°40'18.57850"~~	~~107°52'44.86460"~~	~~Kim-me-ni-oli Valley Tributary**~~
MSP28W1	024	35°40'06.05300"	107°53'45.05580"	Kim-me-ni-oli Valley Tributary**
MSP28W2	025	35°40'03.86650"	107°54'20.22530"	Kim-me-ni-oli Valley Tributary**
MSP28W3	026	35°40'09.57010"	107°54'33.61880"	Kim-me-ni-oli Valley Tributary**
~~MSP28W4~~	~~027~~	~~35°40'42.20920"~~	~~107°54'24.02900"~~	~~Kim-me-ni-oli Valley Tributary**~~
~~MSP29W1~~	~~028~~	~~35°40'35.99950"~~	~~107°54'50.05840"~~	~~Kim-me-ni-oli Valley Tributary**~~
MSP29W2	029	35°40'42.22980"	107°54'46.87210"	Kim-me-ni-oli Valley Tributary**
SP2W6	030	35°39'10.58499"	107°51'57.09588"	Kim-me-ni-oli Valley Tributary**
SP3W2	031	35°38'55.10346"	107°52'46.87900"	Kim-me-ni-oli Valley Tributary**
SP3W3	032	35°38'56.94357"	107°52'44.64213"	Kim-me-ni-oli Valley Tributary**
SP35W3	033	35°39'26.54430"	107°52'13.87367"	Kim-me-ni-oli Valley Tributary**
~~MSP1W1~~	~~034~~	~~35°39'07.24747"~~	~~107°51'11.35081"~~	~~Kim-me-ni-oli Valley Tributary**~~
MSP20W3	035*	35°41'29.15439"	107°55'01.87730"	Kim-me-ni-oli Valley Tributary**
MSP21W2	036*	35°41'17.59690"	107°54'08.37765"	Kim-me-ni-oli Valley Tributary**
~~MSP29W3~~	~~037~~	~~35°40'32.13921"~~	~~107°55'01.73089"~~	~~Kim-me-ni-oli Valley Tributary**~~
MSP34W3	038	35°40'03.64965"	107°53'31.87811"	Kim-me-ni-oli Valley Tributary**
MSP35W5	039	35°39'23.68616"	107°51'44.32688"	Kim-me-ni-oli Valley Tributary**
~~MSP35W7~~	~~040~~	~~35°39'50.22472"~~	~~107°52'13.00073"~~	~~Kim-me-ni-oli Valley Tributary**~~
MSP36W1	041	35°39'10.99588"	107°51'28.33571"	Kim-me-ni-oli Valley Tributary**
MSP5E4	042	35°38'47.34196"	107°48'29.41530"	Inditios Draw***
MSP5E3	043	35°38'50.05730"	107°48'05.85054"	Inditios Draw***
MSP4E1	044	35°38'46.26628"	107°47'48.70650"	Inditios Draw***
MSP4E2	045	35°38'34.99914"	107°47'33.48255"	Inditios Draw***
MSP4E3	046	35°38'33.02111"	107°47'22.36140"	Inditios Draw***
MSP3E2	047	35°38'31.53214"	107°46'57.71286"	Inditios Draw***
~~MSP3E1~~	~~048~~	~~35°38'36.52615"~~	~~107°46'35.88041"~~	~~Inditios Draw***~~
~~MSP34E1~~	~~049~~	~~35°39'15.44785"~~	~~107°46'37.72115"~~	~~Inditios Draw***~~
~~MSP6E1~~	~~050~~	~~35°38'42.16980"~~	~~107°49'15.41620"~~	~~Inditios Draw***~~
~~MSP5E2~~	~~051~~	~~35°38'51.60090"~~	~~107°48'57.47920"~~	~~Inditios Draw***~~
~~MSP32E1~~	~~052~~	~~35°39'19.90000"~~	~~107°48'34.14000"~~	~~Inditios Draw***~~

ID NUMBER	OUTFALL NUMBER	LATITUDE	LONGITUDE	RECEIVING WATER
MSP5E1	053	35°38'59.72000"	107°48'48.22000"	Inditios Draw***
~~MSP31E1~~	~~054~~	~~35°39'11.21000"~~	~~107°49'31.65000"~~	~~Inditios Draw***~~
~~MSP33E2~~	~~055~~	~~35°39'29.62000"~~	~~107°47'25.12000"~~	~~Inditios Draw***~~
MSP25W1	056****	35°40'12.48000"	107°51'19.2900"	Kim-me-ni-oli Valley Tributary**

Outfall with a strikethrough are removed in this permit. These ponds have either been mined through or were not built.
* To be built during this permit term.
** The Kim-me-ni-oli valley tributary flows into the Chaco Ricer, which flows to the San Juan River, approximately 100 miles northwest of the El Segundo permit area, which is a tributary of the Colorado River.
*** Inditos Draw is a tributary of Vought Draw, which flows into Arroyo Chico which flows into the Rio Puerco approximately 60 miles southeast of the El Segundo permit area, which is a tributary of the Rio Grande.
**** New outfall 056 to be added in this permit.

III. EFFLUENT CHARACTERISTICS

Since the operation began in 2008, there has been no discharge from the permitted outfalls. There is no discharge data for this permit renewal. The permittee has submitted analytical results of samples collected at two ponds in 2012. These samples data are more than 4.5 years old and may not be representative since there has not been a discharge; therefore, they are not reviewed according the requirement for historical data used in the application. The submitted data are available for review upon request. Once discharge occurs the permittee is required to have analytical tests for pollutants described below and in Part I.A of the draft permit. Reports of the test results must be submitted in accordance with Part I.C and the permit maybe modified per 40 CFR Part 122.44(d).

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). The mining facility is still a new source pursuant to 40 CFR 434.11(j)(1); therefore, it’s subject to the environmental review pursuant to 40 CFR 6.600 - 607 and new source performance standards pursuant to 40 CFR 434.

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 pond, technology-based effluent limitations are established in the proposed draft permit for TSS and BOD, pH and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for TDS, *E. coli* bacteria and TRC.

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

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

The sewage lagoon is subject to technology requirements established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants established in this Chapter are BOD, TSS and pH. BOD limits of 30 mg/l for the 30-day average and 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits; also 30 mg/l for the 30-day average and 45 mg/l for the 7-day average, average and 85% percent (minimum) removal are found at 40 CFR §133.102(b). ELG's for pH are between 6-9 s.u. and are found at 40 CFR §133.102(c). The facility has not been eligible for Equivalent to Secondary Standards, which are less stringent because discharge data is not available pursuant to 40 CFR 133.101(g). The draft permit establishes new limits for percent removal for both

BOD and TSS. Since these are technology-based there is no compliance schedule provided to meet these limits. Compliance is required on the permit effective date.

A summary of the technology-based limits for the sewage pond is:

Effluent Characteristic	**Discharge Limitation**			
	lbs/day, unless noted		mg/l, unless noted	
Parameter	30-day Avg	7-day Max	30-day Avg	7-day Max
BOD	N/A	N/A	30	45
BOD, % removal[1]	≥ 85	---	---	---
TSS	N/A	N/A	30	45
TSS, % removal	≥ 85	---	---	---
pH	N/A	N/A	6.0 to 9.0 s.u.	

% removal is calculated using the following equation:

$$\text{Percent removal} = \frac{\text{average monthly influent concentration } \left(\frac{\text{mg}}{\text{L}}\right) - \text{average monthly effluent concentration } \left(\frac{\text{mg}}{\text{L}}\right)}{\text{average monthly influent concentration } \left(\frac{\text{mg}}{\text{L}}\right)} \text{ x } 100$$

Due to a new source, discharges from the sediment ponds are subject to 40 CFR 434 with New Source Performance Standards (NSPS), including:

- Coal Preparation Plants and Coal Preparation Plant Associated Areas, 40 CFR 434.25

Effluent Characteristic	**Monthly Average (mg/l)**	**Daily Maximum (mg/l)**
TSS	35	70
Iron, total	3.0	6.0
pH (s.u.)	6.0 – 9.0	

- Alkaline Mine Drainage, 40 CFR 434.45

Effluent Characteristic	**Monthly Average (mg/l)**	**Daily Maximum (mg/l)**
TSS	35	70
Total Iron	3.0	6.0
pH (s.u.)	6.0 – 9.0	

- Western Alkaline Coal Mining Operation, 40 CFR 434.85

The mining facility meets the definition of Western Coal Mining Operation pursuant to 40 CFR 434.80(f), west of the 100th meridian west longitude and average annual precipitation of 26 inches or less. Precipitation data in the facility area, annual average of 10 inches, is obtained from nationalatlas.gov. Pursuant to 40 CFR 434.81 the NSPS applicable to alkaline mine drainage and/or drainage at western alkaline mining operations 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.

The permittee must implement and update (as necessary) Sediment Control Plan (SCP) to EPA, including all requirements according to 40 CFR 434.82. Previous condition for the SCP is retained in the draft permit.

- Effluent Limitations for Precipitation Events, 40 CFR 434.63

The alternative limitations apply to Alkaline Mine Drainage and Coal Preparation & Associated Areas outfalls. If a discharge is caused by precipitation within any 24-hour period less than or equal to the 10-

year, 24-hour precipitation event (or snowmelt of equivalent volume), alternative limitations will be 0.5 ml/l for SS and 6.0 – 9.0 for pH. If a discharge is caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume), alternative limitation will be 6.0 – 9.0 for pH. The permittee has the burden of proof that the discharge or increase in discharge was caused by the precipitation event.

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.

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/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 August 11, 2017). The discharges are to Kim-me-ni-oli Valley and Inditos Draw, ephemeral receiving waters pursuant to 20.6.4.97 NMAC approved by EPA on January 30, 2013. The designated uses of the receiving waters are livestock watering, wildlife habitat, limited aquatic life and secondary contact.

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. Bacteria

For secondary contact, criteria for E. coli bacteria is at 548 cfu/100 ml monthly geometric mean and 2507 cfu/100 ml daily maximum pursuant to 20.6.4.900.E NMAC; analytical methods with results in CFU or MPN can be used.

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 operation started in 2008. Samples from two non-discharging ponds in 2012 does not represent any discharges. Due to no discharge data (data must be less than 4.5 years old required in the application) EPA determines there is inadequate information to determine reasonable potential to cause or contribute an exceedance of the state WQS. Thus, there is no additional limits proposed to outfalls. Should discharges occur, the permittee must monitor all applicable pollutants to protect the designated uses of livestock watering, wildlife habitat and limited aquatic life, acute and persistent human health – organism only (HH-OO), pursuant to 20.6.4 900 NMAC. Monitored pollutants (listed in Part I.A.7) are retained from the previous permit. The permittee must monitor the pollutants at each outfall listed in Attachment A – "Coal Preparation & Associated Areas" and Attachment B – "Alkaline Mine Drainage" once per calendar year when discharge occurs. Once having the discharge data, EPA may re-open to modify the permit in according with 40 CFR Part 122.62(s)(2).

The permittee must also monitor the pollutants in Form 2C at each outfall listed in Attachment A and B once per permit term when discharge occurs. All pollutant must be tested to insure compliance with the WQS. The test results may be used for the next permit renewal application or permit modification.

c. TRC

For wildlife habitat, criteria for TRC is 11 ug/l pursuant to 20.6.4.900.G & J NMAC.

d. Total Dissolved Solids – Colorado River Salinity Control Program

The discharge to the San Juan River is part of the Colorado River Basin where a basinwide Colorado River Salinity Control Program (CRSP) was established by EPA in December 1974. NMED has incorporated the CRSP by reference into their WQS. Pursuant to 20.6.4.54 NMAC and the current "2017 Review, Water Quality Standards for Salinity, Colorado River System" EPA retains the previous limitation for TDS (less than 366 tons/year, applicable to outfalls discharging to Kim-me-ni-oli Valley Tributary) in this permit draft. When discharges occur at multiple outfalls, measured TDS concentrations and estimated flows must be carried out to calculate cumulative TDS load as follow:

$$Cumulative\ TDS\ (tons) = \sum_{i=1}^{56} Qi \times Ci \times 8.345 \div 2{,}000\ lbs/ton$$

Where:
i = Discharged Outfalls 1 to 56 (listed in Attachments A, B, C; but not applicable to Outfalls 42-47, 53)
Qi = Estimated individual flow, MG
Ci = Measured individual TDS concentration, mg/L (if 500 mg/L or less, TDS is considered fresh water and excluded in the calculation)

8.345 = Conversion factor (lbs × L)/(mg × MG)

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.

D. WHOLE EFFLUENT TOXICITY

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 (page 42) of the NMIP outlines the type of WET testing for different types of discharges. The receiving waters are ephemeral streams with the critical dilution of 100%. WET limits will not be established in the proposed permit because there was no discharge in the previous permit term. Based on the nature of the discharges, a minor industrial facility with a separate lagoon system treating domestic sewage, and the receiving waters the NMIP directs the WET testing to be 48-hr acute tests using *Daphnia pulex* once per year for each sediment pond and once per five years for the sewage lagoon (pond) when discharging. These limitations and monitoring frequencies are the same from the previous permit.

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. The permittee must limit and monitor discharge(s) as specified below:

WET Testing (48-hr. Static Renewal)[1]	NOEC	Frequency[2]	Sample Type
Daphnia pulex	Report	Once/year	Grab

[1] 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.

[2] The test shall take place when first discharge occurs if possible. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple failures. However, upon failure of any WET test, the permittee must report the results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification of the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any. Once/5 years for sewage lagoon; once/year for sediment ponds listed in Attachments A & B.

VI. TMDL REQUIREMENTS

The receiving water segments, 20.6.4.97 NMAC, are not listed in the 303(d) list. Therefore, no additional requirement is established 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. No draft permit condition is less stringent than the previous one.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to the list updated on October 15, 2019 for McKinley County, NM obtained from http://ecos.fws.gov, there are five endangered (E) and threatened (T) species: Yellow-billed Cuckoo (T), Mexican spotted owl (T), Southwestern willow flycatcher (E), Zuni bluehead Sucker (E) and Zuni fleabane (T). The owl, flycatcher and Zuni Fleabane (flowering plants) were listed in the previous permit with determination of "no effect". The cuckoo (birds) and Zuni bluehead Sucker (fishes) have been added since the previous permit issuance. According to the attached Environmental Assessment, which also includes more information on analysis of Endangered Species effects, there was no essential habitat found during surveys or "No federally or state listed T&E fauna were found during wildlife surveys."

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 (please refer to ENVIRONMENTAL REVIEW below). After review, EPA has determined that the reissuance of this permit will have no significant impact 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. ENVIRONMENTAL REVIEW

The facility is a new source pursuant to 40 CFR 434.11(j)(1)(i). The permittee must comply with the environmental review requirements of 40 CFR 6.600 through 6.607. The permittee submitted an environmental assessment (EA) dated December 2019. After reviewing the EA, EPA drafts a Finding of No Significant Impact (FONSI) as attached in this fact sheet. Comment(s) to this draft FONSI can be submitted along with this NPDES draft permit.

XII. 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.

XIII. VARIANCE REQUESTS

None

XIV. 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.

XV. FINAL DETERMINATION

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

XVI. ADMINISTRATIVE RECORD

The following information was used to develop the draft permit:

A. APPLICATION(s)

EPA Application Forms 1, 2C and 2F dated August 13, 2019

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, effective September 12, 2018.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2018-2020.

D. MISCELLANEOUS

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

2017 Review, Water Quality Standards for Salinity, Colorado River System, October 2017.

Environmental Assessment (available electronically) dated December 2019.

NMED emails dated October 23&28, 2019

Permittee email dated August 13, 2019; December 16, 2019.