

NPDES Permit No NM0031097

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Mora Independent School District Athletic Field Project PO Box 179 Mora, NM 87732

Is authorized to discharge to receiving waters named the Mora River in Waterbody Segment No. 20.6.4.309 of the Canadian River Basin, from a facility located at Highway 518 and Ranger Drive, Mora, Mora County, New Mexico.

The discharge is located on that water at the following coordinates:

Outfall 001: Latitude 35° 58' 34.1" North, Longitude 105° 19' 59.5" West

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Part I, Part II, and Part III hereof.

This permit supersedes and replaces NPDES Permit No. NM0031097 issued August 30, 2012, with an effective date of September 1, 2012, and an expiration date of August 31, 2017.

Prepared by

This permit shall become effective on

Issued on

This permit and the authorization to discharge shall expire at midnight on

David F. Garcia, P.E.	Quang Nguyen
Acting Division Director	Environmental Engineer
Water Division (6WQ)	Permitting Section (6WQ-PP)

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 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
ug/l Micrograms per liter
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 Publically 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

WOCC New Mexico Water Quality Control Commission

WQMP Water Quality Management Plan WWTP Wastewater treatment plant

PART I – REQUIREMENTS FOR NPDES PERMITS

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS

1. FINAL Effluent Limits – Intermittent Flow

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge groundwater to the Mora River, in Segment Number 20.6.4.309, from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

			MEASUREMENT	
POLLUTANT	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
pH	6.6 s.u.	8.8 s.u.	Once/Month (*1)	Grab

POLLUTANT (*2)	30-DAY AVG	DAILY MAX	30-DAY AVG	DAILY MAX	MEASUREMENT	SAMPLE TYPE
					FREQUENCY	
Flow	Report MGD	Report MGD	***	***	Daily (*1)	Measure
TSS	318 lbs/day	Report	8.83 mg/l	Report	Once/Month (*1)	Grab
TDS	12,970 lbs/day	Report	360 mg/l	Report	Once/Month (*1)	Grab

Whole Effluent Toxicity Testing	30-DAY AVG	7-DAY	MEASUREMENT	
(7-Day Chronic NOEC Freshwater) (*1,*3)	MINIMUM	MINIMUM	FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Report	Once (*4, *5)	24-Hour Composite
Pimephales promelas	Report	Report	Once (*4, *5)	24-Hour Composite

Footnotes:

- *1 When discharging.
- *2 See Appendix A of Part II of the permit for the required Minimum Quantification Level.
- *3 Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.
- Once per permit term. 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 test failures. However, upon failure of any WET test, the permittee must report the test results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5-business days of notification the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any. (See Part II, Section D).
- *5 The test is to be conducted within the first 12-months after the permit effective date between November 1 and April 30.

FLOATING SOLIDS, VISIBLE FOAM AND/OR OILS

There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge after the final treatment unit and prior to the receiving stream. Any addition of precoagulant generated solids to the effluent shall be added upstream of the sample point.

B. SCHEDULE OF COMPLIANCE

None

C. MONITORING AND REPORTING (MINOR DISCHARGERS)

All DMRs shall be electronically reported. To submit electronically, access the NetDMR website at https://netdmr.epa.gov and contact the R6NetDMR@epa.gov in-box for further instructions. Until the permittee is approved for Net DMR, the permittee 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 copies to NMED as required (See Part III.D.IV of the permit). Reports shall be submitted quarterly.

- 1. Reporting periods shall end on the last day of the months March, June, September, and December.
- 2. The permittee is required to submit regular quarterly reports no later than the 28th day of the month following each reporting period.
- 3. If any 30-day average, 7-day average or daily maximum value exceeds the effluent limitations specified in Part I.A, the permittee shall report the excursion in accordance with the requirements of Part III.D.
- 4. Any 30-day average, 7-day average, or daily maximum value reported in the required Discharge Monitoring Report which is in excess of the effluent limitation specified in Part I.A shall constitute evidence of violation of such effluent limitation and of this permit.
- 5. Other measurements of oxygen demand (e.g., TOC and COD) may be substituted for five-day Biochemical Oxygen Demand (BOD₅) or for five-day Carbonaceous Biochemical Oxygen Demand (CBOD₅), as applicable, where the permittee can demonstrate long-term correlation of the method with BOD₅ or CBOD₅ values, as applicable. Details of the correlation procedures used must be submitted and prior approval granted by the permitting authority for this procedure to be acceptable. Data

reported must also include evidence to show that the proper correlation continues to exist after approval.

PART II - OTHER CONDITIONS

A. MINIMUM QUANTIFICATION LEVEL & SUFFICIENTLY SENSITIVE METHOD (Not Applicable at this time)

EPA-approved test procedures (methods) for the analysis and quantification of pollutants or pollutant parameters, including for the purposes of compliance monitoring/DMR reporting, permit renewal applications, or any other reporting that may be required as a condition of this permit, shall be sufficiently sensitive. A method is "sufficiently sensitive" when (1) the method minimum level (ML) of quantification is at or below the level of the applicable effluent limit for the measured pollutant or pollutant parameter; or (2) if there is no EPA-approved analytical method with a published ML at or below the effluent limit (see table below), then the method has the lowest published ML (is the most sensitive) of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, for the measured pollutant or pollutant parameter; or (3) the method is specified in this permit or has been otherwise approved in writing by the permitting authority (EPA Region 6) for the measured pollutant or pollutant parameter. The Permittee has the option of developing and submitting a report to justify the use of matrix or sample-specific MLs rather than the published levels. Upon written approval by EPA Region 6 the matrix or sample-specific MLs may be utilized by the Permittee for all future Discharge Monitoring Report (DMR) reporting requirements.

Current EPA Region 6 minimum quantification levels (MQLs) for reporting and compliance are provided in Appendix A of Part II of this permit. The following pollutants may not have EPA-approved methods with a published ML at or below the effluent limit, if specified:

POLLUTANT	CAS Number	STORET Code
Total Residual Chlorine	7782-50-5	50060
Cadmium	7440-43-9	01027
Silver	7440-22-4	01077
Thallium	7440-28-0	01059
Cyanide	57-12-5	78248
Dioxin (2,3,7,8-TCDD)	1764-01-6	34675
4,6-Dinitro-O-Cresol	534-52-1	34657
Pentachlorophenol	87-86-5	39032
Benzidine	92-87-5	39120
Chrysene	218-01-9	34320
Hexachlorobenzene	118-74-1	39700
N-Nitrosodimethylamine	62-75-9	34438
Aldrin	309-00-2	39330
Chlordane	57-74-9	39350
Dieldrin	60-57-1	39380
Heptachlor	76-44-8	39410
Heptachlor epoxide	1024-57-3	39420
Toxaphene	8001-35-2	39400

Unless otherwise indicated in this permit, if the EPA Region 6 MQL for a pollutant or pollutant parameter is sufficiently sensitive (as defined above) and the analytical test result is less than the MQL, then a value of zero (0) may be used for reporting purposes on DMRs. Furthermore, if the EPA Region 6 MQL for a pollutant or parameter is not sufficiently sensitive, but the analytical

test result is less than the published ML from a sufficiently sensitive method, then a value of zero (0) may be used for reporting purposes on DMRs.

B. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, and NMED within 24 hours from the time the permittee becomes aware of the violation followed by a written report in <u>five days</u>.

None

C. PERMIT MODIFICATION AND REOPENER

In accordance with 40 CFR Part 122.44(d), the permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, or new water quality standards are established and/or remanded.

In accordance with 40 CFR Part 122.62(a)(2), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance. Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR Part 124.5.

D. WHOLE EFFLUENT TOXICITY TESTING (7 DAY CHRONIC NOEC FRESHWATER)

It is unlawful and a violation of this permit for a permittee or his designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by EPA Region 6 or the State NPDES permitting authority.

1. SCOPE AND METHODOLOGY

a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S): 001

REPORTED ON DMR AS FINAL OUTFALL: 001

EFFLUENT DILUTION SERIES: 32%, 42%, 56%, 75%, and 100%

CRITICAL DILUTION: 75%

EFFLUENT DILUTION SERIES: 75%

COMPOSITE SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: 40 CFR Part 136

Ceriodaphnia dubia chronic static renewal survival and reproduction test, Method 1002.0, EPA 821 R 02 013, or the most recent update thereof. This test should be terminated when 60% of the surviving females in the control produce three broods or at the end of eight days, whichever comes first.

Pimephales promelas (Fathead minnow) chronic static renewal 7 day larval survival and growth test, Method 1000.0, EPA 821 R 02 013, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The NOEC (No Observed Effect Concentration) is herein defined as the greatest effluent dilution at and below which toxicity that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution. Chronic sub-lethal test failure is defined as a demonstration of a statistically significant sub-lethal effect (i.e., growth or reproduction) at test completion to a test species at or below the critical dilution.
- c. The conditions of this item are effective beginning with the effective date of the WET limit. When the testing frequency stated above is less than monthly and the effluent fails the lethal or sub-lethal endpoint at or below the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in PART I of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period. The purpose of additional tests (also referred to as 'retests' or confirmation tests) is to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result.
- d. This permit may be reopened to require chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.

e. 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 test failures. However, upon failure of any WET test, the permittee must report the test results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any.

2. REQUIRED TOXICITY TESTING CONDITIONS

a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- i. The toxicity test control (0% effluent) must have survival equal to or greater than 80%.
- ii. The mean number of Ceriodaphnia dubia neonates produced per surviving female in the control (0% effluent) must be 15 or more.
- iii. 60% of the surviving control females must produce three broods. The mean dry weight of surviving Fathead minnow larvae at the end of the 7 days in the control (0% effluent) must be 0.25 mg per larva or greater.
- iv. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.
- v. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal or nonlethal effects are exhibited for: the young of surviving females in the Ceriodaphnia dubia reproduction test; the growth and survival endpoints of the Fathead minnow test.
- vii. A PMSD range of 13 47 for Ceriodaphnia dubia reproduction;
- viii. A PMSD range of 12 30 for Fathead minnow growth.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

- i. For the *Ceriodaphnia dubia* survival test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be Fisher's Exact Test as described in EPA/821/R-02-013 or the most recent update thereof.
- ii. For the *Ceriodaphnia dubia* reproduction test and the Fathead minnow larval survival and growth test, the statistical analyses used to determine if there is a significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA/821/R-02-013 or the most recent update thereof.
- iii. If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 80% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report a survival NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 3 below.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;
 - (A) Toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and
 - (B) Toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.
- ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - (A) A synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;
 - (B) The test indicating receiving water toxicity has been carried out to completion (i.e., 7 days);
 - (C) The permittee includes all test results indicating receiving water toxicity with

the full report and information required by Item 4 below; and

(D) The synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

- i. The permittee shall collect a minimum of three flow-weighted composite samples from the outfall(s) listed at Item 1.a above.
- ii. The permittee shall collect second and third composite samples for use during 24-hour renewals of each dilution concentration for each test. The permittee must collect the composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
- iii. The permittee must collect the composite samples so that the maximum holding time for any effluent sample shall not exceed 72 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first composite sample. Samples shall be chilled to 4 degrees Centigrade during collection, shipping, and/or storage.
- iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 4 of this section.

3. REPORTING

a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this section in accordance with the Report Preparation Section of EPA/821/R-02-013, or the most current publication, for every valid or invalid toxicity test initiated whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of PART III.C.3 of this permit. The permittee shall submit full reports upon the specific request of the Agency. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be

submitted for agency review.

- b. A valid test for each species must be reported on the DMR during each reporting period specified in PART I of this permit unless the permittee is performing a TRE which may increase the frequency of testing and reporting. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST survival lethal and sub-lethal effects results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for EPA review.
- c. The permittee shall submit the results of each valid toxicity test on the subsequent monthly DMR for that reporting period in accordance with PART III.D.4 of this permit, as follows below. Submit retest information, if required, clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR.
 - i. *Pimephales promelas* (Fathead Minnow)
 - (A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a 1; otherwise, enter a 0 for Parameter No. TLP6C
 - (B) Report the NOEC value for survival, Parameter No. TOP6C
 - (C) Report the LOEC value for survival, Parameter No. TXP6C
 - (D) Report the NOEC value for growth, Parameter No. TPP6C
 - (E) Report the LOEC value for growth, Parameter No. TYP6C
 - (F) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a 1; otherwise, enter a 0 for Parameter No. TGP6C
 - (G) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C
 - ii. Ceriodaphnia dubia
 - (A) If the NOEC for survival is less than the critical dilution, enter a 1; otherwise, enter a 0 for Parameter No. TLP3B
 - (B) Report the NOEC value for survival, Parameter No. TOP3B
 - (C) Report the LOEC value for survival, Parameter No. TXP3B

- (D) Report the NOEC value for reproduction, Parameter No. TPP3B
- (E) Report the LOEC value for reproduction, Parameter No. TYP3B
- (F) If the No Observed Effect Concentration (NOEC) for reproduction is less than the critical dilution, enter a 1; otherwise, enter a 0 for Parameter No. TGP3B
- (G) Report the higher (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B
- d. If retests are required by EPA, enter the following codes on the DMR for retests only:
 - i. For retest number 1, Parameter 22415, enter a 1 if the NOEC for survival is less than the critical dilution; otherwise, enter a 0
 - ii. For retest number 2, Parameter 22416, enter a 1 if the NOEC for survival is less than the critical dilution; otherwise, enter a 0.