NPDES PERMIT NO. NM0030139 FACT SHEET

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

APPLICANT

State of New Mexico Department of Game & Fish (DGF) Los Ojos State Fish Hatchery P.O. Box 25112 Santa Fe, NM 87504

ISSUING OFFICE

U.S. Environmental Protection Agency Region 6 1445 Ross Avenue Dallas, Texas 75202-2733

PREPARED BY

Laurence E. Giglio Environmental Engineer NPDES Permits & Technical Branch (6WQ-PP) Water Quality Protection Division VOICE: 214-665-6639 FAX: 214-665-2191 EMAIL: giglio.larry@epa.gov

DATE PREPARED

April 27, 2012

PERMIT ACTION

Renewal of a permit previously issued July 11, 2006, with an effective date of September 1, 2006, and an expiration date of August 31, 2011.

RECEIVING WATER – BASIN

Chama River- Rio Grande 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
	Best available technology aconomically achievable
BCT	Best conventional pollutant control technology
DCI	Best conventional pontitant control technology
	Best menorement alen
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
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
11g/l	Micrograms per liter
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMFD	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWOS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MOI	Minimum quantification level
MQL O&G	Oil and groups
POTW	Dublically owned treatment works
	Publically Owned treatment works
RP CC	
22	Settleable solids
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	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

Changes from the previous permit issued July 11, 2006, with an effective date of September 1, 2006, and an expiration date of August 31, 2011, are:

- 1. The permit establishes total phosphorus and total nitrogen limits, each with a compliance schedule.
- 2. Mass loading limitations for technology-based TSS and SS have been eliminated.
- 3. Outfall 002 has been relocated.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility is located at Hatchery Road #1, approximately 2miles south of Los Ojos, in Rio Arriba County, New Mexico. Under the SIC Code 0921, the applicant operates a coldwater finfish hatchery raising rainbow and Kokanee trout for stocking in lakes and/or streams. The facility described in the application produces a maximum harvestable weight of 97,000 pounds of trout per year; 95,000 lbs of that total rainbow trout. The operation described in the application consists of spring water feeding 65 production raceways, and then a two-cell sedimentation pond.



PLAT OF LOS OJOS FACILITY

The Los Ojos Hatchery is permitted to discharge into ultimately the Chama River from two separate routes. Outfall 001 discharges, which contain water from the A-B-C battery and Dbattery, via a pipe to a settling basin thence to an unnamed irrigation ditch, thence unobstructed to the smaller 1.5 acre Upper Laguna del Campo and then the larger 20 acre Laguna del Campo; (previously known as Upper Burns and Burns Canyon Lake), thence to the La Puente Irrigation Ditch, thence to the Rio Chama in Segment 20.6.4.119 of the Rio Grande Basin. Based on the permit application, discharges from Outfall 001 will only be during cleaning events an A-B-C and D-batteries and will be approximately 0.720 MGD when in use. The settling basin is designed to provide treatment of both TSS and SS. Outfall 002 in the draft permit has been moved from its previous location but will still be identified as 002. Outfall 002 will be located at the lower end of J-battery and will receive the overflow from A-B-C and D-batteries plus the flow from J-battery operation including J-battery cleaning effluent. Anticipated flow from 002 is 2.16 MGD. The wastewater from Outfall 002 J-Battery enters the Los Ojos Ditch where it can be utilized by irrigators, diverted to Laguna del Campo, or a portion utilized for both irrigation and diverted to Laguna del Campo simultaneously. The "Mayor Domo" Association manages flow in Los Ojos Ditch downstream of the hatchery. Flow from Laguna del Campo can either be used for irrigation or it flows to the Chama River. The designated uses of 20.6.4.119 are domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habit, public water supply and primary contact.

DISCHARGE ROUTE



The Los Ojos Hatchery normally raises rainbow trout and Kokanee salmon. However, in September 2005 all the raceways were shut down for fish production in response to the detection of whirling disease, a single-celled parasite that is particularly devastating to immature trout. The upper raceways A-B-C have been disinfected, scrubbed clean, covered with a metal roof and the sides fenced in to prevent any outside contact with the fish and the spread of disease. The hatchery spent approximately \$ 2.4 million in this renovation. In 2010, the hatchery was raising rainbow trout in this area in order to test for any remaining whirling disease. Kokanee salmon fry are being hatched and raised in an enclosed hatchery building.

Water belonging to others and used by the hatchery under agreement, is supplied by several natural springs located on-site and sent through an aeration system. During fish production activities, first-use spring water flows into the A-B-C raceways, exits and flows into an enclosed concrete settling basin (where solids from A-B-C settle) then the water enters D-battery. The D-battery contains a water re-circulation/aeration system and a pump sump channel located at the downstream end. Flow through water from D-Battery can be directed either by pump to the J-battery or it flows to the sediment structure at Outfall 001.

The J-battery has also been disinfected, cleaned and covered. When in use, the J-battery gets reuse water that would be pumped from A-D battery raceways. The flow into J-battery is only possible by pumping; it cannot flow naturally from the D-battery. The discharge from J-battery would contain the water from the A-D battery plus the solids and water from the J-battery. J-battery discharges directly to a kettle basin that serves as the sediment treatment device, with the wastewater flowing through Outfall 002.

The locations of the two outfalls based on the flow diagram in the application package are:

Outfall 001 - Latitude 36° 43' 9.1" North, Longitude 106° 34' 39.2" West Outfall 002 - Latitude 36° 43' 02.13" North, Longitude 106° 34' 36.01" West

III. EFFLUENT CHARACTERISTICS

The applicant tested metals, dioxin, pesticides and other organic human health pollutants and found only the following pollutants at levels above MQL's:

<u>Pollutant</u>	Result, ug/l
Barium	37.9
Copper	1.2
Vanadium	2.4
Zinc	5.7

In addition, pollutant data was reported for the following pollutants:

Pollutant	Result, mg/l
Phosphorus, Total	3.72
TKN	10.0
Ammonia	0.49
Nitrate + Nitrite	0.53

A review of DMR data shows that there have been no exceedances of numerical limits in the past 24 months.

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 technologybased 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.

The facility submitted a complete permit application February 28, 2011. 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 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.

Technology-based effluent limitations are established in the proposed draft permit for TSS and SS. Water quality-based effluent limitations are established in the proposed draft permit for total phosphorus, total nitrogen, and pH.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

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

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

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

2. Effluent Limitation Guidelines

Technology-based effluent limitations found at 40 CFR §451 were promulgated for this type of activity in 2004. Regulations for best practicable control technology currently available (BPT), apply for discharge of pollutants from a concentrated aquatic animal production facility that produces 100,000 pounds or more per year of aquatic animals in a flow-through or recirculating system. The facility produces approximately 97,000 pounds annually. The previous permit established BMPs consistent with 40 CFR §451 and those will be continued in the draft permit. The BMP's cover solids control, materials storage, structural maintenance, recordkeeping and training. Regulations at 40 CFR §451 do not establish ELG's. However, previous permits established technology-based ELG's prior to the promulgation of 40 CFR §451 regulations based on BPJ and those will be continued in the draft permit. They established ELG's for total suspended solids (TSS) and settleable solids (SS). Limitations for TSS were established at 10 mg/l daily avg., 15 mg/l daily max. Limitations for SS were established at 0.1 milliliter/liter (ml/l) daily avg, 0.5 ml/l daily max. These limitations will be retained in the draft permit for both Outfalls 001 and 002.

The description of plant operations reveal that discharges from Outfall 001 occur only when cleaning of the raceways from A-B-C and D-batteries are ongoing. The permit will require that sampling for compliance purposes occur when discharges from each outfall are ongoing during cleaning operations. Consistent with the previous permit the use of a composite grab will be continued in the sample requirements for the draft permit with a slight modification. In the draft permit *Sediment grab* shall be defined as: "Obtain a grab aliquot and record the flow from each outfall during periods of raceway cleaning. After both outfalls have been sampled and flows recorded, make a composite sample by mixing each individual outfall's aliquot in proportion to the flow from each outfall to the sum of the total flow. In the event during a reporting period that discharge from either outfall is not associated with a cleaning event submit a grab sample from the discharging outfall and note on the discharge monitoring form which outfall is discharging."

Flow is variable and is not a basis of the production of fish at each battery. The draft permit will not establish mass loadings for the outfalls as the flow rate is not dependent on pounds of fish raised. The concentration limits will protect the environment. This represents a change from the current permit but since the flow is variable from the outfalls and the concentration will be limited, the deletion of mass limits does not constitute antibacksliding as cited in 40 CFR § 122.44(l)(2)(i)(A); material and substantial alterations of the facility. Also, regulations in 40

CFR §122.45(f)(iii), mass limitations, when the mass of the pollutant discharged is not a measure of operation.

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 amended through January 14, 2011). The facility discharges to an unnamed irrigation ditch, thence to the La Puente Irrigation Ditch, thence to the Rio Chama in Segment 20.6.4.119 NMAC in the Rio Grande Basin. The designated uses of the Rio Chama are domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habit, public water supply and primary 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. pH

Criteria for pH is listed in 20.6.4.900.H.(1) for high quality coldwater aquatic life within the range of 6.6-8.8 su's. This is identical to the current permit.

- b. TOXICS
 - i. General Comments

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.

ii. Critical Conditions - Toxics

The low flow or 4Q3 of the Chama River determined by NMED for the segment between El Vado Reservoir and the Rio Brazos is 13.85 cfs (8.95 MGD). Human health pollutants are evaluated using the harmonic mean flow (HMF). The HMF as provided by NMED is 57.1 cfs (36.89 MGD).

For CD is used in determining certain permit conditions. The CD is determined as follows:

CD = Qe/(Qe + Qa)

Where:

Qe is the effluent flow, for industrial facilities the highest 30-day maximum flow over the most recent two years; 2.82 MGD.

Qa is the 4Q3; 8.95 MGD.

CD = 2.82/(2.82 + 8.95) CD = 0.24 or 24%

iii. Reasonable Potential - Toxics

Appendix 1 of the Fact Sheet shows the RP for those pollutants that had detections reported on the application form above MQL as noted above. As shown on Appendix 1, no pollutants tested demonstrated RP to exceed WQS and further permit action is not required based on these results for toxics.

c. TMDL CONSIDERATIONS

The Chama River is on the 2010-2012 State of New Mexico Clean Water Act §303(d) list of impaired waters with impairments for bacteria and nutrients. The EPA approved the TMDL on August 16, 2011, and the associated WLAs for bacteria and nutrients.

i. Bacteria

Bacteria is not authorized in the discharge from the facility however the TMDL states that "...there are no E. coli data available to assess whether wildlife use of the ponds contribute to the

E. coli load in the Rio Chama. A WLA will be assigned to the facility in order to be both protective of the in-stream water quality as well as the liability of the permittee." The WLA for bacteria is 1.35×10^{10} cfu/day based on 126 cfu/100 ml effluent limit, a 3.79×10^{7} conversion factor and 2.82 MGD 30-day maximum effluent flow over the past 2 years. The conversion factor is based on the following:

C as cfu/100 ml \times 1000 ml/liter \times 11iter/0.264 gallons \times Qe expressed as MGD

The draft permit will incorporate the WLA as approved in the TMDL. Loading limits for bacteria in R6 permits is expressed as billions of cfu/day (1×10^9 cfu). The loading limit will be 13.5×10^9 cfu/day, equivalent to the 1.35×10^{10} TMDL value. E. coli bacteria is a new pollutant and the facility will have a one year compliance period to achieve compliance with the limits. Consistent with bacteria TMDL permit limitations, the 126 cfu/100 ml concentration and 13.5×10^9 cfu/day mass loading limit is shown as the 30-day average value. The primary contact designated use, allows a daily maximum of 410 cfu/100 ml but the segment specific criteria for 20.6.4.119 NMAC is 235 cfu/100 ml. The draft permit will propose the 235 cfu/100 ml limit as the daily maximum. The daily maximum loading limit will be N/A.

ii. Nutrients

Nutrient WLAs have been established using a two-phase approach recommended in the TMDL. WLA are based on 2.82 MGD 30-day maximum effluent flow over the past 2 years and the 8.34 lbs/gallon factor. The first or *interim* phase has a target concentration of 0.24 mg/l, 5.66 lbs/day total phosphorus and 3.0 mg/l, 70.6 lbs/day total nitrogen. The TMDL then establishes a *final* phase WLA of 0.07 mg/l, 1.65 lbs/day, total phosphorus and 0.25 mg/l, 5.88 lbs/day, total nitrogen as established in the TMDL and updated in the WQMP. The draft permit will establish loading limits as 30-day averages. The corresponding pollutant concentration values will also be input as 30-day averages and the draft permit will establish daily maximum concentration limits consistent with the NMIP; using a "daily to maximum" factor of 1.5. The daily maximum load limits however will be report only. The facility will be given a 5-year compliance period, scheduled to go into effect on the last day of the draft permits expiration date to achieve the interim WLA limits and an additional 5-year compliance period, effectively ten years from the draft permits effective date to achieve the *final* WLA limits. The *final* phase is not contingent on additional permit actions as it is implemented with this draft permits issuance. If future TMDLs determine that the *final* phase WLA need adjusting based on additional stream studies, then the *final* phase limits may be amended by future permit actions based on revised TMDLs and updates to the WQMP. However, if no further changes are made to the WQMP, the *final* nutrient permit limits will be required ten years from this draft permits effective date.

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). Sample frequency is based on the March 12, 2012, NMIP.

For both Outfalls 001 and 002, flow is proposed to be measured and reported daily consistent with the current permit. Flow shall be recorded from each outfall by measuring flow over the weir during cleaning operations. The flow from each outfall shall be totaled, and reported on Outfall 001 monitoring report. The pollutants SS and TSS shall be sampled and reported twice per month using *sediment grab* samples as defined above. The pollutant pH shall be sampled and reported twice per month using *flow composite* samples. *Flow composite* samples shall be defined as: "Obtain a grab aliquot and record the flow from each outfall. Make a composite sample by mixing each individual outfall's aliquot in proportion to the flow from each to the sum of the total flow. In the event during a reporting period that discharge is only from one outfall, submit a grab sample from the discharging outfall and note on the discharge monitoring form which outfall is discharging." New pollutants E. coli bacteria, total phosphorus and total nitrogen are to be reported once per month during the compliance period phase for the interim phase only. After the first compliance period, the pollutants total phosphorus and total nitrogen are to be sampled and reported twice per month. For all reporting of total phosphorus and total nitrogen, samples shall be sampled using flow composite samples. Both flow composite and sediment grab samples use flow weighting with the aliquots but sediment grab sampling is to be done during cleaning events and *flow composite* can be sampled any time a discharge is occurring.

6. Drugs Medications And/or Chemicals Used In Hatchery Practices

At times, DGF hatchery staff administers drugs medications and/or chemicals (DMC) used for aquaculture purposes in the water system, in a manner and/or amount that will allow it to be discharged to waters of the United States. The US Food and Drug Administration (FDA) have approved some of these DMC and/or amounts of use. Sometimes, however, either the DMC are used for purposes not specifically approved by the FDA, or the DMC are not approved at all by the FDA, but their use is consistent with sound hatchery practices. With the exception of chlorine, anytime DGF uses <u>any</u> DMC, such that it will enter waters of the State, then the DGF shall notify both EPA and NMED of its impending use. Notification to NMED shall be by phone within one business day of its decision to use the DMC, and at least three-business days prior to the actual use, and both EPA and NMED, in writing, within five-business days of its decision of use. Notification shall provide the name of the DMC, its amount, concentration of use and reason for its use, along with the expected date and time of its use, and expected duration of use. Discharge of chlorine is <u>not</u> authorized in the permit and would be a violation of the permit.

When the DMC used is either not approved by the FDA or its use is not consistent with FDA practices, such that it would allow it to enter the receiving stream, DGF shall conduct the following Whole Effluent Toxicity Test, per instance of use (See footnote *1 below). This testing shall be reported on discharge monitoring report (DMR) and reported as Outfall 01B. On the DMR, report in the comment section the date, time, duration and the name of the DMC used. Also note the date of the letter sent to EPA and NMED.

TOXICITY TESTS

FREQUENCY

7-day Ceriodaphnia dubia survival and reproduction test (Method 1002.0) (*1)

Once/use (*2, 3)

7-day fathead minnow Pimephales promelas larval survival and growth test (Method 1000.0) (*1)

Once/use (*2, 3)

- *1 Chronic freshwater Whole Effluent Toxicity Testing
- *2 WET testing shall be conducted on the maximum dose of each instance of intermittent use of drugs, medications and/or chemicals not approved by the FDA, or drugs, medications and/or chemicals for purposes other than those for which FDA approval was granted. For long-term use of these drugs, medications and/or chemicals, only one WET test shall be required on the maximum dose of the treatment, unless that maximum dose is later increased by 20 percent. At that point, and any later increases above 20 percent, then additional WET tests will be required.
- *3 The sample shall NOT be flow weighted with the other outfall. The sample shall occur at the outfall location consistent with the unit being treated, during the time that the expected highest dose is being administered and shall be taken at a time taking into consideration the lag-time for the slug of maximum dosage of DMC to flow from the point of application to the sample point. The grab sample for the WET test shall be taken 30-minutes after the expected arrival time of the treated water at the outfall. The expected arrival time can be determined by direct observation by use of a floatable marker such as wooden blocks.

D. WHOLE EFFLUENT TOXICITY LIMITATIONS

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 of Section V of the NMIP outlines the type of WET testing for different types of discharges. The previous permit required a chronic WET test using Ceriodaphnia dubia and Pimephales promelas on a once per term frequency and that will be continued in the draft 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. Previously it was shown that the CD is 24%. The additional effluent concentrations shall be 10%, 14%, 18%, and 32%. The previous permit however established the CD at 100%. The CD has been adjusted after consultation with NMED to reflect consistent permit conditions using the Rio Chama as the receiving water. Since the change is based on new facts and the permit condition isn't a limit but rather a report requirement antibacksliding does not apply with the lessening of the CD consistent with 40 CFR §122.44(l)(1)(B); new information.

Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS 30-DAY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity (7-Day NOEC) 1/		
Ceriodaphnia dubia Pimephales promelas	REPORT REPORT	REPORT REPORT
EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS	<u>5</u> TVPF
Whole Effluent Toxicity (7-Day NOEC) 1/	TREQUENCE	
Ceriodaphnia dubia Pimephales promelas	1/permit term 1/permit term	Flow Composite /2 Flow Composite /2

FOOTNOTES

- 1/ 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.
- /2 Flow Composite grab samples do not have to be obtained during cleaning events, they are however to be flow weighted.

VI. TMDL REQUIREMENTS

The Chama River is on the 2010-2012 State of New Mexico Clean Water Act §303(d) list of impaired waters with impairments for bacteria and nutrients. The fact sheet earlier discussed and provided the basis for permit limits to address the impaired pollutants. 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 were 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 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 assimilative capacity of the receiving waters, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

VIII. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, Southwest Region 2 website, <u>http://www.fws.gov/southwest/es/EndangeredSpecies/EndangeredSpecies_Lists/EndangeredSpecies_Lists/EndangeredSpecies_Lists/EndangeredSpecies_Lists/EndangeredSpecies_ListSpecies.cfm</u>, five species in Rio Arriba County are listed as endangered (E) or threatened (T). The interior least tern (E) (*Sterna antillarum*), southwestern willow flycatcher E) (*Empidonax traillii extimus*), the Rio Grande silvery minnow (E) (*Hybognathus amarus*), the Black-footed ferret (E, extirpated in the county) (*Mustela nigripes*) and the Mexican spotted owl (T) (*Strix occidentalis lucida*). The American bald eagle (*Haliaeetus leucocephalus*) was previously listed in Rio Arriba County; however, the USFWS removed the American bald eagle in the lower 48 states from the Federal List of Endangered and Threatened Wildlife Federal Register, July 9, 2007, (Volume 72, Number 130).

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. 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. No additions have been made to the USFWS list of threatened and endangered species and critical habitat designation in the area of the discharge since prior issuance of the permit.

- 2. EPA has received no additional information since the previous permit issuance which would lead to revision of its determinations.
- 3. The draft permit is consistent with the States WQS and does not increase pollutant loadings.
- 4. EPA determines that Items 1, thru 3 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.

IX. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

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

X. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards are promulgated or revised. In addition, if the State amends 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.

XI. VARIANCE REQUESTS

No variance requests have been received.

XII. 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.

XIII. FINAL DETERMINATION

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

XIV. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Forms 1 and 2B received February 28, 2011.

B. 40 CFR CITATIONS

Citations to 40 CFR are as of April 20, 2012. Sections 122, 124, 125, 133, 136

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through January 14, 2011.

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

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2010 - 2012.