

NPDES PERMIT No. NM0030147

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
Red River State Trout Hatchery
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ISSUING OFFICE

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Region 6
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DATE PREPARED

August 19, 2011

PERMIT ACTION

Renewal of a permit issued July 11, 2006.

RECEIVING WATER – BASIN

Red River – Rio Grande 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
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 (one part per million)
µg/l	Micrograms per liter (one part per billion)
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
POTW	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
UV	Ultraviolet light
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

The current permit is proposed to be reissued for a 5-year term. The changes from the current permit issued July 11, 2006, with an effective date of September 1, 2006 and an expiration date of August 31, 2011 are:

- A. The flow has been increased to 12.56 MGD.
- B. The mass limits for TSS have been removed.
- C. The coordinates for outfalls 001, 002, and 003 have been refined.
- D. Discharge of chlorine is not authorized.
- E. Testing requirements for nonylphenols and manganese have been included.
- F. Limits for aluminum have been included.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility located at the end of State Highway 515, approximately 10-miles northwest of the intersection with State Highway 522 and approximately 5-miles downriver (southwest) from the town of Questa, in Taos County, New Mexico. The discharge from the facility is from three outfalls, all directly to the Red River. They are located as follows:

Outfall 001 - Latitude 36° 41' 01.56" North, Longitude 105° 39' 07.03" West

Outfall 002 - Latitude 36° 40' 59.81" North, Longitude 105° 39' 10.55" West

Outfall 003 - Latitude 36° 40' 58.59" North, Longitude 105° 39' 13.94" West

An aerial photograph of the facility follows with the buildings, ponds, and outfalls labeled.



Under the Standard Industrial Classification (SIC) Code 0921, the applicant operates a finfish hatchery raising rainbow and brown trout for stocking in lakes and/or streams. The operation described in the application consists of spring water collection galleries feeding a series of production raceways, equipped with a low head oxygenation system, a hatchery building, a show pond, and settling ponds. The Red River Fishing Pond located south of the river is stocked by NMDGF, but is not part of the trout hatchery operations. Flow from the river enters this pond then is returned back to the river. This permit does not require analytical monitoring of the flow from this fishing pond.

The facility described in the application produces an annual estimated fish harvest is 245,000 pounds of rainbow trout and brown trout from 42 raceways and 21 troughs.

According to the application submitted by the facility, outfall 001 has nearly continuous discharge with a maximum 30-day average flow of 11.1 MGD. The discharge from this outfall is flow from the raceways used to raise fish. Outfall 002 is a constant discharge of 165 gallons per minute (gpm) (0.238 MGD) from the hatchery "Show Pond". The "Show Pond" is a pond used to display larger, older fish raised at the hatchery. Outfall 003 is an intermittent discharge of 6312 gpm for approximately 120 minutes each day from the lower settling pond. This flow is the

equivalent of 0.757 MGD. The flow from this outfall is when the various raceways are cleaned of debris. Raceway's A and B are cleaned daily, raceway C is cleaned less frequently. According to the DMR data, the highest of the 30 day average flow values from June 2009 to June 2011 is 12.56 MGD.

The effluent from the facility through all three outfalls is discharged to the Red River in segment number 20.6.4.122 of the Rio Grande Basin.

The general and specific stream standards are provided in "State of New Mexico Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, effective April 18, 2011). The designated uses of the receiving waters are coldwater aquatic life, fish culture, irrigation, livestock watering, wildlife habitat, and primary contact.

III. EFFLUENT CHARACTERISTICS

The facility submitted information in its application that describes the nature of the permitted discharge. Included in the data provided were the pesticides along with the metals which have human health WQS. Data that exceeded MQL's are included below:

<u>Pollutant</u>	<u>Concentration (µg/l)</u>
Aluminum	5.65
Boron	359
Molybdenum	60

IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water"; more commonly known as the "swimmable, fishable" goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The previous permit expires June 30, 2011. The application was received on February 28, 2011. The existing permit is administratively continued until this permit is issued.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

The proposed effluent limitations for those pollutants proposed to be limited are based on regulations promulgated at 40 CFR 122.44. The draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR 122.44(a), on best professional judgment (BPJ) in the absence of guidelines, and/or requirements pursuant to 40 CFR 122.44(d), whichever are more stringent.

A. REASON FOR PERMIT ISSUANCE

It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR 122.46(a).

The initial permit application was received on February 28, 2011.

B. OPERATION AND REPORTING

The permittee must submit monthly discharge monitoring reports (DMR's) quarterly, beginning on the effective date of the permit, lasting through the expiration date of the permit, to report on all limitations and monitoring requirements in the permit.

The intent of the previous permit was to establish a single "sample" outfall, comprised of flow-weighted composite samples from the three outfalls. It was in the permit writer's professional judgment that the close physical proximity of the three outfalls and the nature of the discharge would allow that approach. The draft permit will continue with the same methodology. The draft permit will authorize discharges from Outfalls 001, 002 and 003, but will sample and report pollutant testing based on flow-weighted composite samples reported at Outfall 001. A second outfall for reporting and monitoring very intermittent drug, medications and chemicals used at the hatchery shall be proposed in the draft permit, designated Outfall 01B.

C. TECHNOLOGY BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated at 40 CFR 122.44(a) require technology-based effluent limitations to be placed in NPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two.

Technology-based effluent limitations found at 40 CFR 451 have been promulgated for this type of activity. 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 242,000 pounds annually. The regulations impose best management practices (BMP) relating to solids control, materials storage, structural maintenance, recordkeeping and training. No chemical specific, effluent limitation guidelines are established. The draft permit shows the specific BMP's contained in the regulations.

The previous permit established technology-based limitations for total suspended solids (TSS) and settleable solids (SS). Limitations for TSS were established at 10 mg/l daily average, 15 mg/l daily max. Limitations for SS were established at 0.1 milliliter/liter (ml/l) daily average, 0.5 ml/l daily max. These limitations will be retained in the draft permit. Mass loading limits for Outfall 001 have been removed based on 40 CFR122.45 (f) (iii) which states:

If in establishing permit limitations on a case-by-case basis under §125.3, limitations expressed in terms of mass are infeasible because the mass of the pollutant discharged cannot be related to a measure of operation (for example, discharges of TSS from certain mining operations), and permit conditions ensure that dilution will not be used as a substitute for treatment.

Monitoring frequency for TSS and SS will be identical to the current permit, twice/month. Sample type in the current permit for TSS is a 24-hour composite, but the flow is only required at once per day frequency. The permit will require that sampling be done during periods when there is a discharge from the settling ponds at Outfall 003. During this sampling period, when discharges are from settling ponds, grab samples are more appropriate and consistent with the daily flow reporting requirements.

D. WATER QUALITY BASED LIMITATIONS

1. General Comments

Effluent limitations and/or conditions established in the draft permit are in compliance with State water quality standards and the applicable water quality management plan.

2. Revised Water Quality Standards

The NM WQCC adopted new WQS for the State of New Mexico. The revised WQS as amended through April 18, 2011 are available on the NMED's website at: <ftp://ftp.nmenv.state.nm.us/www/swqb/Standards/2011/20.6.4NMAC-IntegratedStandards-CWAStatus2011-04-18.pdf>. The WQCC established the revised WQS in accordance with, and under authority of, the NM Water Quality Act [Chapter 74, Article 6, NMSA 1978 Annotated]. The WQS have been partially approved by EPA in accordance with Section 303 of the CWA.

In accordance with State law, the Water Quality Standards (WQS) were properly filed with the State Records Center and publicly noticed in the NM Register December 30, 2010. The revised WQS became effective under State law on January 14, 2011 and Standards were amended through April 18, 2011. The NMED has a non-discretionary duty to base state certification of federal water quality permits on applicable requirements of State law.

The agency is constrained by the "Alaska Rule" [Alaska Clean Water Alliance v. Clark, No. C96-1762R (W.D. Wash.)] in implementing the new NM WQS, until such time as the revised NM WQS are fully approved by EPA pursuant to Section 303 of the Clean Water Act. However, according to EPA memorandum from Geoffrey H. Grubbs, Director Office of Science and Technology dated 9/15/00, if a State or tribe bases a section 401 certification on the more

stringent state requirement, as allowed under CWA section 401(d), EPA would put the effluent limitations specified in the certification into an EPA-issued permit.

The Region, where appropriate, will draft permits with the new standards in place. If the new standards make more restrictive a limit, a compliance schedule will be placed in the permit. If a new parameter were added to the standards that would be added to the permit, then it would also get a compliance schedule. If the standard were less stringent than the currently approved standard, the Region would put the effluent limitation specified in the current Standards, until EPA approves the revised Standards. In addition, if the Region were required under a 401 certification to replace an effluent limitation of a pollutant for another effluent limitation of similar nature, the agency would include effluent limitations of both pollutants until the agency approves the revised Standards. However, the agency will grant a compliance schedule to allow the permittee sufficient time to achieve effluent limitation for the new parameter.

3. Segment Specific Water Quality-Based Limits

The Clean Water Act 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.

Regulations promulgated at 40 CFR 122.44(d) require limits in addition to or more stringent than effluent limitation guidelines (technology based).

Segment specific standards for 20.6.4.122 require pH to be between 6.6 – 8.8 standard units. The permit retains the pH limitations of 6.6 – 8.8 standard units.

This permit does not authorize any discharge of sanitary waste, and limitations for *E. coli* bacteria are not required.

4. Toxics Evaluation

The Clean Water Act 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.

Based on data provided by the applicant, EPA does not believe that the discharge will pose a reasonable potential to cause an in-stream excursion above a water quality standard.

Further, the Region 6 Implementation Guidance for State of New Mexico Standards for Interstate and Intrastate Streams allows biomonitoring to be used to assess a discharge's compliance with State WQS. The draft permit has biomonitoring requirements discussed below.

5. Post Third Round Policy and Strategy

Section 101 of the Clean Water Act (CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." To insure that the CWA's prohibitions on toxic discharges are met, EPA has issued a "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants 49 FR 9016-9019, March 9, 1984." In support of the national policy, Region 6 adopted the "Policy for Post Third Round NPDES Permitting" and the "Post Third Round NPDES Permit Implementation Strategy" on October 1, 1992. The Regional policy and strategy are designed to insure that no source will be allowed to discharge any wastewater which (1) results in instream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State/Tribal water quality standard resulting in nonconformance with the provisions of 40 CFR 122.44(d); (3) results in the endangerment of a drinking water supply; or (4) results in aquatic bioaccumulation which threatens human health.

The Region is currently implementing its post third round policy in conformance with the Regional strategy. Either technology-based effluent limitations reflecting the best controls available or 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. Biomonitoring of the effluent is thereby required as a condition of this permit to assess potential toxicity.

6. Aquatic Toxicity Testing

a. General Comments

The State has established narrative criteria, which in part, state that:

"Surface waters of the State shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms..." (NM Standards Section 20.6.4.13.F.1)

The Implementation Guidance for NM Standards state that:

"Biomonitoring requirements will be applied to all major dischargers and those minor dischargers with known or potential problems to cause or contribute to exceedances of applicable NM Standards, numeric or narrative water quality criteria in waters with existing or designated fishery uses" (Section VI. Narrative Toxics Implementation).

b. Permit Action

The provisions of this section apply to discharges from Outfalls 001, 002 and 003. The sample shall be a flow-weighted composite sample representing ALL three outfalls, and reported on the discharge monitoring report (DMR) for Outfall 001.

The testing requirements are based on the instream concentration of effluent after complete mixing with 100% of the receiving water of the Red River at low-flow conditions. NMED has provided the low-flow (4Q3) of the Red River, downstream of the facility at USGS 08266820. The 4Q3 is reported to be 31.6 cfs (20.4 MGD). Subtracting the effluent flow of 12.56 MGD yields a 4Q3 above the facility of 7.84 MGD. The critical dilution for perennial streams is calculated as:

$$C_d = (Q_e) / (FQ_a + Q_e)$$

Where:

Q_e = the treatment facility flow determined above, 12.56 MGD

Q_a = the critical low-flow determined above, 7.84 MGD

F = the fraction of stream allowed for mixing, and for site specific streams, when conditions such as climatic conditions, channel characteristics and morphology are not known, a value of 1.0 is used.

$$C_d = (12.56) / \{(1.0 * 7.84) + 12.56\}$$

$C_d = 61.6\%$, rounded to 62%

OUTFALL 001

In the section above in “Critical Conditions,” it was shown that the critical dilution, CD, for the facility is 62%, because the discharge is to a perennial. Based on the nature of the discharge; fish hatchery, minor discharge according to 20.6.4 NMAC, the nature of the receiving water; perennial, and the critical dilution; 62%, the NMIP directs the WET test to be a 7 day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* at a once per permit term frequency consistent with the NMIP. The test series will be 0% (control), 26%, 35%, 47%, 62%, and 83%.

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

EFFLUENT CHARACTERISTIC DISCHARGE MONITORING

MINIMUM 30-DAY AVERAGE MINIMUM 7-DAY

Whole Effluent Toxicity Testing
(7 Day Static Renewal) 1/

Ceriodaphnia dubia
Pimephales promelas

REPORT
REPORT

REPORT
REPORT

EFFLUENT CHARACTERISTIC

MONITORING REQUIREMENTS

	<u>FREQUENCY</u>	<u>TYPE</u>
Whole Effluent Toxicity Testing (7 Day Static Renewal) <u>1/</u>		
<i>Ceriodaphnia dubia</i>	1/permit term	24-Hr. Composite
<i>Pimephales promelas</i>	1/permit term	24-Hr. Composite

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.

The permittee shall conduct separate whole effluent toxicity tests in accordance with the following table:

TOXICITY TESTS	FREQUENCY
7-day <i>Ceriodaphnia dubia</i> survival and reproduction test (Method 1002.0) ¹	Once/permit term
7-day fathead minnow <i>Pimephales promelas</i> larval survival and growth test (Method 1000.0) ¹	Once/permit term

¹ Chronic freshwater Whole Effluent Toxicity Testing

The sample for the WET test shall be taken during the period April 1 through June 30. The permittee shall submit the results of any toxicity testing performed in accordance with the Part II of the Permit.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the appropriate test method publication. The full reports required by each test section need not be submitted unless requested. However, the full report is to be retained following the provisions of 40 CFR Part 122.41(j)(2). The permit requires the submission of the toxicity testing information to be included on the DMR.

A minimum of five effluent dilutions in addition to an appropriate control (0%) are to be used in the toxicity tests. These additional effluent concentrations are 26%, 35%, 47%, 62%, and 83%. The low-flow effluent concentration (critical dilution) is defined as 62% effluent determined above.

7. Permit Limits

See the proposed permit for final limitations. All pollutants including biomonitoring (except the special biomonitoring test discussed in the next section) shall be based on composite samples. Composite samples shall be obtained using the following procedures:

- a. During times when discharging from the settling ponds through Outfall 003, collect a sample aliquot from each outfall and at the same time, measure and record the flow over the weir from each outfall.
- b. After the last aliquot from the last outfall has been collected, calculate the proportion of each outfalls flow to the total flow from all the outfalls.
- c. Make the composite sample by mixing each individual outfall's aliquot in the same ratio as the flow proportion determined in Step b. above.

8. Monitoring Frequency

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)]. The monitoring frequencies are based on the professional judgment of the permit writer, taking into account the nature of the facility. For all sample events, flow shall be monitored daily by measurement of head over each of the weirs, totaled and reported. The parameter pH shall be monitored twice/month, with each reporting period sample taken at least 10-days after the previous reporting period first sample. This frequency is proposed at the same frequency in the current permit.

E. APPROVED MEDICATIONS AND HATCHERY PRACTICES

1. Drugs Medications And/Or Chemicals

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) has 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. Anytime DGF uses any DMC, such that it will enter waters of the US, 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.

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 other outfall flow. 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 first slug of DMC at the outfall. The expected arrival time can be determined by direct observation by use of a floatable marker such as wooden blocks.

VI. 303(d) LIST

The Red River, Segment No. 20.6.4.122, is listed on the current “2010 – 2012 State of New Mexico Clean Water Act §303(d)/§305(b) Integrated Report” as an integrated report (IR) Category 4. This category indicates that it is meeting some attainments, fish culture, irrigation and wildlife habitat, has not been assessed for primary contact and livestock watering, and is not supporting coldwater fishery uses. A TMDL for coldwater fishery uses has been completed and approved by EPA, and it addressed aluminum.

Red River (Rio Grande to Placer Creek, NM-2119_10) Total Maximum Daily Load (TMDL) for Acute Aluminum was approved by USEPA on March 17, 2006. The TMDL does not have a WLA for the hatchery. NMDGF Red River fish hatchery uses water obtained from springs (gravity fed) in their operations--not from the Red River. The State of New Mexico Statewide Water Quality Management Plan and Continuing Planning Process (WQCC Approval Date May 10, 2011) states, “If an application for a new or revised permit is received for a discharge into an impaired waterbody with an approved TMDL but with no available WLA, the permit may be issued without revision of the TMDL provided the discharge is at or less than the in-stream TMDL target concentration.”

In this case, the TMDL target discharge limitation is based on the dissolved aluminum acute criteria (0.750 mg/L or 750 µg/L). Aluminum effluent limitations have been added to this permit based on the following calculation and the treatment facility flow determined above:

$$12.56 \text{ MGD} * 1,000,000 \frac{\text{Gallon}}{\text{MGD}} * 3.785 \frac{\text{Liter}}{\text{Gallon}} * 0.750 \frac{\text{mg}}{\text{liter}} * \frac{1 \text{ lb}}{453592 \text{ mg}} = 78.6 \frac{\text{lb}}{\text{day}}$$

The 30 day average discharge limitation is based on the dissolved aluminum chronic criteria (0.087 mg/L or 87 µg/L). The permit has a reopener clause that would allow the permit to be changed if at a later date the TMDL were changed, a TMDL target concentration based on the dissolved Aluminum chronic criteria, and/or revised WQS were implemented.

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 WQS 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 are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water, per NMAC 20.6.4.8.A.2.

VIII. ANTIBACKSLIDING

The proposed modified permit is consistent with the requirements and exemption to meet antibacksliding provisions of the Clean Water Act (CWA), Section 402 (o) and 40 CFR Part 122.44 (i) (B), which states 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, or substantial alterations to the permitted facility have been made. The modifications do not increase the volume, nature or pollutants of the discharge from the current permit. The proposed modifications do not violate the provisions antibacksliding provisions of the CWA.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, <http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>, three species in Taos County are listed as endangered or threatened. The Black-footed ferret (*Mustela nigripes*) and Southwestern willow flycatcher (*Empidonax traillii extimus*) are listed as endangered; and the Mexican spotted owl (*Strix occidentalis lucida*) is listed as threatened.

In the previous permit, these same three species, plus the Bald eagle (*Haliaeetus leucocephalus*) were listed as endangered and/or threatened. Since the previous permit was issued, one species has been delisted, and the environmental baseline established in the previous permit has not changed. Based on those facts, EPA has reviewed the available information regarding impacts of this action on listed species and designated critical habitat. EPA has determined that the issuance of this permit will have “no effect” on listed threatened and endangered species nor will destroy nor adversely modify 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 construction activities are planned in the reissuance.

XI. 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.

XII. FINAL DETERMINATION

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

XIII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(S)

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

B. 40 CFR CITATIONS

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 April 18, 2011.

Implementation Guidance for the State of New Mexico Standards for Interstate and Intrastate Streams, May 3, 2011

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

D. MISCELLANEOUS REFERENCES

National Toxics Rule 57 FR 60848, December 22, 1992.

Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001, March 1989.

Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA/600/4-90/027, September 1991.

E. CORRESPONDENCE

Email from Paulette Free, Huther and Associates to Taimur Shaikh, EPA, August 19, 2011 providing a report.

Email from Erin Trujillo, NMED to Taimur Shaikh, EPA, October 5, 2011 providing comments.