



**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

***Surface Water Quality Bureau***

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**RYAN FLYNN**  
Cabinet Secretary - Designate

**BUTCH TONGATE**  
Deputy Secretary

**Certified Mail - Return Receipt Requested**

July 2, 2013

Mr. Michael Sloane, Fisheries Chief  
New Mexico Department of Game and Fish  
P.O. Box 25112  
Santa Fe, NM 87504

**RE: Minor Industrial; SIC 0921; NPDES Compliance Evaluation Inspection; Rock Lake Fish Hatchery  
NMDG&F; NM0030155; June 3, 2013**

Dear Mr. Sloan:

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas, for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the Clean Water Act.

Problems noted (if any) during this inspection are discussed in the Further Explanations section of this inspection report. You are encouraged to review the inspection report, and required to correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify, in writing, both USEPA (Diana McDonald, USEPA (6EN-WC), 1445 Ross Ave., Dallas, TX 75202) and NMED (at the above address) regarding modifications and compliance schedules. Thank you for the cooperation and assistance of Mr. Paul Sanchez, Assistant Manager – Cold Water Fishery during this inspection. If you have any questions about this inspection report, please contact me at 505-827-0212 or [barbara.cooney@state.nm.us](mailto:barbara.cooney@state.nm.us)

Sincerely,  
/S/ Barbara Cooney

Surface Water Quality Bureau

Cc: Rashida Bowlin, USEPA (6EN-AS) by email  
Diana McDonald, USEPA (6EN-WM) by email  
Hannah Branning, USEPA (6EN-AS) by email  
Darlene Whitten-Hill, USEPA (6EN-AS) by email  
Carol Peters-Wagnon, USEPA (6EN-WM) by email  
Brent Larsen, USEPA (6EN-PP) by email  
Michael Kesler, NMED Dist. 3 Mgr, by email



### NPDES Compliance Inspection Report

#### Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
1   N   2   5   3   N   M   0   0   3   0   1   5   5   11   12   1   3   0   6   0   3   17   18   C   19   S   20   2					
Remarks					
A   N   I   M   A   L   A   Q   U   A   C   U   L   T   U   R   E   R   O   C   K   L   A   K   E					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67       1   69	70   3	71   N	72   N	73	74   75   M   I   N   O   R     80

#### Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) <b>ROCK LAKE HATCHERY, SANTA ROSA, GUADALUPE COUNTY, NM – FROM I-40, TAKE THE FIRST SANTA ROSA EXIT GO 1 MILE TO RIVER ROAD, TURN RIGHT (AT GAS STATION) ONTO CR 69 FOR 2 MILES. RIGHT INTO HATCHERY ENTRANCE.</b>	Entry Time /Date 1200 HOURS / 6-3-2013	Permit Effective Date February 1, 2008
	Exit Time/Date 1500 HOURS / 6-3-2013	Permit Expiration Date November 30, 2011 – Administratively Extended by EPA
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) MR. PAUL SANCHEZ, ASSISTANT MANAGER (575) 472-3690	Other Facility Data Outfall 003 LAT N. 34° 54' 45" LONG W. -104° 40' 05" Outfall 004 LAT N. 34° 54' 44" LONG W. -104° 40' 44" SIC 0921	
Name, Address of Responsible Official/Title/Phone and Fax Number MR. MICHAEL SLOAN, FISHERIES CHIEF (505) 476-8052 P.O. BOX 25112, SANTA FE, NM 87504	Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

#### Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
S	Records/Reports	S	Self-Monitoring Program	M	Sludge Handling/Disposal	N	Pollution Prevention
M	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
M	Effluent/Receiving Waters	S	Laboratory	N	Storm Water	N	Other:

#### Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

SEE THE FURTHER EXPLANATIONS SECTION OF THIS REPORT FOR DETAILS.

Name(s) and Signature(s) of Inspector(s) /s/ Barbara Cooney	Agency/Office/Telephone/Fax NMED/SWQB 505- 827-0212 / 505 827-0160	Date July 2, 2013
Signature of Management QA Reviewer /s/ Bruce Yurdin	Agency/Office/Phone and Fax Numbers NMED/SWQB 505- 827-0212 / 505 827-0160	Date July 3, 2013

## SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS

 S  M  U  NA (FURTHER EXPLANATION ATTACHED NO )

DETAILS:

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE

 Y  N  NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES Salt is added as part of the process and not stated in the permit application. Uncontrolled drain to splitter box.

 Y  N  NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT

 Y  N  NA

4. ALL DISCHARGES ARE PERMITTED

 Y  N  NA

## SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.

 S  M  U  NA (FURTHER EXPLANATION ATTACHED YES )

DETAILS:

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.

 Y  N  NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.

 S  M  U  NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING

 Y  N  NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING

 Y  N  NA

c) ANALYTICAL METHODS AND TECHNIQUES.

 Y  N  NA

d) RESULTS OF ANALYSES AND CALIBRATIONS.

 Y  N  NA

e) DATES AND TIMES OF ANALYSES.

 Y  N  NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.

 Y  N  NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.

 S  M  U  NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.

 S  M  U  NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.

 Y  N  NA

## SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.

 S  M  U  NA (FURTHER EXPLANATION ATTACHED YES )

DETAILS:

1. TREATMENT UNITS PROPERLY OPERATED.

 S  M  U  NA

2. TREATMENT UNITS PROPERLY MAINTAINED.

 S  M  U  NA

3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.

 S  M  U  NA

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.

 S  M  U  NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE.

 S  M  U  NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.

 S  M  U  NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.

 S  M  U  NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.

 Y  N  NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.

 Y  N  NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.

 Y  N  NA

## SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?

 Y  N  NA

IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?

 Y  N  NA

HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?

 Y  N  NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?

 Y  N  NA

IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?

 Y  N  NA

## SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS.  
DETAILS: S  M  U  NA (FURTHER EXPLANATION ATTACHED NO.)

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.

 Y  N  NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.

 Y  N  NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.

 Y  N  NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.

 Y  N  NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.

 Y  N  NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE

 Y  N  NA

a) SAMPLES REFRIGERATED DURING COMPOSITING.

 Y  N  NA

b) PROPER PRESERVATION TECHNIQUES USED.

 Y  N  NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.

 Y  N  NA7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE  
THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT? Y  N  NA

## SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS.  
DETAILS: Spill way to the Pecos River and not to the Borsch Ditch. S  M  U  NA (FURTHER EXPLANATION ATTACHED YES.)1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.  
TYPE OF DEVICE \_\_\_\_\_ 48" RECTANGULAR WEIR Y  N  NA

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.

 Y  N  NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.

 Y  N  NA4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION None )  
RECORDS MAINTAINED OF CALIBRATION PROCEDURES.  
CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. Y  N  NA Y  N  NA Y  N  NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.

 Y  N  NA

6. HEAD MEASURED AT PROPER LOCATION.

 Y  N  NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.

 Y  N  NA

## SECTION F - LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS.  
DETAILS: S  M  U  NA (FURTHER EXPLANATION ATTACHED NO.)

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)

 Y  N  NA

**SECTION F - LABORATORY (CONT'D)**

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED  Y  N  NA
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.  S  M  U  NA
4. QUALITY CONTROL PROCEDURES ADEQUATE.  S  M  U  NA
5. DUPLICATE SAMPLES ARE ANALYZED. 10 \_\_\_ % OF THE TIME.  Y  N  NA
6. SPIKED SAMPLES ARE ANALYZED. \_\_\_ % OF THE TIME.  Y  N  NA
7. COMMERCIAL LABORATORY USED.  Y  N  NA

LAB NAME NM SCIENTIFIC LABORATORY DIVISION HUTHER AND ASSOCIATES  
 LAB ADDRESS 1101 CAMINO DE SALUD, ABQ, NM 87102 1156 NORTH BONNIE BRAE, DENTON, TX 76201  
 PARAMETERS PERFORMED TSS, Ammonia, Settleable Solids BIOMONITORING

**SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS.**  S  M  U  NA (FURTHER EXPLANATION ATTACHED YES).

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
004	NO	NO	SLIGHT - ALGAE	NO	NO	CLEAR - SLIGHTLY GREEN	
003	NO	NO	SLIGHT - ALGAE	NO	NO	CLEAR - SLIGHTLY GREEN	

RECEIVING WATER OBSERVATIONS See attached.

**SECTION H - SLUDGE DISPOSAL**

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED YES).

DETAILS: The content of the mortality pit is overflowing the barriers.

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY.  S  M  U  NA
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503.  S  M  U  NA
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: Unknown (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

**SECTION I - SAMPLING INSPECTION PROCEDURES** (FURTHER EXPLANATION ATTACHED NO).

1. SAMPLES OBTAINED THIS INSPECTION.  Y  N  NA
2. TYPE OF SAMPLE OBTAINED  
 GRAB \_\_\_\_\_ COMPOSITE SAMPLE \_\_\_ METHOD \_\_\_\_\_ FREQUENCY \_\_\_\_\_
3. SAMPLES PRESERVED.  Y  N  NA
4. FLOW PROPORTIONED SAMPLES OBTAINED.  Y  N  NA
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.  Y  N  NA
6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.  Y  N  NA
7. SAMPLE SPLIT WITH PERMITTEE.  Y  N  NA
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.  Y  N  NA
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.  Y  N  NA

### **Introduction**

On June 3, 2013 a Compliance Evaluation Inspection (CEI) was conducted at the Rock Lake Hatchery NMDG&F by Barbara Cooney of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). The inspection was conducted by NMED for the US Environmental Protection Agency (USEPA), Region VI, under the National Pollutant Discharge Elimination System (NPDES) permit program, in accordance with the Federal Clean Water Act. These inspections are conducted under contract with the USEPA and are used by USEPA to evaluate compliance with the NPDES permit program. This inspection report is based on information supplied by the Rock Lake Hatchery NMDG&F representatives (the permittee), observations made by the NMED inspectors, reports and records kept by the permittee and/or NMED.

Rock Lake has a design flow capacity of roughly 8 MGD (million gallons per day) and is classified as a minor industrial discharger under the Federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. The facility is listed under SIC 0921. It is assigned NPDES permit number NM0030155. This permit regulates the discharge to the Ortega-Borsich drainage ditch, thence to the Pecos River in Segment 20.6.4.211 of the Pecos River Basin according to the *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 NMAC*. This segment includes the designated uses of fish culture, irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

### **Inspection Details**

The inspector arrived at the facility at 1200 hours on June 3, 2013 and conducted an entrance interview with Mr. Paul Sanchez, Assistant Manager for the Coldwater Fishery, where she presented credentials and explained the purpose of the inspection. Mr. Sanchez accompanied the inspectors on a tour of the facility. An exit interview was conducted with Mr. Sanchez at the facility at 1515 hours that same day. The inspector left the facility at 1530 hours.

### **Treatment Scheme**

The Rock Lake Hatchery consists of a coldwater fish hatching and production facility for rainbow trout, and a warmwater hatching and rearing facility for walleye eggs and fry, largemouth bass and catfish. Wastewater from the raceways, kettles and walleye/bass/catfish facilities are collected in two earthen settling ponds prior to discharge either to irrigation or to the Pecos River.

The source water is from the spring fed, natural, deep water, Rock Lake. The water is pumped to a distribution chamber that provides passive aeration by allowing it to flow over a series of steps before being divided between the coldwater raceways and the warm water rearing ponds.

The coldwater system consists of two parallel raceways. At the end of the raceways, the water passes through a gated splitter box where it can either be direct to mix with the warm water discharge or to continue to the cold water settling pond and Outfall 003.

The warm water process consists of eleven ponds, each one acre in size. The discharge from these ponds flows past the same splitter box that separates it from the cold water thus sending it to a settling pond and to Outfall 004.

The flow from both settling ponds respectively designated as Outfall 003 for coldwater and Outfall 004 for warm water, enters a concrete lined surface ditch that eventually combines these flow streams before final discharge to the Ortega-Borsich drainage, thence to the Pecos River. See Attachment A for a diagram of the

process flow through the system. The sampling location for each outfall is at the effluent weirs from each pond, before the water reaches the ditch.

The permit defines "Combined Outfall" as the point in the process stream after the cold water raceways and the warm water ponds where the two streams pass through the splitter box before reaching the settling ponds. If the splitter box is configured to allow the waters to comeingle, at that point it becomes an internal outfall, and an additional sampling point with its own permit requirements. The permit does not address the comingling of water from the cold water process and the warm water process as it mixes past the final settling ponds.

At the time of the inspection the coldwater pond was discharging. Comingling of the coldwater and warmwater was not being done at the time of the inspection.

### **Solids**

Fish mortality are composted on site and buried on site.

### **Further Explanations**

Note: The sections are arranged according to the format of USEPA Form 3560-3 and checklist, attached, rather than being ranked in order of importance.

### **Permit Verification**

Overall Rating For Permit Verification (Satisfactory)

### **Permit Requirements For Permit Verification**

The cover letter of the permit states:

*This permit and the authorization to discharge shall expire at midnight, November 30, 2011*

### **Findings For Permit Verification**

The current permit has been administratively extended by the U.S. EPA following the receipt of the permit application.

### **Record Keeping and Reporting**

Overall Rating For Record Keeping and Reporting (Satisfactory)

### **Permit Requirements For Record Keeping and Reporting**

#### **The permit requires in Part III. C. Monitor:**

#### **4. Records Content**

*Records of monitoring information shall include:*

- a. The date, exact place, and time of sampling or measurements;*
- b. The individual(s) who performed the sampling or measurements;*
- c. The date(s) and times(s) analyses were performed;*
- d. The individual(s) who performed the analyses;*
- e. The analytical techniques or methods used; and*
- f. The results of such analyses.*

### **Findings For Recordkeeping and Reporting**

The permittee was approved to submit DMRs through NetDMR the EPA online reporting system May 18, 2011. Reports have been submitted as required by the permit. It is important for the permittee to know that any

hardcopy reports or written communications with EPA should also be copied to the New Mexico Environment Department.

Laboratory Records were reviewed for Ammonia tests as provided by the contractor, State Laboratory Division to the hatchery. A change was made in the reports format being sent to the permittee. The new format is missing the collection time of the sample. The date of the sample collection is reported.

### **Operations And Maintenance**

Overall Rating for Operations and Maintenance (Marginal)

### **Permit Requirements For Operation And Maintenance**

The permit requires in Part III B. Proper Operation and Maintenance

#### *3. PROPER OPERATION AND MAINTENANCE*

*a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.*

### **Findings For Operation and Maintenance**

1. The building known as the “Walleye Building” is located near the end of the cold water and warm water streams where they are sent through a splitter box, to the settling ponds. Stored in this building are ice machines, miscellaneous tools and equipment, bagged salt and a 50 gallon barrel of liquid hydrogen peroxide. A floor drain in this building flows directly to the splitter box that directs water to the settling ponds (see photo). This drain is a place where potentially toxic substances can enter the water that is ultimately discharged to the Pecos River.

Salt is added to the rearing unit when fish are being prepared to be moved to the “kettles” for transport and release. Operators said the salts help calm down the fish for this process. This addition of salts can increase the Total Dissolved Solids (TDS) suspected of being a factor in the failure of the Whole Effluent Toxicity (WET) Tests.

Hydrogen peroxide is commonly used as a disinfectant for cleaning wounds in people. Hydrogen peroxide has also been used in aquaculture as an immersion (bath) treatment against many different disease-causing organisms, including external parasites, bacteria, and fungi, on different species and life-stages of fish.

2. Fertilizer is being added to the warmwater rearing ponds to promote algal growth for fish feeding. The addition of this fertilizer may be another source or toxic substances affecting the WET test.

### **Self-Monitoring**

Overall Rating For Self Monitoring (Satisfactory)

### **Flow Measurement**

Overall Rating For Flow Measurement (Satisfactory)

**Permit Requirements For Flow Measurements:**

The permit requires in Part III C.

**6. FLOW MEASUREMENTS:**

*Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected, shall be capable of measuring flow with a maximum deviation 10% from true discharge tares throughout the range of expected discharge volumes.*

**Findings For Flow Measurements:**

A rectangular weir and measuring stick is used to determine the effluent flow volume from both lagoons. There is nothing in place that allows for secondary measurement or for calibration of the flow measurements.

**Laboratory**

Overall Rating For Laboratory (Satisfactory)

**Effluent And Receiving Water**

Overall Rating For Effluent And Receiving Water (Marginal)

**Permit Requirements For Effluent and Receiving Water**

The permit requires in Part I. Section A

Limitations And Monitoring Requirements

**1. Outfall 003 – Final Effluent Limits – 6.8 MGD Flow**

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
Whole Effluent Lethality (7-Day NOEC) (See Part II, Section C) (PCS 22414)	30-DAY AVG 77%	7-DAY MINIMUM 77%	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Report	Once/Year (*2)	Grab
Pimephales promelas	Report	Report	Once/Year (*2)	Grab

**2. OUTFALL 004 - FINAL Effluent Limits – Intermittent Flow**

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING (7-Day Static Renewal) (See Part II, Section D)	30-DAY AVG	7-DAY MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Report	Once/Term (*1)	Grab
Pimephales promelas	Report	Report	Once/Term (*1)	Grab

**Findings For Effluent And Receiving Water**

1. The facility failed the chronic Whole Effluent Toxicity Test (WET) for the species, Ceriodaphnia dubia on April 5, 2011. The laboratory has reported that a number of tests are “invalid” due to toxicity in the receiving stream and in the influent water (May 24, 2011 and June 21, 2011). The effluent was retested on May 24, 2011 and passed for both species, Ceriodaphnia dubia and Pimephales promelas. If the receiving stream is shown to be toxic to the test species, the permit allows for the use of synthetic water to be used as a substitute with the noted approval by EPA. The permittee has not requested to use of synthetic water. The permittee has requested

the use of a substitute species *Daphnia magna* for the chronic test instead of *Ceriodaphnia dubia*. This is under evaluation by EPA. The permittee has provided Total Dissolved Solids (TDS) data for the source water, receiving stream and outfall. The values for samples at each of these location range between >2700 mg/L and <3000mg/L.

Observations made at the facility during this inspection raised questions about practices that could also add to the potential toxicity in the effluent. Those practices include:

- a. The addition of salt and hydrogen peroxide.
- b. The uncontrolled drain in the walleye building is a potential source of contamination that could affect the WET test as well.
- c. The addition of fertilizer in the warmwater fisheries ponds that promotes algal growth.

Additional investigations should be made into the potential toxicity from practices at the Hatchery while considering alternative test. These and other activities not yet identified could act synergistically with high TDS to create a toxic environment.

### **Sludge Disposal**

Overall Rating For Sludge Handling (Marginal)

#### **Permit Requirements For Sludge Disposal**

The permit states in Part II. G.5.a.iii:

*Remove and dispose of aquatic animal mortalities properly on a regular basis to prevent discharge to waters of the U.S., except in cases where the permitting authority authorizes such discharge in order to benefit the aquatic environment.*

And, the facility's BMP plan states in Part VI.A.4:

*All mortality (sic) will be removed from rearing unit screens daily and properly disposed of.*

#### **Findings For Sludge Disposal**

Two Mortality pits, consist of three sided berms (see attached photo) are located on the lower end of the property and are overflowing. Final disposal of the debris and dead fish is pit burial on site. These overflowing pits need to be maintained for better containment and vector control.

NMED/SWQB  
Official Photograph Log  
Photo #1

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Warm Water rearing ponds.



NMED/SWQB  
Official Photograph Log  
Photo #2

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Warm Water Rearing Ponds



NMED/SWQB  
Official Photograph Log  
Photo # 3

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Warm Water Rearing Ponds With Debris – The facility representative did not know the cause of the debris. It appears to be a combination of algae, fish food and possibly fertilizer used to promote algae growth.



NMED/SWQB  
Official Photograph Log  
Photo # 4

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Warm Water Rearing Pond liner



**NMED/SWQB  
Official Photograph Log  
Photo # 5**

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Mortality Containers. Note the containers are overflowing and spilling out the sides as well. Final disposal is by burial on site.



**NMED/SWQB  
Official Photograph Log  
Photo # 6**

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Cold Water Raceway



NMED/SWQB  
Official Photograph Log  
Photo # 7

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Walleye building and the cold water raceway with conveyor belt to lift fish to the tanks (Kettles) for transport and release.



NMED/SWQB  
Official Photograph Log  
Photo # 8

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: raceway with conveyor belt to lift fish to the tanks (Kettles) for transport and release.



NMED/SWQB  
Official Photograph Log  
Photo # 9

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Final Cold Water Raceway



NMED/SWQB  
Official Photograph Log  
Photo # 10

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Final Cold Water Raceway with 4-6 inch long fish



NMED/SWQB  
Official Photograph Log  
Photo # 11

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Splitter box past final raceway and past final warm water rearing pond – a pipe feeds into this splitter box (located at the lower right of the photo that is from the floor drain of the Walleye building). The splitter box directs water to the final settling ponds, either to the warm water pond or the coldwater pond. At the time of this inspection, the flow was being directed to the Cold Water settling pond.



NMED/SWQB  
Official Photograph Log  
Photo # 12

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

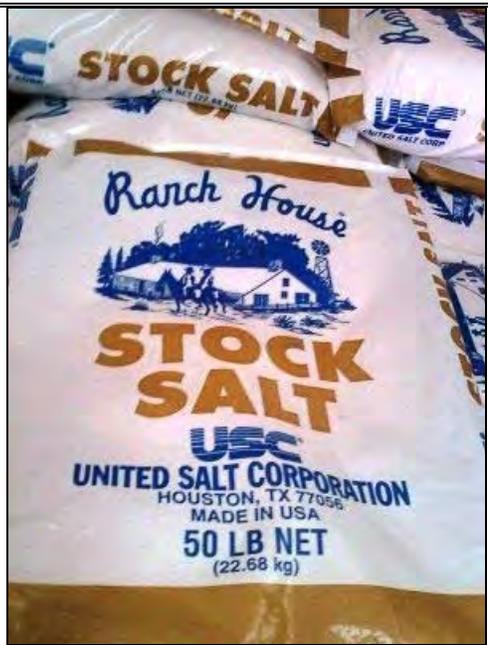
Location: Rock Lake Hatchery, NDG&F

Subject: In the Walleye building, chemical such as this salt are stored.



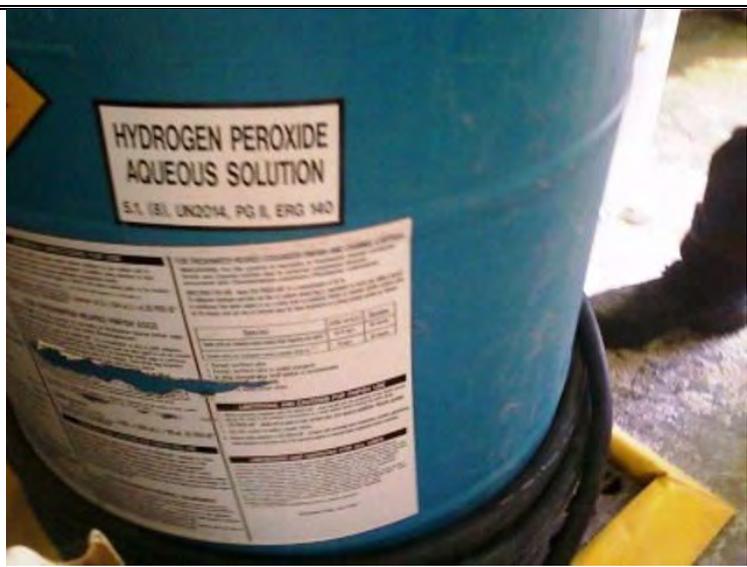
NMED/SWQB  
Official Photograph Log  
Photo # 13

Photographer: B. Cooney	Date: June 3, 2013	Time: Between 1240 and 1600 Exact Time Unknown
City/County: Santa Rosa / Guadalupe	State: New Mexico	
Location: Rock Lake Hatchery, NDG&F		
Subject: : In the Walleye building, chemical such as this salt are stored.		



NMED/SWQB  
Official Photograph Log  
Photo # 14

Photographer: B. Cooney	Date: June 3, 2013	Time: Between 1240 and 1600 Exact Time Unknown
City/County: Santa Rosa / Guadalupe	State: New Mexico	
Location: Rock Lake Hatchery, NDG&F		
Subject: : In the Walleye building, chemical such as this Hydrogen peroxide are stored. Though there is a small containment boom around the floor of the barrel, it would not actually contain the contents of the barrel if it were to break and leak.		



NMED/SWQB  
Official Photograph Log  
Photo # 15

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Walleye Building with salts and other spillage on the floor.



NMED/SWQB  
Official Photograph Log  
Photo # 16

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: In the Walleye building, water leaking from the ice machines , chemical stains and flows to a floor drain.



NMED/SWQB  
Official Photograph Log  
Photo # 17

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Walleye building floor drain that flow to the splitter box and out to the settling ponds – that ultimately discharge to the Borsch ditch and the Pecos River.



NMED/SWQB  
Official Photograph Log  
Photo # 18

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Cold Water Settling Pond.



**NMED/SWQB  
Official Photograph Log  
Photo # 19**

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Square Weir Box at the end of the warmwater settling pond. This is where effluent flow reading are taken.



**NMED/SWQB  
Official Photograph Log  
Photo # 20**

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Effluent being discharged to the Borsch ditch for irrigation and a spillway where discharge goes directly to the Pecos River.



**NMED/SWQB  
Official Photograph Log  
Photo # 21**

Photographer: B. Cooney

Date: June 3, 2013

Time: Between 1240 and 1600 Exact Time  
Unknown

City/County: Santa Rosa / Guadalupe

State: New Mexico

Location: Rock Lake Hatchery, NDG&F

Subject: Effluent being discharged to the Borsch ditch for irrigation.

