NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

Harold Runnels Building, N2050
1190 South St. Francis Drive (87505)
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SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

RYAN FLYNN
Cabinet Secretary-Designate

BUTCH TONGATE
Deputy Secretary

ERIKA SCHWENDER
Director
Resource Protection Division

Certified Mail - Return Receipt Requested

September 24, 2013

Mr. Jeff Powell,
Project Manger
Mora National Fish Hatchery & Technology Center
P.O. Box 689
Mora, New Mexico 87732

Re: Mora National Fish Hatchery and Technology Center; Minor Non-Municipal, SIC 0921; NPDES Compliance Evaluation Inspection; NPDES Permit No. NM0030031; September 5, 2013

Dear Mr. Powell:

Enclosed please find a copy of the report and check list 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 federal Clean Water Act.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the "Further Explanations" section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Diana McDonald
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Bruce Yurdin
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact Barbara Cooney at 505-827-0212 or at barbara.cooney@state.nm.us .

Sincerely,

/S/ Bruce J. Yurdin

Bruce J. Yurdin
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Larry Giglio, USEPA (6WQ-PP) by e-mail
Hannah Branning, USEPA (6EN-WC) by e- mail
Jan Walker, USEPA (6EN) by e-mail
NMED District 1, Robert Italiano by e-mail

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

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 0 3 1 11	12 1 3 0 9 0 5 17	18 C	19 S 20	4

Remarks

M I N O R N O N M U N I C I P A L H A T C H E R Y

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
67 1 69	70 3	71 N 72	N 73 74 75	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)*	Entry Time /Date	Permit Effective Date
Mora National Fish Hatchery & Technology Center, Hwy 434 Mile Post 2, P.O. Box 689, Mora, New Mexico 87732 NM 434 north, facility is at milepost 2 on left side of NM 434. MORA COUNTY	1135 Hours /September 5, 2013	August 1, 2013
	Exit Time/Date 1630 Hours / September 5, 2013	Permit Expiration Date July 31, 2018

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data
Mr. Jeff Conway, Fish Biologist / 575-387-6022	LAT 35 58 34.1 N LONG –105 18 8.10 W SIC 0921

Name, Address of Responsible Official/Title/Phone and Fax Number	Contacted
Mr. Jeff Powell, Project Manager Post Office Box 689 Mora, NM 87732 575-387-6022 / 575-387-9030	Yes [ ] No [X]

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**	M	**Self-Monitoring Program**	S	**Sludge Handling/Disposal**		**Pollution Prevention**
S	**Facility Site Review**	U	**Compliance Schedules**	N	**Pretreatment**	N	**Multimedia**
U	**Effluent/Receiving Waters**	S	**Laboratory**	N	**Storm Water**		**Other:**

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

SEE REPORT AND FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
/S/ BARBARA COONEY	**NMED/SWQB 505-827-0212 /505-827-0160**	***September 24, 2013***
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date** ***September 24, 2013***
/S/ BRUCE YURDIN	**NMED/SWQB 505-827-2795 /505-827-0160**	

MORA NATIONAL FISH HATCHERY AND TECHNOLOGY CENTER	PERMIT NO. **NM0030031**

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS ☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED Yes*)

DETAILS:

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	☒ Y ☐ N ☐ NA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES	☒ 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 No*)
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: No Treatment in place for Total Nitrogen Removal and Total Phosphorous Removal

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. No Treatment in place for Total Nitrogen Removal and Total Phosphorous Removal	☐ 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

MORA NATIONAL FISH HATCHERY AND TECHNOLOGY CENTER	PERMIT NO. **NM0030031**

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. ☐ S ☒ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED No).*
DETAILS: Compost Samples not refrigerated

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. Need to add ice to the compartment in the ISCO composite sampler	☐ 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 ☐ NA
7. 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. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED Yes)*
DETAILS: Improvements have been made since last inspection done in 2011.

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE	☒ Y ☐ N ☐ NA
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.	☒ Y ☐ N ☐ NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. No secondary Instrument	☐ Y ☒ N ☐ NA
4. CALIBRATION FREQUENCY ADEQUATE. *(DATE OF LAST CALIBRATION* when installed – inline meter)	☐ Y ☐ N ☒ NA
RECORDS MAINTAINED OF CALIBRATION PROCEDURES.	☐ Y ☐ N ☒ NA
CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.	☐ 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. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED No)*
DETAILS:

1. EPA APPROVED ANALYTICAL PROCEDURES USED *(40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)*	☐ Y ☐ N ☐ NA

MORA NATIONAL FISH HATCHERY AND TECHNOLOGY CENTER	PERMIT NO. **NM0030031**

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. ___ % 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

LAB ADDRESS

PARAMETERS PERFORMED

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

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	no	no	no	no	Slight algae	Slightly green	

RECEIVING WATER OBSERVATIONS

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED __No__).*
DETAILS:

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: _____ (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

A Compliance Evaluation Inspection (CEI) was conducted at the U.S. Fish & Wildlife Service Mora National Fish Hatchery & Technology Center (Mora Fish Hatchery) on September 5, 2013 by Barbara Cooney of the NMED Surface Water Quality Bureau for the U. S. Environmental Protection Agency (USEPA). The NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the Federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the permittee's representatives, observations made by the NMED inspectors, and records and reports kept by the permittee and/or NMED. Findings of the inspection are detailed on the attached EPA form 3560-3 and in the narrative Further Explanations section of the report.

The Mora Fish Hatchery is classified as a minor industrial discharger under the Federal Clean Water Act (CWA), Section 402 National Pollutant Discharge Elimination System (NPDES) permit program, and is assigned NPDES permit number NM0030031. The facility design flow is 0.50 million gallons per day (MGD). The discharge primarily consists of wastewater generated from the fish raceways. Domestic sewage, fish raceway solids, filter back flush, and floor drain wastes are treated in an on-site septic drain field.

Discharge from the Mora Fish Hatchery enters an unnamed irrigation ditch, thence to Trambley irrigation ditch, and thence to the Mora River in the Canadian River Basin in Water Quality Segment 20.6.4.307 NMAC (State of New Mexico Standards for Interstate and Intrastate Surface Water). The designated uses for this segment of the river are: marginal coldwater aquatic life, warmwater aquatic life, secondary contact, irrigation, livestock watering, and wildlife habitat. This segment of the Mora River is 303(d) listed as not supporting marginal coldwater aquatic life. Probable cause of impairment is listed as nutrient/eutrophication, biological indicators, and dissolved oxygen. The probable sources of impairment are listed as municipal point source discharges, flow alterations from water diversions, and on-site treatment systems (septic systems and similar decentralized systems). Due to this a Total Maximum Daily Load (TMDL) has been calculated and implemented for this segment of the Mora River, thus included in the NPDES permit for Mora Fish Hatchery are discharge limitations for Total Phosphorous and Total Nitrogen.

Treatment Scheme

The facility raises the threatened and endangered Gila Trout, for recovery and propagation purposes. Due to the extreme wild land fires in the Gila National Forest and surrounding areas, some subspecies of the Gila Trout at the hatchery are suspected to be the only remaining living members of their kind. The hatcheries efforts are critical to saving these fish. Hatchery production varies seasonally: September & October- 10,000 small fish & 2,000 large fish are produced equaling an estimated 400 lbs + 2000 lbs respectively; January & February – 2,000 large fish and very few small fish; April is the spawning month with eggs and similar fish populations to January & February; May & June is when fingerlings are present.

Source water for the hatchery is a series of four ground water wells located in the Mora Valley. The well depths are 180 feet according to hatchery representatives. The Mora Fish Hatchery treatment system consists of filtration, disinfection, aeration, gas stripping and solids settling. Discharges from the facility vary from 0.1 MGD to over 0.5 MGD. The source water is pumped from the wells and piped into a storage tank reservoir. Water enters the facility and passes through a filter with a 90-micron screen for sediment removal. The filtered water is mixed with additional ground water input from the storage tank, sent through a biofiltration system for ammonia and nitrite removal and disinfected ultraviolet. The water is then aerated and sent through a gas stripper column for nitrogen gas removal before entering the fish raceways and/or research tanks.

Water exiting the raceways is either re-circulated through the treatment system and reused in the hatchery or directed into a settling pond and eventually discharged to outfall 001. According to facility representatives, in the event chemical or pharmaceutical treatment is used in the hatchery, the raceway or tank is isolated and the waste stream is sent to the septic system at the facility, therefore no chemical treated water is discharged to outfall 001. The record of chemical treatment at the facility lists the use of NaCl, and Formalin, to treat for stress and fungus.

Solids accumulated in the raceways are either returned to the drum filters or suctioned up and discharged into the 12,000 gallon on-site septic system, or spread out on the ground around trees on site. Per the facility representative, the settling pond receives water from the raceways and does not include solids removed from the drum filters, backwash water, and solids from the biofilters. The settling ponds consist of two separate concrete structures with sloping sides. Only one pond was being operated at the time of the inspection. An overflow structure allows decanted water to exit the settling pond and flow via underground pipeline into a final polishing earthen pond. The polishing pond is estimated to be less than one acre in size and 12 feet deep with a bentonite liner. Water leaves the polishing pond through a 10' high perforated stand pipe that is surrounded by a screen to minimize accumulation of debris and algae. Water leaves the standpipe and flows into an underground pipeline for 1 ½ to 2 miles before being discharged to outfall 001.

All controls and processes are monitored through a computerized Supervisory Control and Data Acquisition (SCDA) system. As part of the SCDA system a dial up alarm system is in place to alert facility operators to any system irregularities or failures. An onsite back up power generator is tested weekly.

Further Explanations
The Sections in this narrative are arranged according to the EPA Form 3560-3

Permit (Satisfactory)
The renewed NPDES permit issued by US EPA became effective on August 1, 2013 through July 31, 2018. The previous permit was administratively extended from January 1, 2013 until the effective date of the current permit.

Recordkeeping and Reporting (Satisfactory)

Facility Site Review (Satisfactory)

Effluent And Receiving Water (Unsatisfactory)

Permit Requirements For Effluent and Receiving Water
The permit that was effective January 1, 2008 requires in Part I
1. FINAL Effluent Limits – Outfall 001 – 0.500 MGD Flow

EFFLUENT CHARACTERISTICS		*DISCHARGE LIMITATIONS*				*MONITORING REQUIREMENTS*	
		lbs/day, unless noted		*mg/l, unless noted*			
POLLUTANT	*STORET CODE*	*DAILY AVG*	*DAILY MAX*	*DAILY AVG*	*DAILY MAX*	*MEASUREMENT FREQUENCY*	*SAMPLE TYPE*
Flow	*50050*	*Report MGD*	*Report MGD*	****	***	*Continuous*	*Totalizing Meter*
Total Suspended Solids	*00530*	*42*	*63*	*10*	*15*	*2/Month (*1)*	*Grab (*2)*
Settleable Solids	*00545*	*N/A*	*N/A*	*0.1 ml/l*	*0.5 ml/l*	*2/Month (*1)*	*Grab (*2)*
*Total Nitrogen (*3, 4)*	*00625*	*Report*	*Report*	*Report*	*Report*	*2/Month (*1)*	*Grab (*2)*
*Total Phosphorus (*4)*	*00665*	*Report*	*Report*	*Report*	*Report*	*2/Month (*1)*	*Grab (*2)*
*Total Nitrogen (*3, 5)*	*00625*	***1.54***	***2.31***	***0.38***	***0.57***	*2/Month (*1)*	*Grab (*2)*
*Total Phosphorus (*5)*	*00665*	***0.122***	***0.183***	***0.03***	***0.045***	*2/Month (*1)*	*Grab (*2)*

Footnotes:
**1 The first sample event of any reporting period shall be at least 10-days from the first sample event of the previous reporting period.*
**2 Sampling shall be conducted during cleaning operations of the raceways.*
**3 Total Nitrogen is defined as the sum of Total Kjeldahl Nitrogen (as N) and Nitrate-Nitrite (as N) (see EPA methods 351.2 and 353.2).*
**4 From the permit effective date lasting until four (4) years after the permit effective date.*
**5 From four years after the permit effective date lasting until the permit expiration date.*

Findings For Effluent and Receiving Water

The permittee was required to meet effluent limits for Total Nitrogen and Total Phosphorous beginning January 1, 2012. The Facility has exceeded effluent limits for Total Nitrogen and Total Phosphorous several times since that date. This is the reason for the "Unsatisfactory" rating for this section.

Flow Measurement (Satisfactory)

Self Monitoring (Marginal)

Permit Requirements For Self Monitoring

The permit requires in Part III C. MONITORING AND RECORDS

4. RECORD CONTENTS

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 time(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.

5. MONITORING PROCEDURES

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.

Findings For Self Monitoring

1. Composite samples are not being refrigerated as required in 40 CFR Part 136.
2. Composite samples are not flow weighted. The samples are time weighted.
3. Sampling and analysis bench sheet do not show the different times for sample collection and sample analysis, only one time is listed.

Compliance Schedule (Unsatisfactory)

Permit Requirements For Compliance Schedule

See the table in the section, "Permit Requirements For Effluent and Receiving Water" above.

Findings For Compliance Schedule

The permittee has not instituted any additional control mechanisms or operational practices to reduce the nutrient pollutants, Total Nitrogen and Total Phosphorous. Since the time the previous permit was issued, there have been some staff changes at the Hatchery. The current staff has begun monitoring the influent water as well as the effluent water in an effort to determine the sources of the nutrient pollution. This may be valuable data to help the permittee determine appropriate treatment mechanisms. However, up to that point there were four years (January 1, 2008 through December 31, 2011) during the compliance schedule when no actions were taken. The permittee was required to meet effluent limits for Total Nitrogen and Total Phosphorous beginning January 1, 2012.

The table below was provided by the permittee to show the trends of high influent phosphorous to high effluent phosphorous. The permittee suspects that effluent phosphorous concentrations are related to the influent well water.

Date of Sample Collection	Total Phosphorous Influent mg/l	Total Phosphorous Effluent mg/l	Total Nitrogen Influent mg/l	Total Nitrogen Effluent mg/l
7/16/2012	BDL	BDL	BDL	BDL
7/31/2012	ND	BDL	ND	BDL
8/14/2012	3.79	0.338	0.498	0.496
8/30/2012	1.37	1.15	BDL	BDL
9/13/2012	0.387	0.173	BDL	BDL
9/27/2012	BDL	BDL	BDL	BDL
10/17/2012	BDL	BDL	BDL	BDL
10/30/2012	0.014	BDL	BDL	BDL
11/15/2012	0.01	0.01	BDL	BDL
11/29/2012	0.09	0.01	BDL	BDL
12/17/2012	0.022	0.023	BDL	0.58
12/31/2012	0.067	BDL	BDL	BDL
1/15/2013	BDL	BDL	BDL	BDL
1/31/2013	0.01	0.044	BDL	BDL
2/13/2013	0.026	0.031	BDL	BDL
2/28/2013	0.01	BDL	BDL	BDL
3/16/2013	BDL	0.035	BDL	BDL
3/31/2013	BDL	BDL	BDL	BDL
4/16/2013	0.17	0.16	BDL	0.3
5/2/2013	BDL	0.033	BDL	BDL
5/16/2013	BDL	BDL	BDL	0.28
5/30/2013	BDL	BDL	BDL	BDL
6/12/2013	BDL	BDL	BDL	BDL
6/27/2013	BDL	BDL	BDL	BDL
7/16/2013	BDL	BDL	BDL	BDL
7/31/2013	BDL	BDL	BDL	BDL
8/16/2013	BDL	BDL	BDL	BDL
8/29/2013	NC	NC	NC	NC

NC: Not Complete

ND: No Data

BDL: Below Detectable Limit

Laboratory (Satisfactory)

Operation and Maintenance (Marginal)

Permit Requirements For Operation And Maintenance

The permit requires in part III and Section, 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

The only operational step being taken to reduce total phosphorous is to clean the algae and solids from the cement lined settling ponds on a regualar schedule and to dispose of it on site. There are no other additonal controls being implimentedfor this pollutant.

Sludge Handling And Disposal (Satisfactory)

NMED/SWQB Official Photograph Log Photo #1		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1209 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: One of four well and pump houses for source water. The well water is pumped to an above ground storage tank/reservoir.		

NMED/SWQB Official Photograph Log Photo #2		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1228 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Effluent Pipes have been reconfigured so there is only one discharge point, the purge water from the wells now is mixed with the regular effluent before discharge. This is in response to finding in the CEI report March 30, 2011. Note in the picture: an inline effluent flow meter and a composite sampling unit.		

NMED/SWQB Official Photograph Log Photo # 3		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1236 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Effluent Sampling Location		

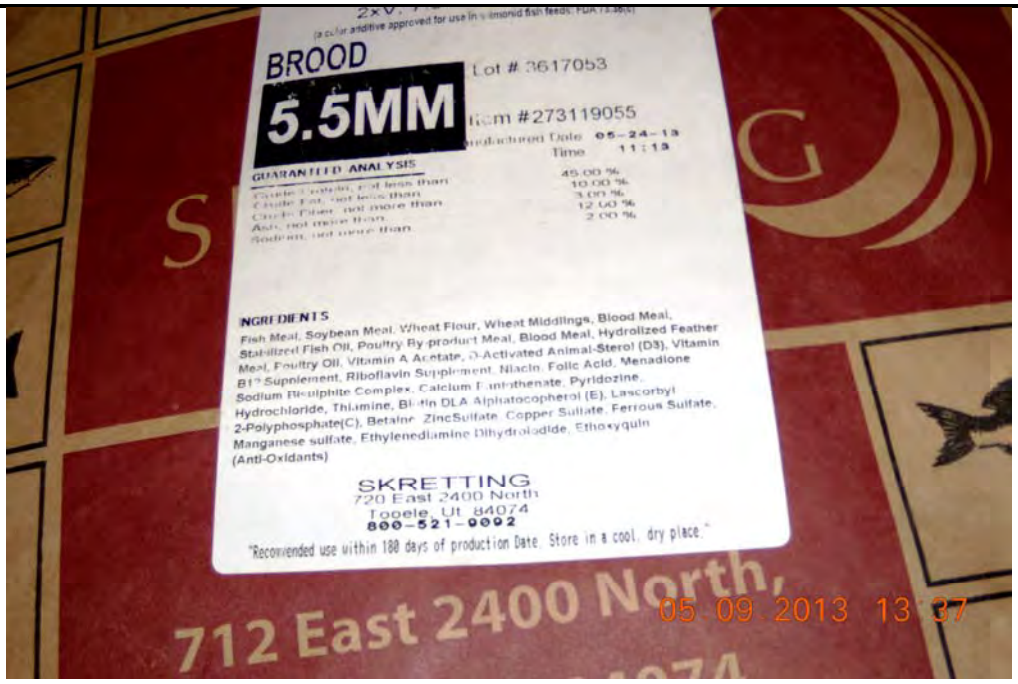
NMED/SWQB Official Photograph Log Photo # 4		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1259 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Holding tank – reservoir holds 150,000 gallons		

NMED/SWQB Official Photograph Log Photo # 5		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1305 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: These are the quarantine tanks where freshly caught fish are kept.		

NMED/SWQB Official Photograph Log Photo # 6		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1322 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: SACDA system overview screen – show the status of all units throughout the hatchery.		

NMED/SWQB Official Photograph Log Photo # 7		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1316 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Raceways		

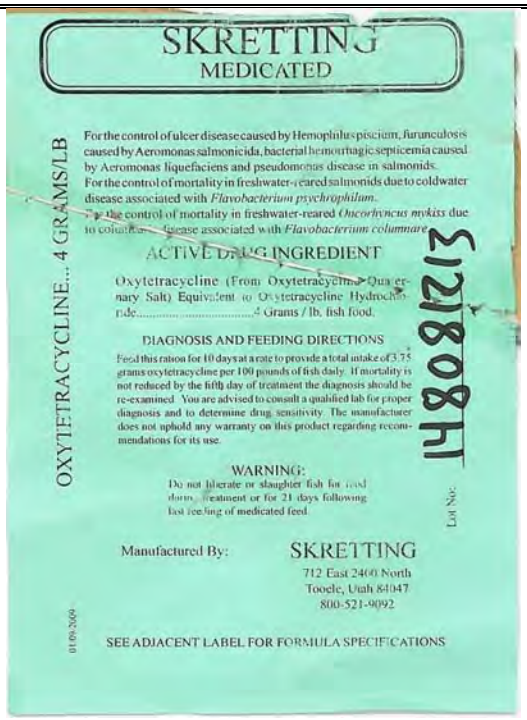
NMED/SWQB Official Photograph Log Photo # 8		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1337 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Feed Ingredients		



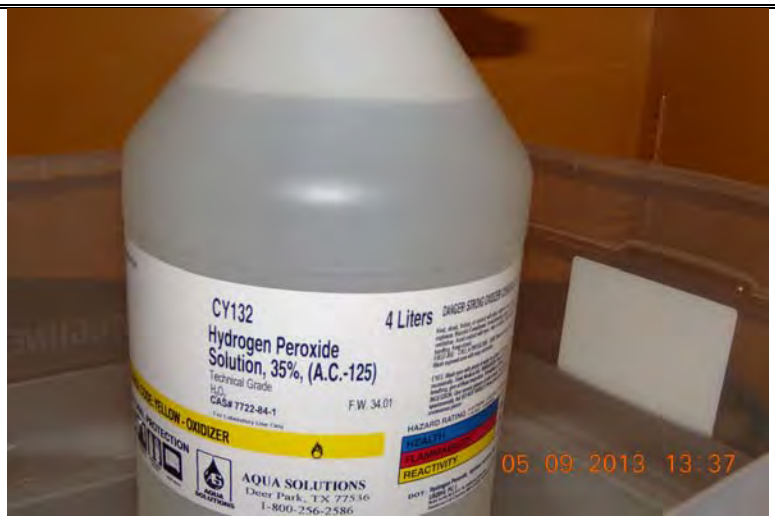
MED/SWQB Official Photograph Log Photo # 9		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1337 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Salt used during the transport of fish – helps with regulation and homeostasis of the fish metabolism.		

NMED/SWQB Official Photograph Log Photo # 10		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1336 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Feed Ingredients		

NMED/SWQB Official Photograph Log Photo # 11		
Photographer J. Conway	Date: September 13, 2013	Time: Unknown
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Medicated Feed Ingredients		



NMED/SWQB Official Photograph Log Photo # 12		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1337 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Hydrogen Peroxide Used On Site.		



NMED/SWQB Official Photograph Log Photo # 13		
Photographer: B. Cooney	Date: September 5, 2013	Time 1338 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Treatments Used Onsite		

NMED/SWQB Official Photograph Log Photo # 14		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1358 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Cement Lined Holding Pond – Discharge Goes To Final Polishing Pond		

NMED/SWQB Official Photograph Log Photo # 15		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1357 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Cement Lined Holding Pond In the Process Of Being Cleaned – Discharge Goes To Final Polishing Pond – The Remaining Algae Is Removed And Disposed Of Onsite.		

NMED/SWQB Official Photograph Log Photo # 16		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1418 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Final Polishing Pond – Overgrown Algae		

NMED/SWQB Official Photograph Log Photo # 17		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1420 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Final Polishing Pond – Overgrown Algae – The Floating Book Keeps Much Of The Algae From Being Discharged Through The Effluent Pipe.		

NMED/SWQB Official Photograph Log Photo # 18		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1421 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: The polishing pond surface algae bloom was thick enough to support the weight of a four foot long snake. This indicates the presence of nutrients in the water. Note: Picture cropped to zoom in. The original photo is available upon request.		

NMED/SWQB Official Photograph Log Photo # 19		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1225 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Effluent to the Irrigation Ditch. – Large mats of Duck Weed Were Growing Over The Ditch.		

NMED/SWQB Official Photograph Log Photo # 20		
Photographer: B. Cooney	Date: September 5, 2013	Time: 1225 Hours
City/County: Mora County		State: New Mexico
Location: Mora National Fish Hatchery and Technology Center		
Subject: Irrigation Ditch Where Hatchery Effluent Is Discharged Is Overgrown With Vegetation. The Ditch Above The Outfall Does Not Have The Same Level Of Growth.