



SUSANA MARTINEZ
Governor
JOHN SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

1190 South St. Francis Drive, Room N2050
P.O. Box 26110, Santa Fe, NM 87502-6110
Phone (505) 827-0187 Fax (505) 827-0160
www.nmenv.state.nm.us



DAVE MARTIN
Secretary
RAJ SOLOMON, P.E.
Deputy Secretary

Certified Mail - Return Receipt Requested

April 12, 2011

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

Re: Minor Non-Municipal, SIC 0921, NPDES Compliance Evaluation Inspection, Mora National Fish Hatchery and Technology Center, NPDES Permit No. NM0030031, March 30, 2011

Dear Mr. Powell:

Enclosed, please find a copy of the report and checklist 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 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)
Suite 1200
1445 Ross Avenue
Dallas, Texas 75202-2733

Program Manager
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 me at (505) 827-1041 or sandra.gabaldon@state.nm.us

Sincerely,
/s/Sandra Gabaldón

Sandra Gabaldón
Surface Water Quality Bureau

Cc: Marcia Gail Adams, EPA, Enforcement Section (6EN-AS) by e-mail
Larry Giglio, EPA (6EN-P) by e-mail
Carol Peters-Wagnon, EPA (6EN-WM) by e-mail
Diana McDonald, EPA (6EN-WM) by e-mail
Samual Tates, EPA, (6W-AS) by e-mail
Robert Italiano, Manager, NMED District II Manager (Santa Fe) 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	1	0	3	3	0	17	18	C	19	S	20	4
Remarks																												
F I S H							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	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) 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		Entry Time /Date 1310 / March 30, 2011	Permit Effective Date January 1, 2008
		Exit Time/Date 1540 / March 30, 2011	Permit Expiration Date December 31, 2012
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Mr. Jeff Powell, Project Manager / 575-387-6022 / 575-387-9030		Other Facility Data	
Name, Address of Responsible Official/Title/Phone and Fax Number Mr. Jeff Powell, Project Manager Post Office Box 689 Mora, NM 87732 575-387-6022 / 575-387-9030		LAT 35 58 34.1 N LONG -105 18 8.10 W SIC 0921 Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Section C: Areas Evaluated During Inspection

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

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

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

1. SEE REPORT AND FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s) SANDRA GABALDON /s/ Sandra Gabaldon	Agency/Office/Telephone/Fax NMED/SWQB/505-827-1041/505-827-0160	Date April 12, 2011
Signature of Management QA Reviewer RICHARD E. POWELL /s/ Richard E. Powell	Agency/Office/Phone and Fax Numbers NMED/SWQB 505-827-0418	Date April 12, 2011

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 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 NO.)
 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. EMERGENCY GENERATOR ON SITE S M U N

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. SCDA CALL OUT 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. S M U NA (FURTHER EXPLANATION ATTACHED NO).
 DETAILS:

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 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 (no))
 DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE Closed Pipe with secondary ultra mag

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. Y N NA

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

4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION _____) 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

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. 100 % 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 ARS International Still Meadow Inc. Environmental Toxicology Lab.
 LAB ADDRESS 2709D Pan American Freeway, Albuquerque, NM 87107 12852 Park One Drive, Sugar Land, TX 77478
 PARAMETERS PERFORMED Total Nitrogen – Total Phosphorous WET Testing

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. S M U NA (FURTHER EXPLANATION ATTACHED NO).

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	NO	NO	NO	NO	NO	CLEAR	

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

Compliance Evaluation Inspection
Mora National Fish Hatchery and Technology Center
NPDES Permit No. NM0030031
March 30, 2011

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 March 30, 2011 by Sandra Gabaldón and Daniel Valenta 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.

Compliance Evaluation Inspection
Mora National Fish Hatchery and Technology Center
NPDES Permit No. NM0030031
March 30, 2011

Treatment Scheme

The Mora Fish Hatchery treatment system consists of filtration, disinfection, aeration, gas stripping and solids settling. The facility is primarily raising Gila Trout, for recovery and propagation purposes. Discharges from the facility vary from 0.1 MGD to over 0.5 MGD. The source water is provided by groundwater pumped from four 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. 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 exits 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 on site back up power generator is tested weekly.

Compliance Evaluation Inspection
Mora National Fish Hatchery and Technology Center
NPDES Permit No. NM0030031
March 30, 2011

Further Explanations

Section A - Permit Verification – Overall Rating of “Unsatisfactory”

Part II.C. Permit Modification and Reopener, states:

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

Findings for Permit Verification:

The permittee maintains four underground water wells for flow through at their facility. Three of the four wells are currently operational. The outfall for this facility is located at their well field in a small shed-type structure. Upon viewing the outfall, it is noted that there are two separate pipes that discharge at the same location. One pipe is the waste stream from the fish hatchery (outfall 001) and the other pipe contains the purged water from the wells, which is not a permitted outfall. The permittee must inform EPA of all waste streams that enter this permitted outfall.

Section B - Recordkeeping and Reporting – Overall Rating of “Marginal”

The permit requires in Part III – 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 measurement;*
- 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.*

The permit requires in Part III.C.6 – Monitoring Procedures:

- a. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.*

The permit requires in part I.C – Compliance Schedules:

The permittee shall submit quarterly progress reports, both to EPA and NMED, in accordance with the following schedule: January 1, April 1, July 1, and October 1.

Findings for Recordkeeping and Reporting:

The permittee provided benchsheets from October 2010 and October 2009. The October 2010 benchsheets were completed by the current operator responsible for data collection and records, Mr. Jeff Conway. The benchsheets from October 2009 were completed by the previous operator, Mr. Matthew Romero. The benchsheets for October 2010 failed to provide the name of the individual performing the sampling. The benchsheets provided all other requirements of Part III – Record Contents.

The permittee has failed to provide adequate calibration records for their thermometers in both their oven and the refrigerator. Standards used to measure the bias in a procedure [i.e., Total Suspended Solids (TSS)] require the use of the National Institute of Standards and Technology (NIST) Standard Reference Materials.

The permittee has failed to submit progress notes for both Schedule One (Whole Effluent Monitoring) and Schedule Two (Total Nitrogen and Total Phosphorus). The permittee is required to attain final effluent limitations no later than three (3) years from the permit effective date for their Whole Effluent Monitoring requirements and to attain final effluent limitations no later than four (4) years from the permit effective date for their Total Nitrogen and Total Phosphorus Limitations. The permittee should have submitted progress notes from the date the permit became effective in January 2008. No progress notes have been submitted to either EPA or NMED.

NMED/SWQB
Official Photograph Log
Photo #1

Photographer: Sandra Gabaldóm	Date: March 30, 2011	Time: 1422 Hours
City/County: Town of Mora /Mora County		
Location: Mora National Fish Hatchery and Technology Center – Effluent Outfall		
Subject: Two waste streams entering permitted Outfall 001.		

