



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

Harold Runnels Building, N2050
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, NM 87502-5469
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

July 21, 2011

Mr. Michael Sloan, Fisheries Chief
State of New Mexico
Department of Game & Fish
P.O. Box 25112
Santa Fe, New Mexico 87504

RE: Minor Non-Municipal; SIC 0921; NPDES Compliance Evaluation; Glenwood State Fish Hatchery; NM0030163; July 14, 2011

Dear Mr. Gallegos:

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 federal Clean Water Act.

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.

If you have any questions, please feel free to contact me at the above address or by telephone at (505) 827-2575.

Sincerely,

/s/Daniel Valenta

Daniel J. Valenta
Surface Water Quality Bureau

xc: Marcia Adams, EPA, Enforcement Section (6EN-AS) by e-mail
Samuel Tate, EPA (6SF) by e-mail
Carol Peters-Wagnon, EPA (6EN-WM) by e-mail
Diana McDonald, EPA (6EN-WM) by e-mail
Larry Giglio, EPA (6WQ-PP) by e-mail
NMED District III, by e-mail

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS
DETAILS: S M U NA (FURTHER EXPLANATION ATTACHED no)

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.
DETAILS: S M U NA (FURTHER EXPLANATION ATTACHED YES)

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

Name of individual needed not just initial. 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 **Bench sheet records need to be updated to show the replacement of the pH meter from a Oakton meter to a Hanna pHep 5pH/Temperature Tester**

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.

 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. S M U NA (FURTHER EXPLANATION ATTACHED YES).
 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 Discharge is measured by depth over a Rectangular Sharp Crested Weir.
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. **Staff gage and weir has not been checked for accuracy.** 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

Glenwood State Fish Hatchery

Permit No. NM0030163

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 Huther & Associates, Inc. Scientific Laboratory Division

LAB ADDRESS 1156 North Bonnie Brae, Denton Texas 76201 700 Camino de Salud, NE, Albuquerque, NM 87196

PARAMETERS PERFORMED Whole Effluent Toxicity TSS

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	light green	
002	No Discharge						

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).

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
Glenwood State Fish Hatchery
NPDES Permit #NM0030163, July 14, 2011**

Introduction

On July 14, 2011 a Compliance Evaluation Inspection (CEI) was conducted at the State of New Mexico/Glenwood State Fish Hatchery located at Glenwood, New Mexico by Daniel J. Valenta of the New Mexico Environment Department (NMED). The Glenwood State Fish Hatchery has a design flow of 4 MGD, but is classified as a minor industrial discharger under the federal Clean Water Act, Section 402 National Pollutant Discharge Elimination System (NPDES) permit program and is assigned permit #NM0030163. This permit allows discharges to Glenwood Pond thence to Los Olmos Pond, thence to White Water Creek; thence to the San Francisco River in Segment 20.6.4.603 NMAC of the San Francisco River Basin.

The NMED performs a certain number of CEI's for the U.S. Environmental Protection Agency (USEPA) each year. The purpose of this inspection is to provide USEPA with information to evaluate the permittee's compliance with the NPDES permit. This report is based on review of files maintained by the permittee and NMED, on-site observation by NMED personnel, and verbal information provided by the permittee's representatives.

An entrance interview was conducted with Mr. Leonard Rice, Facility Manager, at approximately 0935 hours on July 14, 2011. The inspector made introductions, presented his credentials and discussed the purpose of the inspection. An exit interview to discuss the preliminary findings of this inspection was conducted at approximately 1145 hours on July 14, 2011 with Mr. Rice at the hatchery office.

Treatment Scheme

The hatchery has two sets of outdoor raceways and a hatchery building. When water is available from Whitewater Creek, fresh water is directed through the raceways and the once through fresh water is discharged to the bypass channel or entrance works sump. At the time of the inspection, water was being supplied to the facility from ground water wells. One set of two upper raceways discharges back to the entrance works sump while the set of twelve lower raceways (connected in series) discharges to the entrance works bypass channel directly. The hatchery building also discharges to the entrance works bypass channel. The bypass channel flow is primarily directed to Glenwood Pond, which discharges to Los Olmos Pond. Los Olmos Pond discharges to the Los Olmos irrigation system which consists of an irrigation ditch connecting three more ponds. From the irrigation system, effluent can be directed to a fourth pond or applied directly to fields. If the effluent is not completely used for the irrigation system or the storage capacity of the system is exceeded, discharge to White Water Creek may occur.

**Compliance Evaluation Inspection
Glenwood State Fish Hatchery
NPDES Permit #NM0030163, July 14, 2011**

Since the inspection of 2003, a permitted outfall (002) has been added. This outfall discharges to Los Olmos pond when active. However, according to the permittee, outfall 002 is not regularly utilized and has not discharged since November of 2006. Elements of the plumbing system have been re-routed since the last inspection to prevent routine discharge through 002.

The hatchery gets fresh water to support operations from three sources. Approximately 800-900 gallons per minute (GPM) is supplied from a ground water infiltration gallery installed upstream of the hatchery in White Water Creek. An additional 800-900 GPM is supplied from a well (approximately 60 feet deep) installed down stream of the hatchery near the San Francisco River. Approximately 250 GPM is re-circulated from Glenwood Pond. All three of these flows are directed to the above entrance works sump. Most of the flow from the sump is directed to the raceways and hatchery building, but some goes directly into the bypass channel, while approximately 300 GPM is returned to White Water Creek below the infiltration gallery. The hatchery currently uses no non-FDA approved drugs, chemical, or medications.

**Compliance Evaluation Inspection
Glenwood State Fish Hatchery
NPDES Permit #NM0030163, July 14, 2011**

Further Explanations

Section B - Recordkeeping and Reporting Evaluation: Overall rating of "Marginal"

DMR received for the month of January 2011 reported Daily Maximum/Daily Average flow had dropped to 0.01 MGD.

A review of the reported flow data revealed the daily numbers had been incorrectly transcribed to the wrong column in the spreadsheet. A corrected DMR needs to be submitted with signatures.

Section D – Self-Monitoring: Overall rating of “Marginal”

Per Part III.C.5.a, b; MONITORING PROCEDURES

“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.”

“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 sampling log sheet notes the Standard Methods for the Examination of Waste Water 20th edition will be used. Standards methods 20th edition has been approved under 40 CFR Part 136 for the analysis of TSS, method 2540 D, for SS, 2540 F, and pH, 4500-H+B.

1. Preservation techniques and holding times for samples collected for Residue, Non-filterable (TSS) tests are to be cooled to $\leq 6\text{ C}^\circ$ and held for no longer than 7 days. For the 6 samples collected for the months of December, January, and February, three of the samples were received by the lab above the required $\leq 6\text{ C}^\circ$; this may invalidate the lab results.
2. A conspicuous entry was found on the 6 reviewed lab results. Each gave the time of sample collection as 8:15. This may be a default setting in the lab spreadsheet but inquires should be made to determine why the collection information in the bench sheets is different than the lab results.
3. The permit limit for the lowest pH in the discharge water is 6.6. Over the last 33 months, since 7/2008, all the reported minimum pH values reported have been within 0.2 pH units of the limit. The current calibration procedure used is to use a two point calibration using a 7 and 10 buffer and then checking with a 4. If possible the buffers used should bracket the expected value of the sample.

**Compliance Evaluation Inspection
Glenwood State Fish Hatchery
NPDES Permit #NM0030163, July 14, 2011**

DMR Calculation Check

Reporting Period: **From:** December 2010 **To:** February 2011

Parameter Checked: Outfall 001 TSS

Reported Values TSS

	Daily Ave (mg/L)	Daily Max (mg/l)	Daily Ave (lbs/day)	Daily Max (lbs/day)
December	<3	<3	25.62	25.62
January	<3	<3	27.02	28.43
February	<3	<3	28.43	28.43

Calculated Values TSS

	Daily Ave (mg/L)	Daily Max (mg/l)	Daily Ave (lbs/day)	Daily Max (lbs/day)
December	<3	<3	25.62	25.62
January	<3	<3	27.02	28.43
February	<3	<3	28.43	28.43

(Flow MGD) * (TSS mg/l) * (8.34) = Loading

Flow reported for December 711(GPM) = 1.02384 (MGD)
711(GPM) = 1.02384 (MGD)

Flow reported for January 711(GPM) = 1.02384 (MGD)
789 (GPM) = 1.13616 (MGD)

Flow reported for February 789 (GPM) = 1.13616 (MGD)
789 (GPM) = 1.13616 (MGD)

All loading values reported for the months of December 2010, January 2011, and February 2011 have been correct.

Glenwood

NM0030163

Outfall 001A

NM0030163

Date	pH	pH	TSS		TSS		SS		Q		Outfall 002A	Outfall 01BA
			Daily Ave 166 lbs/day	Daily Max 249 lbs/day	Daily Ave 10 mgs/L	Daily Max 15 mgs/L	Daily Ave 0.10	Daily Max 0.50	Daily Ave MGal/day	Daily Max MGal/Day		
	6.6	9.0										
3/1/11	6.7	6.8	28.43	28.43	3.00	3.00	0.00	0.00	1.14	1.14	ND	
2/1/11	6.6	6.6	28.43	28.43	<3	<3	0.00	0.00	1.14	1.14	ND	
1/1/11	6.7	7.0	27.02	28.43	<3	<3	<.01	<.01	0.01	0.01	ND	
12/1/10	6.7	6.7	25.62	25.62	<3	<3	<.01	<.01	1.00	1.02	ND	
11/1/10	6.6	6.8	37.56	43.77	<3	<3	<.01	<.01	1.30	1.75	ND	
10/1/10	6.6	6.9	43.77	43.77	<3	<3	<.01	<.01	1.75	1.75	ND	
9/1/10	6.8	6.8	36.48	52.53	2.50	3.60	<.01	<.01	1.75	1.75	ND	
8/1/10	6.7	6.9	43.77	43.77	<3	<3	<.01	<.01	1.79	2.16	ND	
7/1/10	6.7	7.0	43.77	43.77	<3	<3	<.01	<.01	1.76	2.16	ND	
6/1/10	6.7	6.8	43.77	43.77	<3	<3	<.01	<.01	1.75	1.75	ND	
5/1/10	6.8	7.0	43.77	43.77	<3	<3	<.01	<.01	1.75	1.75	ND	
4/1/10	6.6	6.7	50.58	50.58	<3	<3	<.01	<.01	1.88	2.02	ND	
3/1/10	6.8	6.9	54.09	57.61	<3	<3	<.01	<.01	1.87	2.30	ND	
2/1/10	6.7	6.9	43.77	43.77	<3	<3	<.01	<.01	1.37	1.75	ND	
1/1/10	6.8	6.9	29.94	34.26	<3	<3	<.01	<.01	1.17	1.25	ND	
12/1/09	6.8	6.8	25.62	25.62	<3	<3	<.01	<.01	1.05	1.25	ND	
11/1/09	6.6	6.7	25.62	25.62	<3	<3	<.01	<.01	0.98	1.02	ND	
10/1/09	6.7	6.9	32.05	43.77	<3	<3	<.01	<.01	1.47	1.75	ND	
9/1/09	6.8	7.2	34.44	40.53	<3	<3	<.01	<.01	1.34	1.62	ND	
8/1/09	6.7	6.8	31.51	37.40	<3	<3	<.01	<.01	1.28	2.02	ND	
7/1/09	6.7	7.1	37.56	43.77	<3	<3	<.01	<.01	1.43	2.02	ND	
6/1/09	6.9	7.1	34.37	37.70	<3	<3	<.01	<.01	1.40	1.62	ND	
5/1/09	6.7	6.9	39.02	43.77	<3	<3	<.01	<.01	1.49	2.02	ND	
4/1/09	6.7	6.9	35.83	37.39	<3	<3	<.01	<.01	1.49	1.62	ND	
3/1/09	6.8	6.8	59.45	87.55	4.50	6.00	<.01	<.01	1.46	1.75	ND	
2/1/09	6.8	6.9	32.80	34.26	<.01	<.01	<.01	<.01	1.23	1.49	ND	
1/1/09	6.8	7.1	37.56	43.77	<3	<.01	<.01	<.01	1.29	1.75	ND	
12/1/08	6.8	7.0	31.35	31.35	<3	<3	<.01	<.01	1.25	1.25	ND	ND
11/1/08	6.7	6.7	63.90	40.53	5.00	7.00	<.01	<.01	1.52	1.62	ND	
10/1/08	6.5	6.8	40.59	43.77	<3	<3	<.01	<.01	1.67	1.67	ND	
9/1/08	6.8	6.9	38.97	40.53	<3	<3	<.01	<.01	1.60	1.75	ND	ND
8/1/08	6.7	6.8	40.59	43.77	<3	<3	<.01	<.01	1.59	1.88	ND	ND
7/1/08	6.7	6.8	37.40	37.40	<3	<3	<.01	<.01	1.52	1.75	ND	ND