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Governor

JOHN SANCHEZ
Lieutenant Governor

**NEW MEXICO
ENVIRONMENT DEPARTMENT**

Surface Water Quality Bureau

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DAVE MARTIN
Secretary

RAJ SOLOMON, P.E.
Deputy Secretary

Certified Mail - Return Receipt Requested

June 16, 2011

Mr. Michael Sloan, 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, NM0030155, June 7, 2011

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 Federal Clean Water Act.

Findings are based on the inspector's observations in regards to specific requirements of the NPDES permit. The Rock Lake Hatchery received an overall evaluation rating of "3" on a scale of 1 to 5. Problems were found in the areas of Permit, Recordkeeping & Reporting, and Laboratory. Please refer to the Further Explanations section of the report for more detail.

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 USEPA (Diana McDonald, USEPA (6EN-WT), 1445 Ross Ave, Dallas, Texas, 75202) and NMED (at above address) regarding modifications and compliance schedules.

I wish to thank you for the cooperation extended by Mr. Paul Sanchez, Assistant Manager, to the NMED while at the Rock Lake Fish Hatchery. If you have any questions about this inspection report, please contact me at (505) 222-9587 or sarah.holcomb@state.nm.us.

Sincerely,

/s/ Sarah Holcomb

Sarah Holcomb
Environmental Scientist/Specialist
Surface Water Quality Bureau

Cc: Marcia Gail Adams, USEPA (6EN-AS), by e-mail
Samuel Tate, USEPA (6EN-AS), by e-mail
Carol Peters-Wagnon, USEPA (6EN-AS), by e-mail
Diana McDonald, USEPA (6EN-AS), by e-mail
Larry Giglio, USEPA (6WQ-P), by e-mail
NMED District III, 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	1	0	6	0	7	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																												
Inspection Work Days						Facility Evaluation Rating						BI		QA		-----Reserved-----												
67						70						71		72		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) 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.		Entry Time /Date 1330 HOURS/6-7-2011	Permit Effective Date 2-1-2008
		Exit Time/Date 1515 HOURS/6-7-2011	Permit Expiration Date 11-30-2011
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)

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

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

- INSPECTORS ARRIVED AT THE FACILITY AT 1330 HOURS ON JUNE 7, 2011. THEY PRESENTED CREDENTIALS AND EXPLAINED THE PURPOSE OF THE INSPECTION IN THE ENTRANCE INTERVIEW WITH MR. PAUL SANCHEZ, ASSISTANT MANAGER.
- THE INSPECTORS GAVE PRELIMINARY FINDINGS IN THE EXIT INTERVIEW WITH MR. SANCHEZ AT THE FACILITY AT 1515 HOURS ON JUNE 7, 2011.
- PLEASE SEE REPORT FOR FURTHER DETAILS.

Name(s) and Signature(s) of Inspector(s) SARAH HOLCOMB /s/ Sarah Holcomb	Agency/Office/Telephone/Fax NMED/SWQB 222-9587 FAX 222-9510	Date 6-16-2011
Signature of Management QA Reviewer RICHARD POWELL /s/ Richard Powell	Agency/Office/Phone and Fax Numbers NMED/SWQB 827-2798 FAX 827-0160	Date 6-16-2011

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS
DETAILS:

S M U NA (FURTHER EXPLANATION ATTACHED YES)

- 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 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.
DETAILS:

S M U NA (FURTHER EXPLANATION ATTACHED NO)

- 1. TREATMENT UNITS PROPERLY OPERATED. S M O U NA
- 2. TREATMENT UNITS PROPERLY MAINTAINED. S M O U NA
- 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED. S M O U NA
- 4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. S M O U NA
- 5. ALL NEEDED TREATMENT UNITS IN SERVICE S M O U NA
- 6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. S M O 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 48" RECTANGULAR 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. 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 YES).
 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 X NA |
| 3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. | X S O M U NA |
| 4. QUALITY CONTROL PROCEDURES ADEQUATE. | X S M U NA |
| 5. DUPLICATE SAMPLES ARE ANALYZED. <u>10</u> % OF THE TIME. | O Y X N NA |
| 6. SPIKED SAMPLES ARE ANALYZED. <u> </u> % OF THE TIME. | O Y N X NA |
| 7. COMMERCIAL LABORATORY USED. | X 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	BIOMONITORING

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

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	NONE	NONE	NONE	NONE	SOME ALGAE	CLEAR	

RECEIVING WATER OBSERVATIONS

SECTION H - SLUDGE DISPOSAL

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

- | | |
|---|--------------|
| 1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. | X S M U NA |
| 2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. | O S M U X NA |
| 3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: <u>COMPOSTED ON SITE</u> (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE) | |

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

- | | |
|--|----------|
| 1. SAMPLES OBTAINED THIS INSPECTION. | Y N X 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 7, 2011, Sarah Holcomb of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) (accompanied by Sandra Gabaldón, also of NMED SWQB) conducted a Compliance Evaluation Inspection (CEI) at the New Mexico Department of Game and Fish, Rock Lake Fish Hatchery. 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. 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.

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 inspector, and records and reports kept by the permittee and/or NMED.

Upon arrival at the facility at 1330 hours on June 7, 2011, the inspector conducted an entrance interview with Mr. Paul Sanchez, Assistant Manager, 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 approximately 1510-1515 hours on June 7, 2011 to present the preliminary findings of the inspection.

Treatment Scheme

The Rock Lake Hatchery consists of a coldwater fish hatching and production facility for rainbow trout, and a warmwater hatching 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 sole source of water to the hatchery is Rock Lake, a natural spring fed lake, located approximately 2,000 feet south of the hatchery. Water is collected 50 feet below the lake surface into a steel pipe that leads to the supply pipeline. A metal grill fitted onto the supply line entrance prevents objects from getting into the line. Lake water flows into a collection box that contains a Parshall flume used to regulate inflow levels while maintaining a suitable lake depth.

Following the collection box, water is transported via concrete pipeline to a division box at the entrance into the aerator building. In the division box, water is divided among three separate pipes into an aerator structure that consists of vertical pipes where water cascades over perforated baffles in order to increase dissolved oxygen levels. Upon exiting the aeration building, water flows into a collection box and is divided among seven pipes, as follows: four pipes supply water to the major raceways for rainbow trout; one pipe supplies water to the distribution tank filling station; one pipe supplies water to the walleye, largemouth bass and catfish ponds; and one pipe sends any overflow from the cleaning drainline to the settling pond (this pipe is rarely used). All pipes and aerators within the hatchery contain asbestos.

There are four series of major raceways with four raceways per series for a total of sixteen raceways. Dissolved oxygen is provided to the first raceway by aerated water generated from the aerator building; the remaining raceways are outfitted with individual aerator units at the head of each raceway. Water enters a raceway series, is reused through each raceway within that series, and then sent into either the kettles (two parallel concrete basins used for holding fish) or directly to the settling pond.

Drainlines/valves at the end of each raceway are used to send wastes directly to the settling pond when raceways are being cleaned. Each raceway is cleaned on a weekly basis. On an occasional basis (such as to remove maximum size fish, increase dissolved oxygen levels, remove algae), a raceway may be completely taken offline, drained, cleaned and bleached. During the cleaning process, the exit drainline from the raceway is completely closed to prevent any chlorine from making it through to other raceways or into the settling pond. A bleach solution (sodium hypochlorite) is applied with hand rollers to the concrete floor and walls of the raceway and then allowed to air dry for a few days.

The raceway is then re-filled with water and facility staff monitors pH and total residual chlorine levels to determine when fish can be safely returned to the raceway and the exit line re-opened.

The walleye, largemouth bass and catfish ponds are located west of the coldwater raceways. There are approximately eleven one-acre unlined and uncovered ponds. The ponds are passive and are treated with Blue Vail, a blue dye that prevents algal growth in the ponds.

There are two settling ponds, which are single cell, earthen type ponds with bentonite liners. The coldwater raceways discharge from the rainbow trout kettles and the water is directed to a splitter box (please see Picture #1), which directs the coldwater wastewater to the pond with an outfall designated as Outfall 003. The warmwater wastewater from the walleye, largemouth bass and catfish production ponds is directed through the same splitter box, but is sent to a separate earthen settling pond with an outfall designated as Outfall 004. There are no aerators, baffles or other treatment structures in either pond. The main treatment process is passive settling of solids prior to discharge. Water enters the ponds, flows slowly through to the east end of both ponds, and then flows over a rectangular weir for discharge to the outfall. During the summer months, a portable screen is placed in front of the weir to trap algae and other solids; the screen is cleaned manually. Pond depths typically run between 12-15 feet.

Discharge from each of these ponds enters a separate pipe that directs the flow to another splitter box. The flow from Outfall 003 (the coldwater settling pond) is theoretically directed to the Ortega-Borsich Irrigation Canal, thence to the Pecos River, and the flow from Outfall 004 (the warmwater settling pond) is theoretically directed to the Pecos River. The baffle in this secondary splitter box is permanent, however, the flow observed during this inspection from Outfall 003 was jointly discharging directly to the Pecos River and to the Ortega-Borsich Irrigation Canal as well.

Solids Management

The fish mortalities are taken to a bermed composting pit located southeast of the warmwater ponds. This pit is currently unlined and open to the elements. The permittee's representative indicated that a new composting area is planned next to the office building (northwest of the coldwater raceways) that will be lined, bermed and covered.

Further Explanations

Note: The sections are arranged according to the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

Permit Verification

Section A – Permit Verification Evaluation – Overall rating of *Marginal*

The permit states in Part I.A.1:

...is authorized to discharge treated wastewater to the Ortega-Borsich ditch, thence to the Pecos River, in Segment Number 20.6.4.211, from Outfall 003 (See Part II).

The permit states in Part I.A. 2:

...is authorized to discharge treated wastewater to the Ortega-Borsich ditch, thence to the Pecos River, in Segment Number 20.6.4.211, from Outfall 004 (See Part II).

The permit states in Part I.A.3:

...is authorized to discharge treated wastewater to the Ortega-Borsich ditch, thence to the Pecos River, in Segment Number 20.6.4.211, from the combined outfalls flowing through either Outfall 003 or Outfall 004.

Footnote 1 The authorization of this outfall shall only be used when the sedimentation ponds are being cleaned, or short term repair work not lasting more than two months requires the combination discharge. The use of this outfall shall be intermittent, only for cause, not for convenience.*

Findings for Permit Verification:

As mentioned in the facility description, this hatchery has more than two outfalls. Outfall 003 is from the coldwater hatchery line sedimentation pond, Outfall 004 is from the warmwater hatchery line sedimentation pond, and the combined outfall is for use during cleaning. The permit language regarding the combined outfall is unclear as to what “combined” actually means. The permittee’s representative indicated that during cleaning, both coldwater and warmwater wastewater streams would be directed into one of the sedimentation ponds instead of being separated, hence the need for a “combined” discharge. The permit language describing the combined outfall should be clarified in the next permit to indicate this practice. There may be another type of combined discharge, as explained below.

Outfall 003 and Outfall 004 are both authorized to discharge to the Ortega-Borsich ditch (an irrigation canal), thence to the Pecos River. On the ground, both outfalls from each sedimentation pond are directed to a splitter box, where most of the flow appears to be directed to the irrigation canal. However, because of flow issues, even though only one pond may be discharging at a time, the water overflows the baffle present in the splitter box. The water that flows over the splitter box baffle is directed through another underground pipe, which results in a separate stream of effluent that goes directly to the Pecos River. (Please see Picture #3.) Because the permit is written to allow the discharge to the irrigation canal, thence to the Pecos River (which is about a mile downstream from the splitter box through the irrigation canal) the direct discharge to the Pecos River may be an unpermitted discharge.

When the warmwater pond is discharging in addition to the coldwater pond, the comingled water is also being sent to both discharges and the sampling data that is currently taken at the outfall weir from each pond may not be representative of the actual discharge either going to the Pecos directly, or to the irrigation canal.

Recordkeeping and Reporting

Section B – Recordkeeping and Reporting Evaluation – Overall rating of *Marginal*

In the NPDES Reporting Requirements Handbook (www.epa.gov/region6/gen/w/dmrman.pdf), in Part XII.H.2, it states:

Some parameters in the permit are limited in terms of pounds per day (lbs/day). Although all of these parameters are measured initially in milligrams per liter (mg/L), conversion to lbs/day can be achieved by using the following formula. Always be sure to use the flow measurement determined on the day when sampling was done.

Findings for Recordkeeping and Reporting:

The inspector double checked the calculations for TSS from Outfall 003 during the month of March 2011. Please refer to Appendix A to see the specific calculations.

The inspector derived the flow rate during a phone call to Mr. Sanchez on June 15, 2011. He indicated that they measure the flow through the weir of the pond using a staff gage, which normally measures at about 7.5 inches. Using the corresponding flow chart for that particular weir, they obtain a flow rate of 2979.72 gallons per minute. This converts to 4.291 million gallons per day.

The concentration based data reported on the DMRs was accurate. The loading calculations were not as accurate – the permittee was actually over-reporting the TSS loading values. The inspector found that the daily average should have been reported as 214.7 lbs/day, and was instead reported as 403.7 lbs/day. The daily max should have been reported as 536.8 lbs/day, and the permittee reported 591.41 lbs/day. A common mistake that permittees make is that they use the averaged flow measurement from the DMR to report their loading calculations, which may have been the case in this instance.

During the inspection, the permittee's representative indicated that the most recent biomonitoring test had indicated a failure of the *Ceriodaphnia dubia* reproduction (Chronic) test. The permittee reported the failure to EPA and immediately initiated subsequent retesting. At the time this report was written, the permittee had received the results for the first retest and passed at all concentration for both acute and chronic tests.

Laboratory

Section F – Laboratory Evaluation – Overall rating of *Marginal*

The permit states in Part III.C.5.c:

An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical tests shall be maintained by the permittee or designated commercial laboratory.

And in Part III.D.5:

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated in the DMR.

Findings for Laboratory:

When questioned, the permittee's representative indicated that duplicate samples were never taken to ensure that some sort of quality control was being performed. The permit requires a quality control program be done and that duplicate samples are taken at least 10% of the time in order to show that samples are being run correctly. This is a repeat finding from the last inspection.

Sludge Disposal

Section H – Sludge Disposal Evaluation – Overall rating of *Satisfactory*

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:

In the prior 2009 inspection, the inspector noted that the facility was composting the fish mortalities onsite in an area that was not protected in the event of a rainstorm. The facility has since bermed the compost site to prevent a discharge of contaminated stormwater to the Ortega-Borsich ditch or the Pecos River. The permittee's representative indicated, in addition, that the facility will be building a new compost area close to the facility management's offices on site, which will be bermed, lined and covered. Once this is completed, the facility's BMP plan should be amended to specifically address this practice.

**Appendix A
Calculation Check**

Ö the inspector's calculation agrees with the permittee's reported data

Outfall 003 (coldwater)

Sample from 3-10-2011: 6.0 mg/L TSS

Sample from 3-21-2011: 15 mg/L TSS

Concentration calculations:

Daily Average: $6 \text{ mg/L} + 15 \text{ mg/L} = 21 \text{ mg/L} / 2 = 10.5 \text{ mg/L}$ Ö

Daily Max: 15 mg/L Ö

Loading Calculations:

Daily Average:

- $6 \text{ mg/L} \times 8.34 \times 4.291 \text{ mgd} = 214.7 \text{ lbs/day}$
- $15 \text{ mg/L} \times 8.34 \times 4.291 \text{ mgd} = 536.8 \text{ lbs/day}$
- $536.8 \text{ lbs/day} + 214.7 \text{ lbs/day} = 751.5 \text{ lbs/day} / 2 = 375.8 \text{ lbs/day}$ (permittee reported 403.7 lbs/day)

Daily Max:

$15 \text{ mg/L} \times 8.34 \times 4.291 \text{ mgd} = 536.8 \text{ lbs/day}$ (permittee reported 591.41 lbs/day)

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Sandra Gabaldon	Date: 6-7-2011	Time: 1358 hours
City/County: Santa Rosa/Guadalupe County		
Location: NMDGF Rock Lake Hatchery		
Subject: Weir/discharge structure from the warmwater settling pond (Outfall 004)		



NMED/SWQB

Official Photograph Log

Photo # 2

Photographer: Sandra Gabaldon	Date: 6-7-2011	Time: 1400 hours
City/County: Santa Rosa/Guadalupe County		
Location: NMDGF Rock Lake Hatchery		
Subject: Weir/discharge structure from coldwater settling pond (Outfall 003)		



NMED/SWQB

Official Photograph Log

Photo # 3

Photographer: Sandra Gabaldon	Date: 6-7-2011	Time: 1408 hours
City/County: Santa Rosa/Guadalupe County		
Location: NMDGF Rock Lake Hatchery		
Subject: Secondary splitter box at discharge point. The flow coming in to the splitter box from the bottom of the picture is from the coldwater settling pond. There was no discharge from the warmwater settling pond at the time of the inspection.		



NMED/SWQB

Official Photograph Log

Photo # 4

Photographer: Sandra Gabaldon	Date: 6-7-2011	Time: 1409 hours
City/County: Santa Rosa/Guadalupe County		
Location: NMDGF Rock Lake Hatchery		
Subject: Secondary splitter box at discharge point. View is standing over the Ortega-Borsich ditch. The concrete channel to the right actually covers a pipe going directly to the Pecos River.		

