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Certified Mail - Return Receipt Requested

March 1, 2013

Jose L. Guaderrama, P.E., Plant Manager
El Paso Electric / Rio Grande Station
P.O. Box 982
El Paso, Texas 79960-0982

RE: Minor, Non-Municipal, SIC 4911, NPDES Compliance Evaluation Inspection, El Paso Electric / Rio Grande Station, NM0000108, January 30, 2013

Dear Mr. Guaderrama,

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) 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. 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
Allied Bank Tower
Region VI Enforcement Branch (6EN-WM)
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

I appreciate the cooperation of Aida G. Mauricio, El Paso Electric and other staff of El Paso Electric and Rio Grande Station during the inspection. If you have any questions about this inspection report, please contact me at (505) 827-0418.

Sincerely,

/s/ Erin S. Trujillo
Erin S. Trujillo
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN) by e-mail
Hannah Branning, USEPA (6EN-WC) by e-mail
Darlene Whitten-Hill, USEPA (6EN-WC) 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
Mike Kesler, NMED District III Las Cruces by e-mail
Aida G. Mauricio, El Paso Electric 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 0 0 1 0 8 11 12 1 3 0 1 3 0 17 18 C 19 S 20 2					
Remarks					
S T E A M E L E C T R I C P O W E R S T A T I O N					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 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 (<i>For industrial users discharging to POTW, also include POTW name and NPDES permit number</i>) El Paso Electric Company, Rio Grande Power Station, 3501 Doniphan Drive, Sunland Park, New Mexico 88063. From I-10 (Texas), take Exit 13, Travel 1/2 Mile West on Sunland Park Drive, then 0.9 Miles South on Doniphan Drive to plant on right. Doña Ana County	Entry Time /Date ~1300 hours / 01/30/2013	Permit Effective Date 12/01/2008
	Exit Time/Date ~1730 hours / 01/30/2013	Permit Expiration Date 11/30/2013
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) -David Barraza / El Paso Electric Company Rio Grande Power Generation, Superintendent Operation -Victor C. Fernandez / El Paso Electric Company Rio Grande Power Generation, Water Lab Tech -Carlos Zuazua / El Paso Electric Company Rio Grande Power Generation, Water Lab Tech -Aida G. Mauricio / El Paso Electric Company, Principal Env. Eng / 915-543-5956 & Fax 543-5802 -Roger Chacon / El Paso Electric Company, Environmental Manager / 915-543-5827	Other Facility Data Outfall 001 at Rio Grande: Lat 31.80356° Long -106.54633° Outfall 002 at Montoya Drainage Canal: Lat 31.804428° Long -106.549904° SIC 4911	
Name, Address of Responsible Official/Title/Phone and Fax Number Jose L. Guaderrama, P.E., Plant Manager, Rio Grande Station El Paso Electric, P.O. Box 982, El Paso, Texas 79960-0982 / 915-543-2913 / Main Offices 1-800-592-1634 or 915-543-5711	Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> *	

Section C: Areas Evaluated During Inspection

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

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

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

1. SEE ATTACHED CHECKLIST REPORT WITH FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s) Erin S. Trujillo /s/ Erin S. Trujillo	Agency/Office/Telephone/Fax NMED/SWQB/505-827-0418	Date 03/01/2013
Signature of Management QA Reviewer Bruce J. Yurdin /s/ Bruce J. Yurdin	Agency/Office/Telephone/Fax NMED/SWQB/505-827-2795	Date 03/01/2013

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS S M U NA (FURTHER EXPLANATION ATTACHED No)
 DETAILS: **Permittee NPDES application for addition of Unit 9 received on 12/05/2011 was determined to be administratively complete (USEPA letter 01/11/2012). Additional power station unit, but increase in discharge proposed.**

- 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: **Previous CEI on 09/08/2011. Approved for NetDMR on 12/29/2011. Last paper DMR in NMED SWQB files 09/2011.**

- 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: **See further explanations for equipment, and/or operation and maintenance reasons for Outfall 002 effluent exceedances**

- 1. TREATMENT UNITS PROPERLY OPERATED. S M U NA
- 2. TREATMENT UNITS PROPERLY MAINTAINED. **Computerized work order process system** S M U NA
- 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED. **Power station has equivalent power sources** S M U NA
Power Plant's Industrial
- 4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. **Control System Operational** 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: **Sample collection for internal outfalls is from temporary storage tank before discharge.**

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. **See notes in Section F Laboratory** 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: **Outfall 001 disconnected (no discharge since May 2010)**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE **Sparling Waterhawk (magnetic motion) flowmeter**

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: **pH and TRC conducted at on-site laboratory. Contract laboratories were not evaluated (not inspected).**

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

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED **Not documented** Y N NA

3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. **Composite Samplers** S M U NA

4. QUALITY CONTROL PROCEDURES ADEQUATE. **pH** S M U NA

5. DUPLICATE SAMPLES ARE ANALYZED. >10 % OF THE TIME. **Except for Internal Outfall Monitoring (Cu & Fe)** Y N NA

6. SPIKED SAMPLES ARE ANALYZED. ~100 % OF THE TIME. **Batch Spikes** Y N NA

7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME **1) Alamo Analytical Laboratories, Inc.** **2) Stillmeadow, Inc.**
 LAB ADDRESS **1155 Larry Mahan Drive, Suite B, El Paso, TX 79925** **12852 Park One Drive, Sugar Land, TX 77478**
 PARAMETERS PERFORMED **All but, WET, pH and TRC** **WET**

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

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	No discharge						
002	Not observed						
Internal Outfalls	No discharge						

RECEIVING WATER OBSERVATIONS: Discharge from 002 could not be observed because outfall was mostly below water surface of Montoyo Canal on day of this inspection. See further explanations for summary of effluent exceedances.

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

El Paso Electric Company / Rio Grande Station
NPDES Permit #NM0000108
Compliance Evaluation Inspection
January 30, 2013

Further Explanations

Introduction

On January 30, 2013, a Compliance Evaluation Inspection (CEI) was conducted at the El Paso Electric Company, Rio Grande Station at Sunland Park, New Mexico by Erin S. Trujillo of the State of New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB). El Paso Electric is classified as a minor discharger under the federal Clean Water Act, Section 402 National Pollutant Discharge Elimination System (NPDES) permit program and is assigned permit number NM0000108. This permit allows discharges to the Montoya Drain, thence to the Rio Grande; and to the Rio Grande in Segment 20.6.4.101 of the State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC).

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. The enclosed report is based on review of files maintained by both the Permittee and NMED, on-site observation by NMED personnel and verbal information provided by the Permittee representatives. Additional information on the addition of Rio Grande Unit 9 was available at <http://www.epelectric.com/about-el-paso-electric/new-generation-project-at-rio-grande-power-plant>.

An entrance interview was conducted with Mr. David Barraza, Rio Grande Power Generation, Superintendent of Operation; Victor C. Fernandez Rio Grande Power Generation, Water Laboratory Technician; Aida G. Mauricio, Principal Environmental Engineer; Roger Chacon, Environmental Manager; and several other El Paso Electric Company and Rio Grande Power Station staff upon arrival at approximately 1300 hours on the day of this inspection. The inspector made introductions, presented credentials, and discussed the purpose of the inspection. An exit interview to discuss preliminary findings of this inspection was conducted on-site with Mr. Barraza, Ms. Mauricio, and Mr. Chacon and other El Paso Electric Company and Rio Grande Power Station staff. The inspector left the facility gate at approximately 1730 hours on the day of this inspection.

Treatment Scheme

The Rio Grande Power Station was completed in November 1929 and is a natural gas fired electric generating station with emergency fuel oil back-up. Power plant units 1-5 have been retired. The station currently operates three service heat exchange units identified as units 6, 7 and 8:

- Rio Grande 6 – Output 50 Megawatts, Commissioned 1957
- Rio Grande 7 – Output 50 Megawatts, Commissioned 1958
- Rio Grande 8 – Output 150 Megawatts, Commissioned 1972

The facility operates three cooling towers also identified as No. 6, 7 and 8. Water sources include municipal water supply and groundwater wells. The facility reuses some wastewater in the cooling towers. The facility has two canals. The upper canal is used to store wastewater and the lower canal is used to store stormwater. Several pipes of various materials (e.g., steel, PVC, iron), sizes and schedules from the facility enter and discharge into the upper and lower canals. The facility's has a pipe identification project to document wastewater sources.

The upper canal receives stormwater runoff; metal cleaning wastewater from internal outfalls 106, 107 and 108; and wastewater from service heat exchangers, boiler blowdown, and floor drains. Metal cleaning wastewater generated from hydroblasting the main heat exchangers, condenser and smaller service heat exchangers discharge through floor drains from the power plant units to oil/water separators before being routed to the upper canal. The metal cleaning wastewater is temporarily stored in a tank for testing prior to discharge. Compliance monitoring of the metal cleaning wastewater routed to internal outfalls is obtained from the tank prior to discharge to the upper canal. The service heat exchangers supply “closed loop” cooling water for plant equipment. Wastewater from the heat exchangers is routed to oil/water separators. Boiler blowdown from units 6, 7, and 8 are also routed to an oil/water separator. Water used for the boiler systems is treated with oxygen scavengers, polymers and other chemicals to adjust pH.

Booms and absorbent pads (pillows or socks) are used in the upper canal to remove and control oil. Booms in the canals are inspected weekly and changed as needed according to on-site Permittee representatives. Booms had been changed the day before this inspection. No oil sheens were observed in canal water or on the canal banks on day of this inspection.

Water levels in the upper canal are normally maintained by re-circulation to cooling towers. Canal water levels are visually inspected daily and the estimated height is recorded on logs according to on-site Permittee representatives. Cooling tower make-up water is drawn from the upper canal, oil/water separator and ground water wells. Cooling tower water is treated to control scale, solids, corrosion, pH, and algae through chlorination and other chemicals. Discharges from Outfall 002 consist of blowdown from cooling tower units 6, 7 & 8 which are de-chlorinated prior to discharge to Montoya Drain then to the Rio Grande. Dechlorination is currently operated manually. The facility has not completed and/or implemented an automated system. Compliance monitoring samples of the cooling tower blowdown effluent are collected from a sampling valve after de-chlorination and prior to discharge at Outfall 002. Composite samples are collected in an automatic sampler prior to discharge at Outfall 002.

Outfall 001 is disconnected from the lower canal. No discharge has been reported since May 2010. An automatic sampler is still located at Outfall 001.

The construction activities of Unit 9 power generation turbine system have begun. Unit 9 is a simple-cycle aero-derivative gas turbine expected to generate 88 to 95 Megawatts of electricity. Construction of the unit began in late January and is expected to be completed by May 2013. Flow from Unit 9 would be to the upper canal or used as make up water directly to Unit 8. Flow from Unit 9 would also be able to flow directly to and discharge at Outfall 002. Information in the Permittee application received at USEPA on 12/05/2011 indicated that the discharge (water balance) would not change with the addition of power station Unit 9.

Section F – Laboratory – Overall Rating of “U = Unsatisfactory”

Permit Requirements for Laboratory

Part III.C.5 (Standard Conditions, Monitoring Procedures) of the permit states:

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.

b. 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.

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 results shall be maintained by the permittee or designated commercial laboratory.

Findings for Laboratory

Alamo Analytical Laboratories, LTD report dated May 14, 2012 indicated that TSS for a sample of effluent from Outfall 002 collected on 05/02/2012 was analyzed using EPA method 160.2. EPA Method 160.2 was withdrawn in March of 2007 (Federal Register/Vol. 72, No. 47/Monday, March 12, 2007/Rules and Regulations).

Reviewed analytical reports from the contract laboratory did not include method revision dates to ensure that analysis were conducted in accordance with approved methods in 40 CFR 136.3 effective May 18, 2012. For example, Alamo Analytical Laboratories, LTD report dated May 14, 2012 indicated Copper analyzed by EPA method 200.7. The citation for the approved method for Total Copper in 40 CFR 136.3 is EPA 200.7 Rev. 4.4 (1994). Reports after May 18, 2012 would need to be reviewed by the Permittee to ensure compliance with approved methods in 40 CFR 136.3.

Part I.A of the permit requires 24-hour composite sampling for parameters (TSS, TDS, Sulfate, and WET) that have cooling preservation requirements in Table II of 40 CFR 136.3 of less than or equal to 6°C Composite samples at Outfall 002 were collected in a refrigerated automatic sampler. However, temperatures in the sampler were not checked or calibrated using a National Institute of Standards and Technology (NIST) thermometer. As an example, EPA National Pollutant Discharge Elimination System Compliance Inspection Manual, Table 5-4 quality control procedures for field analyses and equipment states, *“All standardization should be against a traceable NIST or NIST calibrated thermometer...Biweekly, check at two temperatures against a NIST or equivalent thermometer...Temperature readings should agree within $\pm 1^{\circ}\text{C}$ or the thermometer should be replaced or recalibrated.”*

Calibration (standardization using buffers) of the on-site instrument used in pH analysis (Orion Star A211 benchtop pH meter) was not conducted prior to each sample analysis for NPDES compliance and reporting purposes according to on-site Permittee representatives. Monitoring and analyses for pH was performed more often (daily) than required (once per week) by Part I.A of the permit. Standard Methods 4500-H+ pH method approved by the Standard Methods Committee in 2000 states, *“The purpose of standardization is to adjust the response of the glass electrode to the instrument. When only occasional pH measurements are made standardize instrument before each measurement.”*

Duplicate samples for Internal Outfall monitoring for Copper and Iron were not conducted according to the on-site Permittee representative. According to EPA’s NPDES Inspection Manual, *“10 percent of the samples should be duplicated.”*

Section C - Operations and Maintenance – Overall Rating of “M = Marginal”; and Section G - Effluent/Receiving Waters Observations – Overall Rating of “M = Marginal”

Permit Requirements

Effluent limitations are in Part I. A of the permit.

Part III.B.3.a (Standard Conditions, Proper Operation and Maintenance) of the permit states:

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

Since the previous CEI in September of 2011 to December 2012, the following are the reported effluent exceedances for Outfall 002 and reason as indicated in the Permittee follow up non-compliance reports:

Table 1: Outfall 002 Reported Exceedances

	pH		TSS		O&G		Summary of Reason for Exceedance
	Units	SU	mg/L	mg/L	mg/L	mg/L	
Statistical Base	Min	Max	30DA AVG	DAILY MAX	30DA AVG	DAILY MAX	
Sample Type	Grab		COMP24		GRAB		
Permit Limit	6.6	9	30	100	15	20	
10/2011			85.8	338			canal pumped too low
11/2011					25.8	51.9	spill at gearbox
11/2012	6.52						overfeed of dechlorination (sodium bisulfate)

