



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 MARKLIN
Secretary

BUTCH TONGATE
Acting Deputy Secretary

Certified Mail - Return Receipt Requested

September 14, 2011

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

RE: Minor Non-Municipal; SIC 4911; NPDES; Compliance Evaluation Inspection; El Paso Electric Company; Rio Grande; Station; NPDES #NM0000108; September 8, 2011

Dear Mr. Guaderrama:

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, 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 and NMED regarding modifications and compliance schedules.

I appreciate the cooperation of Aida G. Mauricio, Victor Fernandez, Xavier Felder and Reiner Junge of your company during the inspection. If you have any questions, please feel free to contact me at the above address or by telephone at (505) 827-2798.

Sincerely,

/s/ RICHARD E. POWELL

Richard E. Powell
Surface Water Quality Bureau

CC: Samuel Tate, USEPA (6EN-AS) by email
Carol Peters-Wagnon, USEPA (6EN-WM) by email
Marcia Gail Adams, USEPA (6EN-AS) by email
Diana McDonald, USEPA (6EN-WM) by email
Larry Giglio, USEPA (6EN-P) by email
Hannah Branning, USEPA (6EN-WC) by email
Sonia Hall, USEPA (6EN-WC) by email
NMED, District III Las Cruces by email



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 1 0 9 0 8 17 18	C	S 20	2
Remarks					
S T E A M E L E C T R I C					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 4	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) EL PASO ELECTRIC COMPANY, RIO GRANDE 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. DONA ANA COUNTY	Entry Time /Date 0920/9-8-11	Permit Effective Date 12-1-2008
	Exit Time/Date 1535/9-8-11	Permit Expiration Date 11-30-2013
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) REINER JUNGE/ELECTRONIC SPECIALIST VICTOR FERNANDEZ/RIO GRANDE POWER GENERATION, WATER LAB TECH AIDA G. MAURICIO, EL PASO ELECTRIC COMPANY, PRINCIPAL ENV. ENGINEER/915-543-5956 & FAX 543-5802 XAVIER FELDER/RIO GRANDE POWER GENERATION I&C SUPERVISOR/915-543-2970 & FAX 543-5883	Other Facility Data Outfall 001: Lat N 31.80356° Long W -106.54633° Outfall 002 at Montoya Drainage Canal: Lat N 31.804428° Long W -106.549904° SIC 4911	
Name, Address of Responsible Official/Title/Phone and Fax Number JOSE GUADERRAMA, PLANT MANAGER, EL PASO ELECTRIC COMPANY, P.O. BOX 982, EL PASO, TEXAS 79960 915-543-2913	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)

S	Permit	S	Flow Measurement	S	Operations & Maintenance	N	CSO/SSO
S	Records/Reports	M	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	S	Laboratory	N	Storm Water	N	Other:

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

1. SEE REPORT AND FURTHER EXPLANATIONS

/s/ RICHARD E. POWELL	Agency/Office/Telephone/Fax NMED/SWQB 505-827-2798	Date 9/14/2011
Signature of Management QA Reviewer /s/ ERIN TRUJILLO	Agency/Office/Phone and Fax Numbers NMED/SWQB 505-827-0418	Date 9/14/2011

El Paso Electric Company, Rio Grande Power Station

PERMIT NO. **NM0000108**

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 No)
 The reported selenium average for the March-May 2011 reporting period was over-reported slightly as <0.0064 mg/L. The permittee should have used "0" rather than <MQL results for three analyses. The correct average is 0.0054 mg/L.

- 1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs. Generally yes, but see above error 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 U NA
- 2. TREATMENT UNITS PROPERLY MAINTAINED. Computerized work order process system S M U NA
- 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED. Station has equivalent power sources 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: **Internal outfalls are sampled from temporary storage tank before discharge.**

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT. **Outfall 001 has been disconnected and hasn't discharged since May 2010** 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. **Not for pH at internal outfall 108 for June 2011** 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: **Sparling Waterhawk (Magnetic Motion) flowmeters at 001 and 002**
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. **Monthly and sent to the manufacturer for calibration once/year** 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: **Contract laboratories were not evaluated.**

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

El Paso Electric Company, Rio Grande Power Station

PERMIT NO. **NM0000108**

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. Field duplicates of all parameters 6 times/year Y N NA
6. SPIKED SAMPLES ARE ANALYZED. ~100 % OF THE TIME. Batch spikes (Trace Analysis, Inc.) 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 Dr, Suite B, El Paso, TX 79925 12852 Park One Dr, Sugar Land, TX 77478
 PARAMETERS PERFORMED All except WET, pH and TRC WET

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
Outfall 001 - ND							
Outfall 002	Not Observed	NA					
Internal Outfalls	No Discharge	NA					

RECEIVING WATER OBSERVATIONS: Any discharge from 002 could not be observed because outfall was mostly below the water surface of the Montoya Canal on the day of the inspection. Since the last inspection, the facility has exceeded effluent limits from 001 on several occasions; monthly average TSS 10/09, 5/10; from 002 monthly average TSS 6/10, daily maximum TSS 6/10, and daily maximum O&G 5/11.

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
El Paso Electric Company/Rio Grande Station
NPDES Permit #NM0000108, September 8, 2011**

Further Explanations

Introduction

On September 8, 2011, a Compliance Evaluation Inspection (CEI) was conducted at the El Paso Electric Company/Rio Grande Station at Sunland Park, New Mexico by Richard E. Powell of the State of New Mexico Environment Department (NMED). 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 #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 NMAC of the Rio Grande 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. 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's representatives.

An entrance interview was conducted with Mr. Jose L. Guaderrama, P.E., Plant Manager, Mr. Reiner Junge, Electronic Specialist, Mr. Victor Fernandez, Water Lab Tech, Ms. Aida G. Mauricio, Principal Environmental Engineer and Mr. Xavier Felder, I&C Supervisor at approximately 0920 hours on September 8, 2011. The inspector made introductions, presented his credentials, and discussed the purpose of the inspection.

Treatment Scheme

The Rio Grande Power Station is a natural gas fired electric generating station that currently operates three out of eight power plant units and service heat exchange units identified as units 6, 7 and 8. Power plant units 1-5 have been retired. 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 (lower and upper) to store wastewater and stormwater.

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. Oil/water separator No. 1 for unit 6 is routed to the cooling towers. Oil/water separators No. 2 for unit 7 and No. 3 for unit 8 discharge to the upper canal. Boiler blowdown from units 6, 7, and 8 are also routed to oil/water separator No. 1. Water used for the boiler systems is treated with oxygen scavengers, polymers and other chemicals to adjust pH. Booms and absorbent pads are used in the upper canal to remove and control oil. Water levels in the upper canal are normally maintained by re-circulation to cooling towers. Cooling tower make-up water is drawn from the upper canal, oil/water separator No. 1 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 while the facility

investigates other automated systems. 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.

Discharges, first to the lower canal, then to outfall 001, consist of stormwater runoff and occasional overflow from the upper canal. RO backwash and cleaning activity flows are now routed to a tank and discharged to the sanitary sewer. Compliance monitoring samples of the effluent from the lower canal are collected in an automatic sampler prior to discharge at outfall 001. The discharge pipe for this outfall has been disconnected.

An exit interview to discuss the preliminary findings of this inspection was conducted at approximately 1530 hours on September 8, 2011 with Messrs. Junge, Fernandez, and Felder and Ms. Mauricio at the site.

**Compliance Evaluation Inspection
El Paso Electric Company/Rio Grande Station**

Further Explanations

Section A – Permit Verification – Overall Ratings of Satisfactory

According to the facility representatives, El Paso Electric may construct a new generating unit, including various changes to the flow patterns and characteristics to the upper and lower canals, at this site in 2013. The company is aware of the need to modify the NPDES permit prior to making these modifications.

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 pipe identification project to document wastewater sources for the effluent was most recently updated in 2010.

Section D - Self-Monitoring – Overall Ratings of “Marginal”

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.

40 CFR Part 136, Table II lists holding times. The hydrogen ion (pH) parameter is listed as "analyze immediately" which is further described as: '[t]he term “analyze immediately” usually means within 15 minutes or less of sample collection.'

Part III.D.5 (Standard Conditions, Additional Monitoring by the Permittee) of the permit states:

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 on the DMR.

Findings for Recordkeeping and Reporting, and Self-Monitoring

The permittee conducted metal cleaning of Unit 8 on June 26, 2011. These wastewaters were collected in holding tanks (in this case three tanks) and sampled prior to discharge from internal outfall 108. Tanks were sampled at 0800 hours on June 26, 2011. Wastewater in the tanks is analyzed and, if it meets effluent limits, is discharged into the upper canal. If it does not meet effluent limits, it is shipped to the Newman Plant for disposal. According to the facility's laboratory records, pH was analyzed at the laboratory at 1410 hours on June 26, 2011. These were the pH results reported on the DMRs for June 2011. Therefore, the permittee was not meeting the holding time requirements of 40 CFR Part 136 for pH. The permittee analyses pH for all external outfall discharges in house, which do meet the required holding time. The permittee could do pH monitoring for these internal outfalls in house also.

Permit #NM0000108 requires the Permittee to monitor pH from external outfalls 001 & 002 at a minimum frequency of 1/week. For June 2011, results of only one pH sample per week was reported on the DMRs, which lists a frequency of 4/30 and results of 6.99 minimum and 7.31 maximum values. However for June (and apparently every month), the facility monitors pH using approved methods, daily and did not indicate this increased monitoring frequency on the DMRs. The monitoring frequency for June 2011 should have been reported as 30/30 and the correct minimum and maximum results for the entire month reported. All samples analyzed using approved methods must be reported on the DMRs.