



**NEW MEXICO
ENVIRONMENT DEPARTMENT**



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Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

Certified Mail - Return Receipt Requested

December 8, 2014

Mr. Jaime Viramontes, Plant Manager
El Paso Electric/Rio Grande Station
P.O. Box 982
El Paso, TX 79960-0982

Re: El Paso Electric, Rio Grande Station; Minor; Individual Permit; SIC 3511; NPDES Compliance Evaluation Inspection; NM0000108; December 2, 2014

Dear Mr. Viramontes:

Enclosed please find a copy of the report and check list 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 advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Gladys Gooden-Jackson
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Bruce Yurdin
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 Sarah Holcomb at 505-827-2798 or at sarah.holcomb@state.nm.us.

Sincerely,

/s/ Bruce J. Yurdin

Bruce J. Yurdin
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Gladys Gooden-Jackson, USEPA (6EN-WM) by e-mail
Brent Larsen, USEPA (6WQ-PP) by e-mail
Raquel Douglas, USEPA (6EN-AS) by e-mail
NMED District 3, Mike Kesler 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	4	1	2	0	4	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						70	4							71	N	72	N	73												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/Rio Grande Station, Dona Ana County, NM: From I-10 (Texas), take exit 13, travel ½ mile west on Sunland Park Drive, then 0.9 miles south on Doniphan Drive to plant on right.		Entry Time /Date 0900 hours / 12-2-2014	Permit Effective Date 8-1-2013
		Exit Time/Date 1235 hours / 12-2-2014	Permit Expiration Date 7-31-2018
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Mr. Jaime Viramontes, Plant Manager (915) 543-2925 Mr. Roger Chacon, Environmental Manager (915) 543-5827 Ms. Aida Mauricio, Principal Environmental Engineer (915) 543-5956			Other Facility Data GPS:
Name, Address of Responsible Official/Title/Phone and Fax Number Mr. Jaime Viramontes, Plant Manager (915) 543-2925 PO Box 982, El Paso, Texas 79960		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
S	Effluent/Receiving Waters	N	Laboratory	N	Storm Water	N	Other:

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

1. The inspectors arrived on site at approximately 0900 hours and conducted an entrance interview with Mr. Jaime Viramontes, Plant Manager, Mr. Roger Chacon, Environmental Manager, Ms. Aida Mauricio, Principal Environmental Engineer, and Ms. Lucy Valenzuela, Environmental Engineer, where she made introductions, presented credentials and discussed the purpose of the inspection. An exit interview was conducted at the site with the same staff at approximately 1220 hours, where the preliminary findings of the inspection were discussed.
2. Please see report for further information.

Name(s) and Signature(s) of Inspector(s) Sarah Holcomb /s/ Sarah Holcomb	Agency/Office/Telephone/Fax 505-827-2798	Date 12-8-14
Signature of Management QA Reviewer Bruce Yurdin /s/ Bruce J. Yurdin	Agency/Office/Phone and Fax Numbers 505-827-2795	Date 12-8-14

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: Permittee is utilizing NetDMR.

S M U NA (FURTHER EXPLANATION ATTACHED NO)

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 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 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 Sparling Waterhawk 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 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 NA3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. S M U NA4. QUALITY CONTROL PROCEDURES ADEQUATE. S M U NA5. DUPLICATE SAMPLES ARE ANALYZED. 20 % OF THE TIME. Y N NA6. SPIKED SAMPLES ARE ANALYZED. 20 % OF THE TIME. Y N NA7. COMMERCIAL LABORATORY USED. Y N NALAB NAME Alamo Analytical Laboratories, Inc. Stillmeadow, Inc.LAB ADDRESS 1155 Larry Mahan Drive, Suite B, El Paso, TX 79925 12852 Park One Drive, Sugar Land, TX 77478PARAMETERS PERFORMED All but pH, TRC and WET 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
001	No Discharge	No Discharge	No Discharge				
002	None observed	Clear	N/A				
Internal Outfalls	No Discharge	No Discharge	No Discharge				

RECEIVING WATER OBSERVATIONS No effluent exceedances reported since the previous NMED inspection.**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 NA2. 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 NA4. FLOW PROPORTIONED SAMPLES OBTAINED. Y N NA5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. Y N NA6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE. Y N NA7. SAMPLE SPLIT WITH PERMITTEE. Y N NA8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. Y N NA9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. Y N NA

Further Explanations

Introduction

On December 4, 2014, Sarah Holcomb of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Rio Grande Station, operated by El Paso Electric (EPE), in Sunland Park, Dona Ana County, New Mexico. The EPE Rio Grande Station 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 NM0000108. This permit authorizes discharges to the Montoya Drain, thence to the Rio Grande in Segment 20.6.4.101 NMAC (*State of New Mexico Standards for Interstate and Intrastate Surface Waters*) of the Rio Grande Basin. Designated uses of segment 20.6.4.101 NMAC are irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

The NMED performs a certain number of CEIs each year for the U.S. Environmental Protection Agency (USEPA), Region VI. The purpose of this inspection is to provide the USEPA with information to evaluate the Permittee's compliance with the NPDES permit. 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. 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>.

Upon arrival at approximately 0900 hours on the day of this inspection, the inspector made introductions, explained the purpose of the inspection and presented her credentials to Mr. Jaime Viramontes, Plant Manager. A formal entrance interview was held a short time later with the arrival of EPE's environmental staff. The staff present was Mr. Viramontes, Mr. Roger Chacon, Environmental Manager, Ms. Aida Mauricio, Principal Environmental Engineer, and Ms. Lucy Valenzuela, Environmental Engineer. The inspector and the aforementioned staff toured the site, including the facility's lab. At the end of the tour, the inspectors and the permittee's representatives stopped at the onsite office to review documents. The inspector conducted an exit interview to discuss preliminary findings and the meeting concluded at approximately 1235 hours.

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 backup. Power plant units 1-5 have been retired. The station operates four service heat exchange units identified as units 6, 7, 8 and 9 with a total output of 340 MW:

- Rio Grande 6 – Output 50 Megawatts, Commissioned 1957
- Rio Grande 7 – Output 50 Megawatts, Commissioned 1958
- Rio Grande 8 – Output 150 Megawatts, Commissioned 1972.
- Rio Grande 9 – Output 100 Megawatts, Commissioned 2013.

The facility operates three cooling towers also identified as No. 6, 7 and 8. A new cooling tower for Rio Grande 9 was also installed in 2013, but the discharge from this cooling tower is currently routed to Cooling Tower 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 has a pipe identification project to document wastewater sources. Results of the most updated pipe identification project (including schematics) are attached to this report as Appendix A.

The upper canal receives stormwater runoff; metal cleaning wastewater from internal outfalls 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 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.

Currently, the Permittee's practice with outfall 106 is that the approximately 100,000 gallons generated per cleaning event are stored in a plastic tank. Due to the cleaning elements used, the wastewater is taken offsite to the Permittee's Newman facility in Texas and is disposed in a lined pond at that site as long as it is not considered a hazardous waste (between pH 2-12). The Newman site is covered under TPDES permit number WQ-000836. The onsite Permittee representatives indicated that this practice may also be applied to the wastes generated at internal outfalls 107 and 108 in the future. Cleaning frequencies were stated (at the time of this inspection) to be: 1) boiler cleaning at the rate of once every 3-5 years per unit as needed, and 2) condenser cleaning (generating approximately 10,000 gallons of wastewater per cleaning) as needed, but tends to be more often than 3-5 years.

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. No oil sheens were observed in canal water or on the canal banks on the 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 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 and 8 which are dechlorinated prior to discharge to Montoya Drain, then to the Rio Grande. Dechlorination is currently operated mechanically. The sodium bisulfate is added based on flow through the facility and is adjusted as needed. Compliance monitoring samples of the cooling tower blowdown effluent are collected from a sampling valve after dechlorination and prior to discharge at Outfall 002. Composite samples are collected in an automated sampler prior to discharge at Outfall 002.

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

The construction activities of Unit 9 power generation turbine system were completed in 2013. Unit 9 is a simple cycle aero-derivative gas turbine expected to generate 100 Megawatts of electricity. According to onsite Permittee representatives, it currently generates approximately 90 MW. Flow from Unit 9 proceeds through Cooling Tower 9, and then to the upper canal or used as make up water directly to Unit 8. Flow from Unit 9 is also able to flow directly to and discharge at Outfall 002. Information in the Permittee's application received at USEPA on 12-5-11 indicated that the discharge (water balance) would not change with the addition of power station Unit 9.

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.

Section F – Laboratory Evaluation – Overall rating of “Marginal”

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

Findings for Laboratory:

During the facility tour, the inspector visited the facility's laboratory and reviewed procedures for conducting onsite pH and Total Residual Chlorine analyses.

During the review of pH procedures, the inspector noted that the facility staff were conducting pH analyses according to the old EPA method for pH, which was removed from approval in 40 CFR Part 136 with EPA's regulatory update in 2007. The inspector explained that the difference was in the calibration procedure and the first two calibration points must bracket the expected pH value of the sample. The facility's SOPs did document the correct procedure.

The facility analyzes total residual chlorine five times per week (Monday through Friday). Four of the analyses are conducted according to Method SM 4500-Cl G 2000, and one analysis is conducted using method SM 4500 Cl E 2000 (ultra low level). Permittee representatives indicate that they take all data into consideration during reporting. Any data above the MQL would be reported as a maximum.

**NMED/SWQB
Official Photograph Log**

Photo #1:

Photographer:	Sarah Holcomb	Date	12-2-2014	Time	1045 hours*
Location:	El Paso Electric – Rio Grande Station, Sunland Park, Dona Ana County, NM				
Subject:	Disconnected PVC pipe that leads to Outfall 001. This outfall has been out of service since May 2010.				



* = The camera internal time was an hour ahead of the actual time.

**NMED/SWQB
Official Photograph Log**

Photo #2:

Photographer:	Sarah Holcomb	Date	12-2-2014	Time	1046 hours*
Location:	El Paso Electric – Rio Grande Station, Sunland Park, Dona Ana County, NM				
Subject:	Outfall 001 – Rio Grande in the background.				



* = The camera internal time was an hour ahead of the actual time.

**NMED/SWQB
Official Photograph Log**

Photo #3:

Photographer:	Sarah Holcomb	Date	12-2-2014	Time	1111 hours*
Location:	El Paso Electric – Rio Grande Station, Sunland Park, Dona Ana County, NM				
Subject:	Outfall 002 to Montoya Arroyo, thence to the Rio Grande.				



* = The camera internal time was an hour ahead of the actual time.

**NMED/SWQB
Official Photograph Log**

Photo #4:

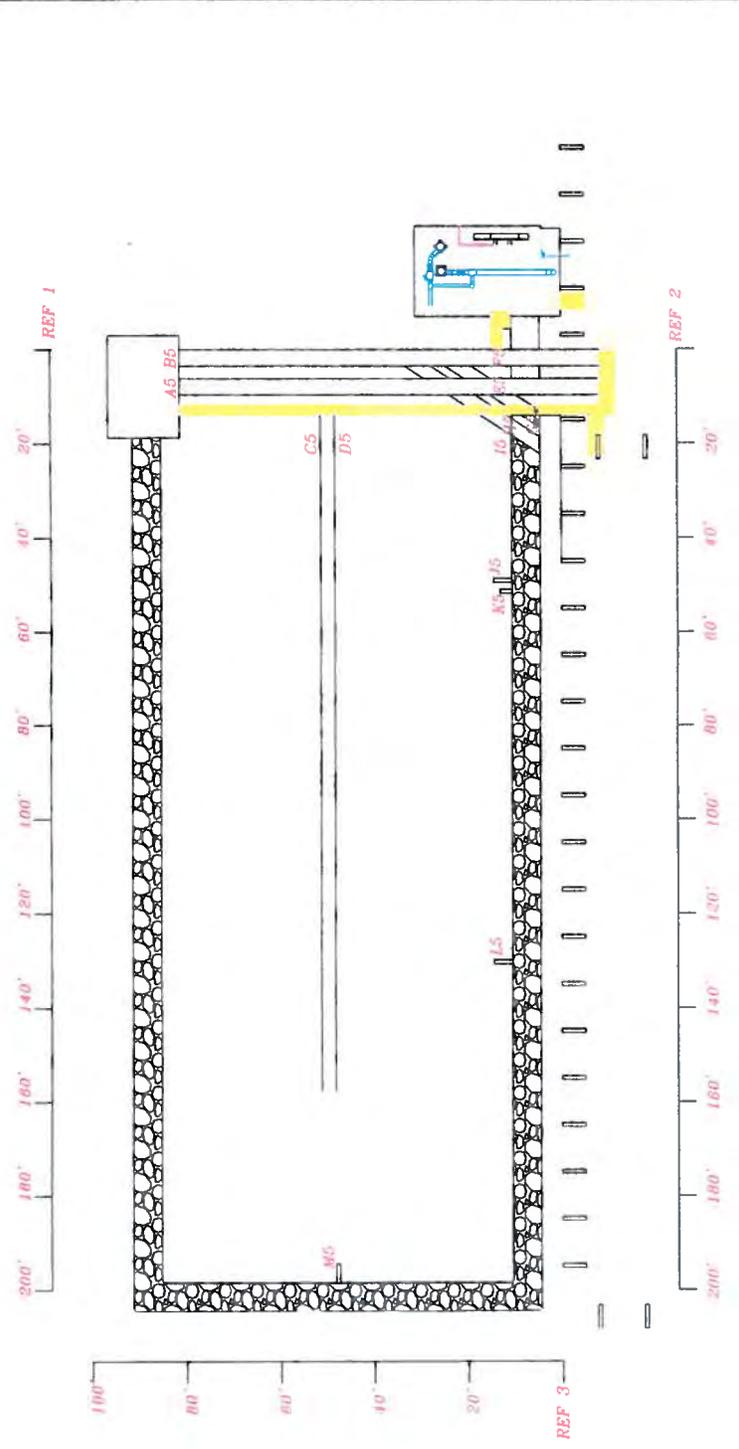
Photographer:	Sarah Holcomb	Date	12-2-2014	Time	1121 hours*
Location:	El Paso Electric – Rio Grande Station, Sunland Park, Dona Ana County, NM				
Subject:	New Unit 9 – installed and operational as of May 2013.				



* = The camera internal time was an hour ahead of the actual time.

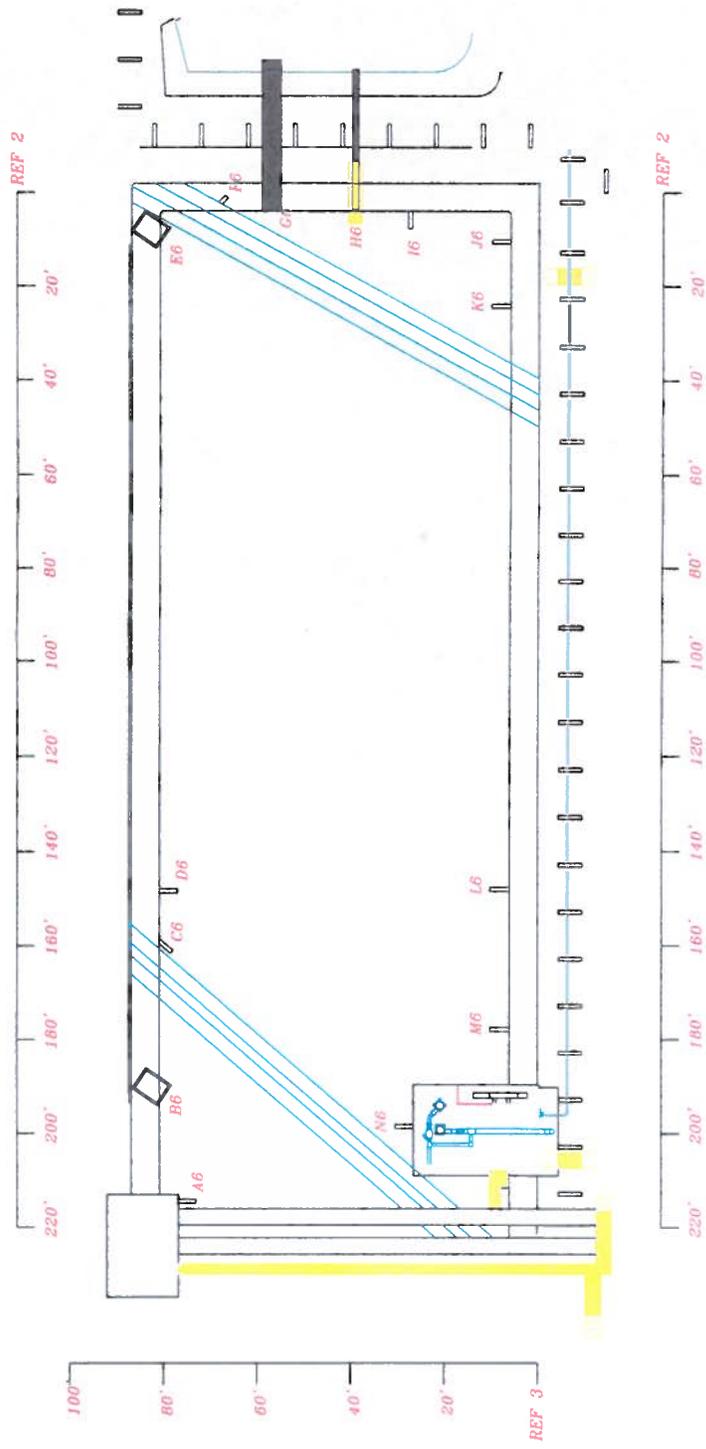
EPE Rio Grande Station CEI Report
NM0000108
Appendix A

DATE	REV	DESCRIPTION	DATE	APPROVED



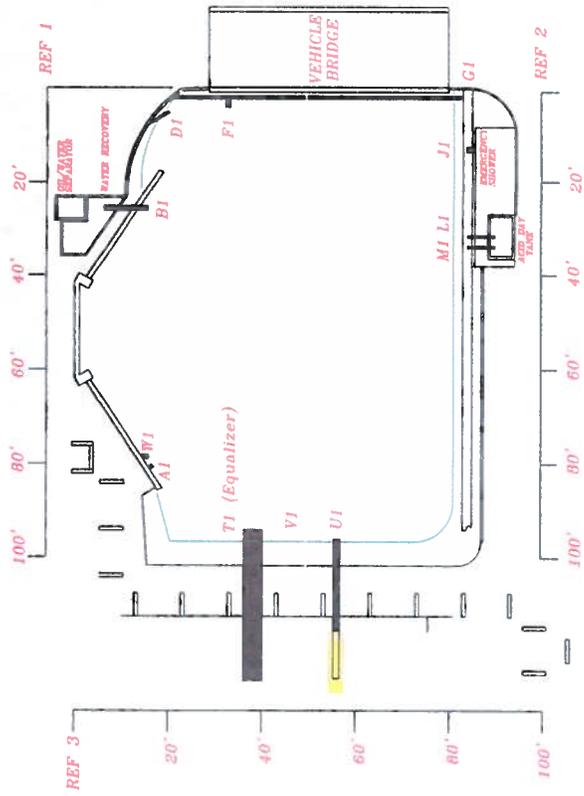
EL PASO ELECTRIC COMPANY RIO GRANDE PLANT		TITLE: UPPER CANAL - SECTION 1	
PROJECT NO.	DWG NO.	SCALE	SHEET
A	D90929.001	NTS	4 of 4
APPROVAL:	JJ	REV:	0

ZONE	REV	DESCRIPTION	DATE	APPROVED



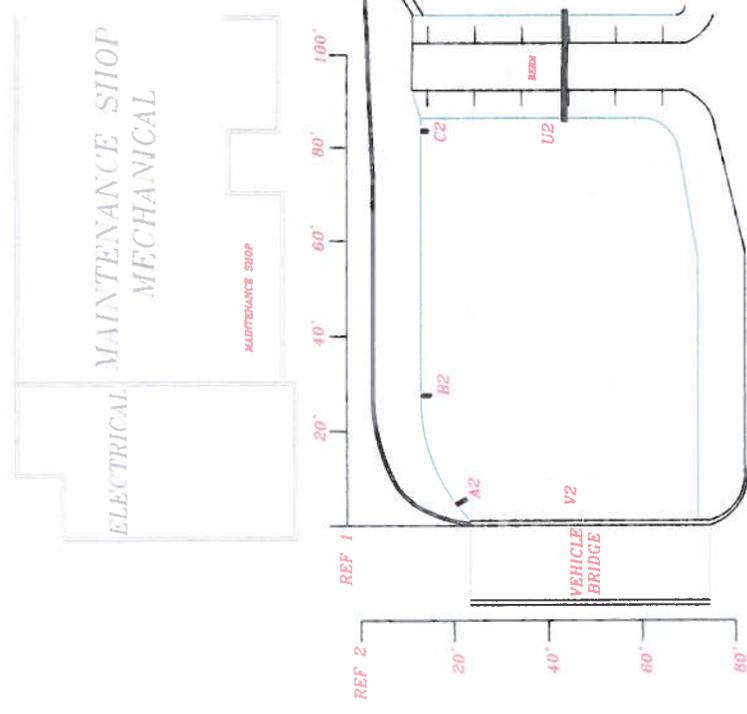
PROJECT NO.		DRAWING NO.		SHEET	
APPROVAL: JJJ		050929.001		4 of 4	
SCALE: NTS		REV: D		DATE	
TITLE: UPPER CANAL - SECTION 2		EL PASO ELECTRIC COMPANY RIO GRANDE PLANT			

REVISIONS	DATE	APPROVED



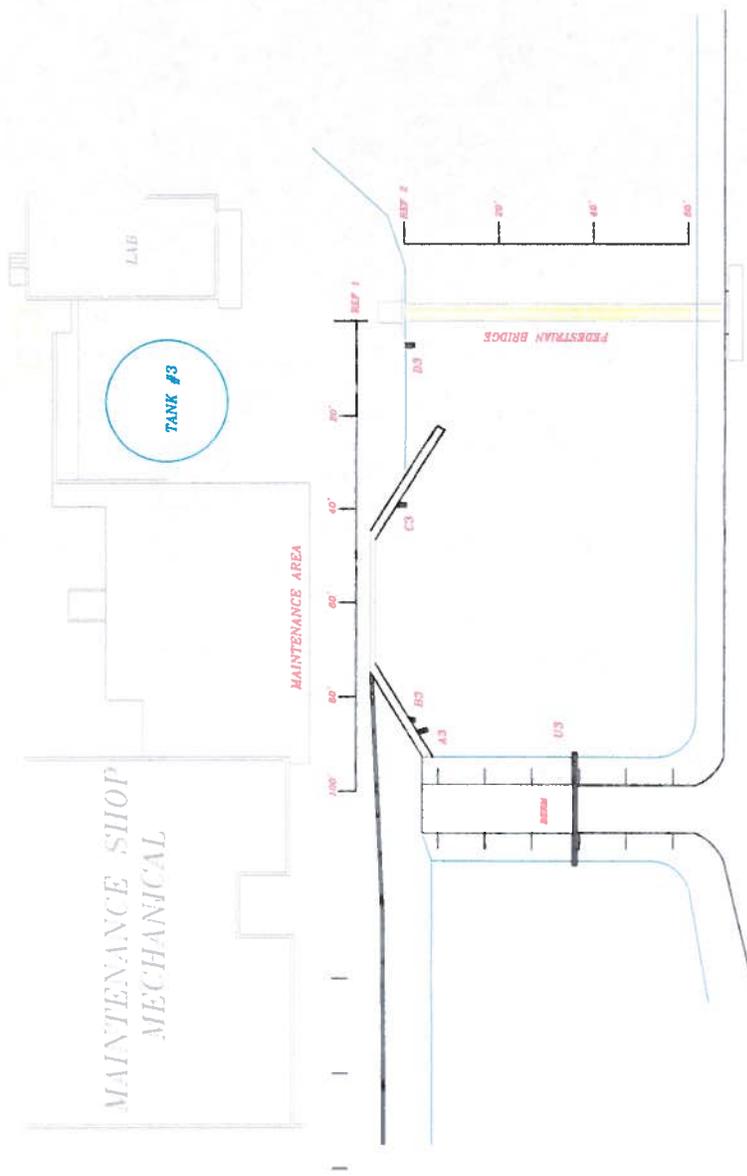
	EL PASO ELECTRIC COMPANY RID GRANDE PLANT	
	TITLE: UPPER CANAL - SECTION 3	
PRODUCT NO.	SIZE / FROM NO.	DATE NO.
APPROVAL: JJJ	A	090929.001
	SCALE: NTS	SHEET: 4 of 4
		REV: 0

REVISIONS		DATE	APPROVED
NO.	DESCRIPTION		



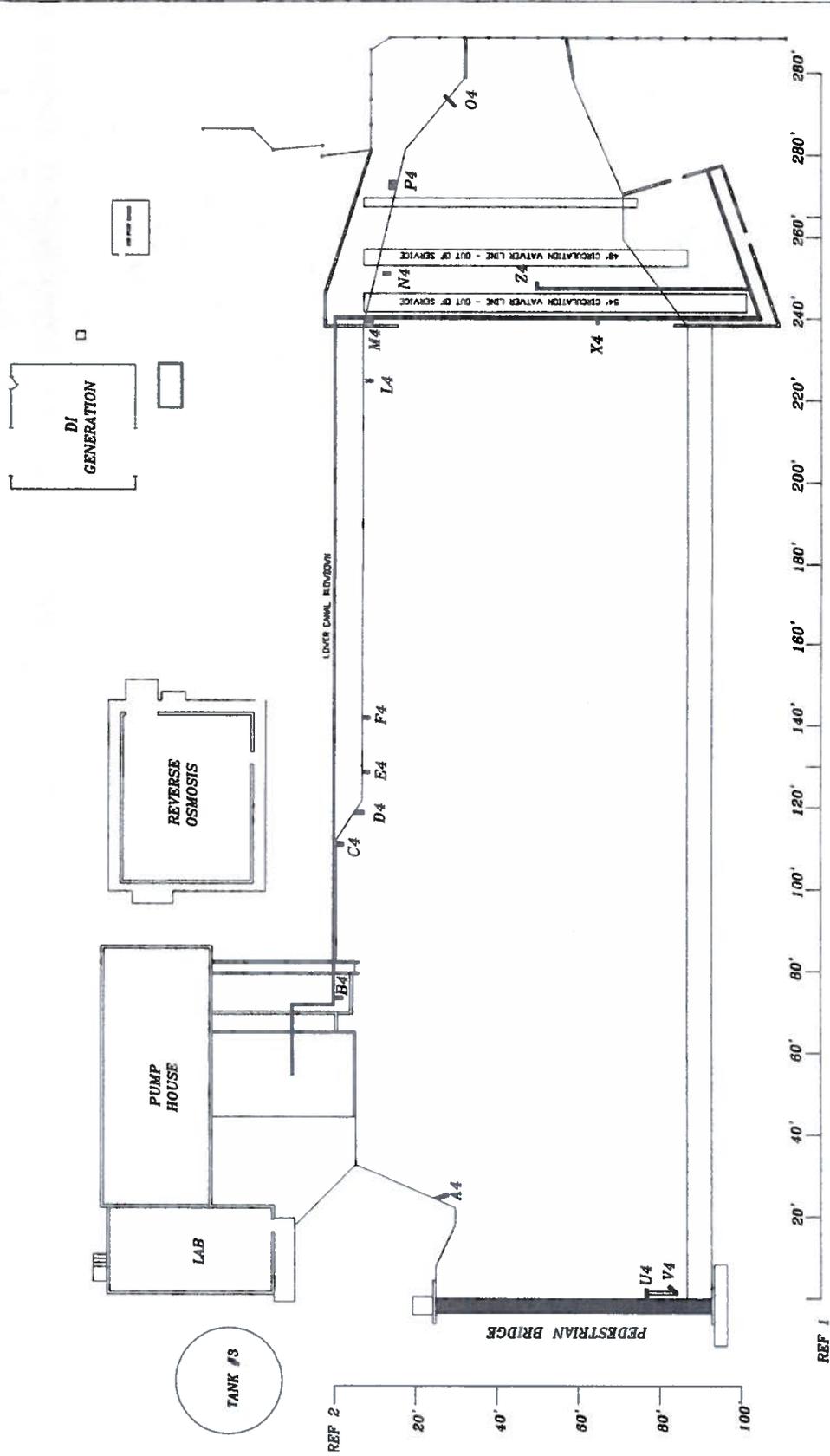
		EL PASO ELECTRIC COMPANY RIO GRANDE PLANT	
PROJECT NO.		TITLE: UPPER CANAL - SECTION 4	
APPROVAL: J.J.		SIZE / FROM NO. A	DWG NO. 090929.001
SCALE: N.T.S.		SHEET: 4 of 4	

DATE	REV	DESCRIPTION	DATE	APPROVED



		EL PASO ELECTRIC COMPANY RIO GRANDE PLANT	
PROJECT NO.		TITLE LOWER CANAL - SECTION 1	
APPROVAL JJ	SCALE NTS	DRAWING NO. 090929.001	SHEET 4 of 4
SIZE FROM NO. A	REV 0		

REVISIONS		
NO.	DESCRIPTION	DATE



		EL PASO ELECTRIC COMPANY RIO GRANDE PLANT	
TITLE: LOWER CANAL - SECTION 2			
PROJECT NO.	SCALE	NTS	SHEET: 4 of 4
SIZE / FOCUS NO.	A		
REV	0		
ORD NO.	090929.001		

REF 1

Plant Discharge to Middle Lower Canal

Pipe No.	Pipe Type	Pipe Identification	Status	Purpose	Normal Daily Flow (GPD)	Emergency/Non Routine Flow
Upper Canal Drains - SECTION 3						
A1	3" Carbon Steel Pipe	Warehouse Drain 81.5 ft west of Ref 1 protruding over sloped wall of intake Out of Service	InActive		1	
B1	10" Carbon Steel Pipe	Unit # 6.7.8 Boiler Blowdown & #6 Floors. outlet from oil trap 15.5 ft west of Ref 1. opens from intake wall (Currently used on Emergency Case Basts)	Active	Capture Blowdown Water	0	175 GPM (Loss of recovery Pumps)
D1	6" Carbon Steel Pipe	Old Fire Line connection (cut off. not used) 3.5 ft west of Ref 1 (Out of Service)	InActive		0	
F1	6" Carbon Steel Pipe	Fire Main 2" Drain Valve adjacent to PIV-8A 2.5 ft west of Ref 1, 20 ft south of Ref 1 at the black bridge	Active	Fire Main Drain	0	10,000 Gallons Drain entire Fire Main
G1	24" Carbon Steel Pipe	Old Circulation Line 85' South of Ref 3 - Running Parallel to the Canal (Out of Service)	InActive	Old Circulation Line	0	
J1	1" Carbon Steel Pipe	Water Supply & Drain from Safety Shower 12 ft West of Ref 2. above ground. south side of Lower Canal 1" Pipe capped off. Emerg Shower drains to Middle Canal	Active	Emergency Shower (Circulation of water Thru the Emergency Shower)	5	
L1	2" Sch80 PVC	Acid Day Tank Drain 25 ft west of Ref 2. aboveground. south side of Middle Canal	Active	Acid Tank Cleaning Acid Day Tank	0	
M1	2" Sch80 to Sch40 PVC	Acid Feed Line to Lower Canal from Acid Mixing Chamber 27.5 ft west of Ref 2. aboveground, south side of Lower Canal	Active	Addition of Acid to Upper Canal	0	3000 Gallons 5 GPM for 8 Hrs
T1	48" Concrete Pipe	Equalizing Pipe between Decitions 2 & 3 Upper Canal 38 ft south of Ref 3, Protrudes from berm between canals	Active	Equalize Water Levels Upper Canal	0	
U1	20" Carbon Steel Pipe	Equalizing Pipe between Decitions 2 & 3 Upper Canal 56 ft south of Ref 3, protrudes from berm between canals Out of Service	InActive			
V1	4" SCH80 PVC Pipe	Chlorination Line 50 ft South of Ref 3. Crosses the Middle Canal along the Bottom	Active	Chlorinate Upper Canal Section 3	0	

Plant Discharge to Middle Lower Canal

Pipe No.	Pipe Type	Pipe Identification	Status	Purpose	Normal Daily Flow (GPD)	Emergency/Non Routine Flow
W1	3" SCH40 PVC Pipe	Drain from Roadway - Pipe crossover Basin 80 ft west of Ref 1, north side of lower canal near A1	Active	Storm Drain	0	

Pipe No.	Pipe Type	Pipe Identification	Status	Purpose	Normal Daily Flow (GPD)	Emergency/Non Routine Flow
Upper Canal Drains - SECTION 4						
A2	10" Cast Iron Pipe	Outlet from #5 DWT Drain, & #5 Unit Floor Drains 5 ft East of Ref 1, at traffic bridge, 6 ft below top of bank	Active	Floor Drain	0	
B2	8" Sch40 PVC Pipe	Maintenance Shop Roof Runoff & Ladies Room Floor Drains 28 ft East of Ref 1, 4 ft below top of north bank	Active	Storm/Floor Drain	0	
C2	8" Carbon Steel Pipe	Floor Drain on South side of Maintenance shop 84 ft East of Ref 1, 1.5 ft below top of north bank	Active	Storm Drain	0	
U2	8" Carbon Steel Pipe	Equalizing Pipe between Middle & Lower Canal 43 ft South of Ref 2, protrudes from berm between canals	Active	Overflow	0	
V2	4" SCH80 PVC Pipe	Middle Canal Chlorination Line 47 ft South of Ref 2, crosses the Middle Canal along the Bottom	Active	Chlorinate Middle Canal Upper Canal/Middle Canal	0	

Pipe No.	Pipe Type	Pipe Identification	Status	Purpose	Normal Daily Flow (GPD)	Emergency/Non Routine Flow
LOWER CANAL DRAINS - SECTION 2						
A4	4" Carbon Steel Pipe	Well Water Supply to RO Unit 24 ft east of Ref 1, 5 ft below top of north bank	Inactive	Well Water Supply to RO Drain Line	0	
B4	1/4" Tygon Tube	Double Valve (1/2") connected to 6" Flange 74 ft east of Ref 1, protrudes from pipe laying on top of berm	Active	Sample Line (used for sampling PH/CL of water discharged to the river)	0	
C4	7-1/2" Cast Iron Pipe	#1 Boiler Blowdown Flashback 110 ft east of Ref 1, 6 ft below top of north bank <i>Out of Service</i>	In/Active		N/A	
D4	3" Carbon Steel Pipe	City Water Blowoff at Inlet to R.O. 110 ft east of Ref 1, laying on top of berm <i>Valve Removed and Line Removed</i>	In/Active	Piping Drain	0	
E4	1" Stainless Steel Pipe	City Water Heater at Inlet to R.O. 129 ft east of Ref 1, laying on top of berm <i>Normally Closed - Capped</i> <i>City Water re-routed to RO Waste Sump</i>	Inactive	Piping Drain (Used only in Cold Weather)	0	
F4	6" Carbon Steel Pipe	Outlet of R.O. Roof Gutter Drain 142 ft east of Ref 1, 2 ft below top of north bank	Active	Storm Drain	0	
L4	3" Sch40 PVC Pipe	Unknown source, not in use 224 ft east of Ref 1, 6 ft below top of north bank <i>Out of Service</i>	Inactive		N/A	
M4	3" Sch80 PVC Pipe	Old R.O. Building Floor Drain Outlet 240 ft east of Ref 1, 7 ft below top of north bank <i>Connection to Lower Canal Cut off</i>	Inactive	Waste Sump Overflow	0	45 GPM
N4	8" Carbon Steel Pipe with Flanged End	Obsolete Well Water Line 250 ft east of Ref 1, runs from south between C.T. Supply lines <i>Out of Service - Flanged off</i>	Inactive	Old Service Water Line??	N/A	
O4	8" Carbon Steel Pipe	City Water Supply Header Blowdown Line	In/Active	Piping Drain	0	

		295 ft east of Ref 1, supported over top of north bank <i>Valve Removed & Outlet Flanged</i>				
P4	54" Cast Iron Gate Valve	Opens equalizing line between lower canal and front canal 270 ft east of Ref 1, 6 feet below top of north bank <i>Out of Service</i>	InActive		N/A	
X4	4" Carbon Steel Pipe	Lower Canal Recirculation - Blowdown 65 ft south of Ref 2, 240 ft east of Ref 1 <i>Normally Open - Recirculation Line</i>	Active	Recirculation	N/A	
Z4	6" Carbon Steel Pipe	Lower Canal Recirculation - Blowdown 50 ft south of Ref 2, 248 ft East of Ref 1 <i>Normally Open - Recirculation Line</i>	Active	Recirculation	N/A	
V4	2" Carbon Steel Pipe	Fire Main Connection 83 ft south of Ref 2, South East side of Pedestrian Bridge <i>Valve Removed and Outlet Flanged</i>	InActive	Fire Main Connection	0	
U4	6" Carbon Steel Pipe	Fire Main Drain 76 ft south of Ref 2, South East side of Pedestrian Bridge <i>Valve Removed and Outlet Flanged</i>	InActive	Fire Main Drain	0	
		<i>Total Storm Water</i>	Total		0	16 GPM

Pipe No.	Pipe Type	Pipe Identification	Status	Purpose	Normal Daily Flow (GPD)	Emergency/Non Routine Flow
Upper Canal - Section 1						
A5	4" Steel Pipe	Unit 8 Cooling Tower Circulation Supply Pipe - Drain 5 ft West of Ref 1 - 81 ft North of Ref 3 Located Under the Circulation Line	Active	Drain for Maintenance	0	Non-Routine
B5	4" Steel Pipe	Unit 8 Cooling Tower Circulation Return Pipe - Drain 3 ft West of Ref 1 - 81 ft North of Ref 3 Located Under the Circulation Line	Active	Drain for Maintenance	0	Non-Routine
C5	2" Sch40 PVC Pipe	Upper Canal Chlorination Pipe 14 ft West of Ref 1 - 52 ft North of Ref 3 Isolation Valve Located adjacent to the Pedestrian Bridge	Active	Upper Canal Chlorination Recirculation	200 GPM	Routine
D5	2" Sch40 PVC Pipe	Upper Canal Aeration Pipe 14 ft West of Ref 1 - 48 ft North of Ref 3 Isolation Valve Located adjacent to the Pedestrian Bridge	Active	Upper Canal Aeration Recirculation	200 GPM	Routine
E5	4" Steel Pipe	Unit 8 Cooling Tower Circulation Supply Pipe - Drain 5 ft West of Ref 1 - 12 ft North of Ref 3 Located Under the Circulation Line	Active	Drain for Maintenance	0	Non-Routine
F5	4" Steel Pipe	Unit 8 Cooling Tower Circulation Return Pipe - Drain 3 ft West of Ref 1 - 12 ft North of Ref 3 Located Under the Circulation Line	Active	Drain for Maintenance	0	Non-Routine
G5	12" PVC pipe	Unit 8 Cooling Tower - Overflow Pipe 14 ft West of Ref 1 - 7 ft North of Ref 3	Active	Overflow	0	Routine
I15	4" Steel Pipe	Unit 7 Cooling Tower Circulation Return Pipe - Drain 16 ft West of Ref 1 - 7 ft North of Ref 3 Located Under the Circulation Line	Active	Drain for Maintenance	0	Non-Routine
I5	4" Steel Pipe	Unit 7 Cooling Tower Circulation Supply Pipe - Drain 20 ft West of Ref 1 - 7 ft North of Ref 3 Located Under the Circulation Line	Active	Drain for Maintenance	0	Non-Routine
J5	12" Steel Pipe	Unit 7 Cooling Tower - Ground Diversion Pipe 20 ft West of Ref 1 - 11 ft North of Ref 3	Active	Divert Stormwater/Overflow	0	Routine

K5	2" Sch40 PVC Pipe	Unit 7 Cooling Tower - Acid Day Day Drain 24 ft West of Ref 1 - 11ft North of Ref 3 Out of Service	Inactive	Drain	0	Non-Routine			
I.5	12" Steel Pipe	Unit 7 Cooling Tower - Overflow Pipe 200 ft West of Ref 1 - 11ft North of Ref 3	Active	Overflow	0	Routine			
M5	6" Steel Pipe	Rio Grande Plant Fire Main - Drain 24 ft West of Ref 1 - 48 ft North of Ref 3	Inactive	Drain for Maintenance	0	Non-Routine			

Pipe No.	Pipe Type	Pipe Identification	Status	Purpose	Normal Daily Flow (GPD)	Emergency/Non Routine Flow
Upper Canal - Section 2						
A6	2" SCH80 PVC Pipe	Unit 8 Cooling Tower Circulation Supply Pipe - Drain 215 ft West of Ref 1 - 81 ft North of Ref 3 Located Adjacent to Unit 8 Circulation Line	Active	Drain for Maintenance	0	Non-Routine
B6	12" Steel Pipe	Unit 8 Boiler - Oil Separator Drain 190 ft West of Ref 1 - 80 ft North of Ref 3	Active	Capture Blowdown Water	200 GPM	Routine
C6	2" Sch80 PVC Pipe	Unit 8 Circulating Line - Priming Line 160 West of Ref 1 - 80 ft North of Ref 3 Isolation Valve Located adjacent to Circulating Water Line	Active	Pime Circulating Water Line	0	Non-Routine
D6	2" Sch40 PVC Pipe	Drain from the Amertap Building 145 ft West of Ref 1 - 80 ft North of Ref 3 Out of Service	Inactive	Drain for Maintenance	0	Non-Routine
E6	10" Steel Pipe	Unit 7 Boiler - Oil Separator Drain 10 ft West of Ref 1 - 80 ft North of Ref 3	Active	Capture Blowdown Water	200 GPM	Routine
F6	2" Steel Pipe	Unit 8 Cooling Tower Circulation Return Pipe - Drain 3 ft West of Ref 1 - 170 ft North of Ref 3 Located Under the Circulation Line	Active	Drain for Maintenance	0	Non-Routine
G6	48" Concrete Pipe	Equalizing Pipe between Sections 2 & 3 Upper Canal 10 ft West of Ref 1 - 60 ft North of Ref 3	Active	Equalize Water levels Upper Canal	0	Routine
I16	20" Carbon Steel Pipe	Equalizing Pipe between Decisions 2 & 3 Upper Canal 10 ft West of Ref 1 - 40 ft North of Ref 3 Out of Service	Inactive	Equalize Water levels Upper Canal	0	Non-Routine
J6	2" Steel Pipe	Service Water Supply to Plant - Drain Valve 10 ft West of Ref 1 - 25 ft North of Ref 3	Active	Drain for Maintenance	0	Non-Routine
J6	2" Sch40 PVC Pipe	FireMain Drain Line 15 ft West of Ref 2 - 10 ft North of Ref 3 Out of Service	Inactive	Drain for Maintenance	0	Non-Routine



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Certified Mail 7003 3110 0004 2928 7429

January 8, 2015

Ms. Gladys Gooden-Jackson
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: NPDES NM0000108. Response to El Paso Electric, Rio Grande Station, Compliance Evaluation Inspection Report dated December 8, 2014; NM0000108

Dear Ms. Gooden-Jackson:

El Paso Electric (EPE) has reviewed the referenced inspection report prepared by the New Mexico Environment Department (NMED) for the compliance evaluation inspection conducted on December 2, 2014. EPE hereby documents corrective actions to the problems noted during the inspection.

Clarification under Treatment Scheme Discussion

The Rio Grande Power Plant, a steam electric facility, initiated operations in 1929. Units 1-5 have been retired. Units 6, 7, and 8 generate electricity by the use of steam turbines. Unit 9 is a simple cycle gas turbine. All four units are fueled with natural gas. Fuel oil was available for emergency purposes, in the past. However, fuel oil is no longer available at the facility. All fuel oil ASTs were decommissioned and dismantled in 2010.

The Rio Grande facility reuses some of the wastewater generated within the facility, such as from Unit 9 cooling tower, and Units 6, 7, and 8 heat exchangers. The upper canal receives groundwater from wells as well as some wastewater. The cooling towers use groundwater from wells, water from the upper canal, and municipality supplied water. Cooling tower blowdown discharges to the Montoya Canal thence to the Rio Grande River through Outfall 002

The lower canal is permitted to discharge through Outfall 001. There has not been any discharge since May 2010.

Metal cleaning wastewater is generated two ways. First, hydro-blasting is used to clean heat exchangers. Water is recirculated between the affected heat exchanger and a 10,000 gallon Poly tank. The wastewater is collected within this tank, sampled, and discharged through Internal Outfalls 106, 107, 108, once analytical confirms permit compliance. If analytical demonstrates non-conformance with permit, the wastewater is transported to the Newman Power Plant located in El Paso, Texas for disposal by evaporation as permitted by TPDES WQ-000836. Cleaning frequency of heat exchanger per unit is approximately 1 -2 per year, and is on an as-needed basis. Each cleaning generates approximately 3000-5000 gallons per unit per cleaning. EPE is considering transporting to the Newman Power Plant all metal cleaning wastewater.

Secondly, boiler chemical cleaning process requires the use of Frac Tanks for storing the wastewater generated during this process. Estimated volume generated is 100,000 to 120,000 gallons per boiler per cleaning event. Frequency is every 3-5 years per boiler (Units 6, 7, and 8). Boiler chemical cleaning is conducted as needed based on industry standards. The wastewater collected is tested for conformance with RCRA regulations, and transported to the Newman Power Plant for disposal by evaporation as permitted by TPDES WQ-000836

Corrective Actions under Section F – Laboratory Evaluation

Alternative Test Procedure

Part I, A , of permit NM0000108 approves the use of alternate methods. *“Test method approved or accepted by the USEPA Alternate Test Procedure Program may be used as an alternate method for the above regulated parameters”*

- Hach Method 8167 (reference method SM 4500-Cl G) and Hach Method 10014(reference method SM 4500-Cl G) are “EPA Accepted” methods for reporting residual chlorine in wastewater analysis. EPE uses both methods for the analysis of Total Residual Chlorine, TRC

Total Residual Chlorine Analyses

- Sampling for TRC is required once per week. The Laboratory Staff conduct sampling more frequently than the permit requires. However, all data is taken into consideration for reporting. Any data at or above the MQL will be reported as a number other than zero. The permit clarifies that if the test results for a pollutant with a listed MQL is found to be non-detected or below the MQL in Appendix A of Part II of the permit, a value of zero may be entered on the DMR for that pollutant.

pH Analyses

- Expected pH values for Outfall 002 discharge are between 6.7 to 7.6 pH units. The pH SOP will be updated to include a 3-point calibration using buffers 7, 10, and 4. Laboratory Staff immediately implemented the 3-point calibration using buffers 7, 10, and 4 as suggested by the Inspector. A 2-point calibration using buffers 6 and 10 is presently being evaluated.
- The facility SOP for *Standard Method 4500-H+ (2000)* will be revised to incorporate detailed instructions for the proper calibration procedure to incorporate "bracketing" the expected pH value of the sample.
- Sampling for pH is required once per week. The Laboratory Staff conduct sampling more frequently than the permit requires. However, all data is taken into consideration for DMR reporting.

EPE trusts the information submitted hereby clarifies certain areas of operation of the facility. Additionally, EPE trusts the information provided for Corrective Actions under Laboratory Evaluation meets your approval. It is EPE's policy to always perform the extra mile, if you have any comments please contact me at 915-543-2925, J Jaime.viramontes@epelectric.com, or EPE Environmental Team, Roger Chacon, Manager at 915-543-5827, roger.chacon@epelectric.com, or Aida Mauricio, Engineer, at 915-543-5956, aida.mauricio@epelectric.com.

Sincerely,


Jaime Viramontes
Manager
Rio Grande Power Plant

Cc Bruce Yurdin, NMED
Sarah Holcomb, NMED by e-mail