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Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

*Surface Water Quality Bureau*

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DAVE MARKLIN  
Secretary

BUTCH TONGATE  
Deputy Secretary

JAMES H. DAVIS, Ph.D.  
Director  
Resource Protection Division

**Certified Mail – Return Receipt Requested**

June 26, 2012

Mr. Larry Webb, Utilities Director  
City of Rio Rancho  
Post Office Box 15550  
Rio Rancho, New Mexico 87174-5550

**RE: Major Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, Rio Rancho  
Wastewater Treatment Plant #2, NM0027987, June 14, 2012**

Dear Mr. Webb:

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 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 wish to thank your staff for their cooperation during this inspection. If you have any questions concerning this inspection report, please feel free to contact me at the above address or by telephone (505) 827-1041.

Sincerely,

*/s/ Sandra Gabaldón*

Sandra Gabaldón

Surface Water Quality Bureau

Cc: Marcia Gail Adams, 6EN-AS, via email  
Samual Tate, 6EN-AS, via email  
Carol Peters-Wagnon, 6EN-WM, via email  
Hannah Branning, 6EN-WC, via e-mail  
Larry Giglio, 6WQ-PP, via email  
Diana McDonald, 6EN-WM, via email  
District I, via 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 <input type="text" value="N"/> 2 <input type="text" value="5"/> 3 <input type="text" value="N"/> <input type="text" value="M"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="7"/> <input type="text" value="9"/> <input type="text" value="8"/> <input type="text" value="7"/> 11 <input type="text" value="1"/> 12 <input type="text" value="2"/> <input type="text" value="0"/> <input type="text" value="6"/> <input type="text" value="1"/> <input type="text" value="4"/> 17 18 <input type="text" value="C"/> 19 <input type="text" value="S"/> 20 <input type="text" value="1"/>	Remarks					
<input type="text" value="M"/> <input type="text" value="A"/> <input type="text" value="J"/> <input type="text" value="O"/> <input type="text" value="R"/> <input type="text" value="M"/> <input type="text" value="U"/> <input type="text" value="N"/> <input type="text" value="I"/> <input type="text" value="C"/> <input type="text" value="I"/> <input type="text" value="P"/> <input type="text" value="A"/> <input type="text" value="L"/>						
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved		
67 <input type="text"/> <input type="text"/> <input type="text"/> 69	70 <input type="text" value="4"/>	71 <input type="text" value="N"/>	72 <input type="text" value="N"/>	73 <input type="text"/>	74 <input type="text"/>	
75 <input type="text"/>						
76 <input type="text"/>						
77 <input type="text"/>						
78 <input type="text"/>						
79 <input type="text"/>						
80 <input type="text"/>						

#### Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) <b>Rio Rancho Wastewater Treatment Plant #2</b> I-25 South, exit 242, West on 550, South on 528 to Industrial Loop  <b>SANDOVAL COUNTY</b>	Entry Time /Date 1035 Hours / 06-14-2012	Permit Effective Date November 1, 2010
	Exit Time/Date 1310 Hours / 06-14-2012	Permit Expiration Date October 31, 2015
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Eddie DeLara, Operations Manager Steven Paul, Operations Supervisor Mark Baker, Maintenance Supervisor	Other Facility Data SIC: 4952 GPS @ outfall: N. 35.25975 W. -106.59631	
Name, Address of Responsible Official/Title/Phone and Fax Number Larry Webb, Utilities Director / (505) 896-8715 Post Office Box 15550 Rio Rancho, NM 87174-5550	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)

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

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

- Inspector arrived on site, presented credentials and discussed the impending compliance evaluation inspection.
- Please see further explanation section for details of inspection.

Name(s) and Signature(s) of Inspector(s) Sandra Gabaldón /s/ Sandra Gabaldón	Agency/Office/Telephone/Fax NMED/SWQB/(505) 827-1041/(505) 827-0160	Date June 26, 2012
Signature of Management QA Reviewer Richard E. Powell	Agency/Office/Phone and Fax Numbers NMED/SWQB/(505) 827-2798/(505) 827-0160	Date June 26, 2012

## SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS  
DETAILS:

S  M  U  NA (FURTHER EXPLANATION ATTACHED NO)

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE

Y  N  NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES

Y  N  NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT

Y  N  NA

4. ALL DISCHARGES ARE PERMITTED

Y  N  NA

## SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.  
DETAILS:

S  M  U  NA (FURTHER EXPLANATION ATTACHED 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 YES)

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 . Some lift stations without standby power; facility does have portable generators

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 South 2A train being rehabilitated and out of 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

PERMITEE 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 PERMITEE'S SELF-MONITORING REPORT?  Y  N  NA

## SECTION E - FLOW MEASUREMENT

PERMITEE 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

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

PERMITEE 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  NA
- 3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.  S  M  U  NA
- 4. QUALITY CONTROL PROCEDURES ADEQUATE.  S  M  U  NA
- 5. DUPLICATE SAMPLES ARE ANALYZED. 10 % OF THE TIME.  Y  N  NA
- 6. SPIKED SAMPLES ARE ANALYZED. 10 % OF THE TIME.  Y  N  NA
- 7. COMMERCIAL LABORATORY USED.  Y  N  NA

LAB NAME Hall Environmental Analysis Laboratory Wilkins Environmental Consulting and Laboratories  
 LAB ADDRESS 4901 Hawkins, NE, Suite D, ABQ, NM 87109 832 NW 67<sup>th</sup> St., Oklahoma City, Oklahoma 73116  
 PARAMETERS PERFORMED Ammonia, Arsenic Biomonitoring (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	NONE	NONE	NONE	SLIGHT	NONE	CLEAR	

RECEIVING WATER OBSERVATIONS Receiving water is clear with visible fish

**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: LANDFILL (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

**SECTION I - SAMPLING INSPECTION PROCEDURES** (FURTHER EXPLANATION ATTACHED   ).

- 1. SAMPLES OBTAINED THIS INSPECTION.  Y  N  NA
- 2. TYPE OF SAMPLE OBTAINED  
 GRAB \_\_\_\_\_ COMPOSITE SAMPLE \_\_\_\_\_ METHOD \_\_\_\_\_ FREQUENCY \_\_\_\_\_
- 3. SAMPLES PRESERVED.  Y  N  NA
- 4. FLOW PROPORTIONED SAMPLES OBTAINED.  Y  N  NA
- 5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.  Y  N  NA
- 6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.  Y  N  NA
- 7. SAMPLE SPLIT WITH PERMITTEE.  Y  N  NA
- 8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.  Y  N  NA
- 9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.  Y  N  NA

**Rio Rancho Wastewater Treatment Plant #2**  
**NPDES Permit #NM0027987**  
**Compliance Evaluation Inspection**  
**June 14, 2012**

**INTRODUCTION:**

A Compliance Evaluation Inspection (CEI) was conducted at the Rio Rancho Wastewater Treatment Plant (WWTP) #2 on June 14, 2012 by Sandra Gabaldón of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). This facility is classified as a major discharger under the federal Clean Water Act (CWA), Section 402 National Pollutant Discharge Elimination System (NPDES) permit program, and is assigned NPDES permit number NM0027987. The facility design flow is 5.5 million gallons per day (MGD), according to the permit.

The Rio Rancho Wastewater Treatment Plant discharges into the Rio Grande Basin in Segment 20.6.4.106 (NMAC State of New Mexico Standards for Interstate and Intrastate Surface Waters). Designated uses of segment 20.6.4.106 are irrigation, marginal warmwater aquatic life, livestock watering, public water supply, wildlife habitat and primary contact.

The inspector arrived at the Rio Rancho #2 WWTP at 1035 hours and conducted an entrance interview with Mr. Steven Paul, Operations Supervisor and Mr. Eddie DeLara, Operations Manager. The inspector made introductions, presented her credentials and discussed the purpose of the inspection with Mr. Paul and Mr. DeLara. An exit conference was conducted with Mr. Paul and Mr. DeLara at the WWTP to discuss preliminary findings.

The NMED performs a specific number of CEI's annually for the United States Environmental Protection Agency (USEPA). The purpose of this inspection is to provide the USEPA with information to evaluate the permittee's compliance with their NPDES permit. The enclosed inspection report is based on verbal information supplied by the permittee's representatives, observations made by Ms. Gabaldón, and a review of records maintained by the permittee, commercial laboratory, and/or NMED. Findings of the inspection are detailed in the attached EPA form 3560-3 and in the narrative further explanations section of the report.

**TREATMENT SCHEME:**

Approximately 27 lift stations within the collection system brings raw wastewater to the WWTP #2.

WWTP consists of two treatment trains. 2A is an old Schreiber Process Unit. The Schreiber unit consists of a barscreen, aeration and clarification. The aeration and clarification processes occur in the same circular unit, while the barscreen is located outside the unit to remove large debris prior to aeration.

2B is an activated sludge treatment train. 2B consists of headworks, anoxic basins, aeration basins, clarifiers, and ultraviolet disinfection.

The headworks contain an automatic bar screen, a conal grit removal system with an auger and conveyor belt removal system and a Parshall flume for influent flow measurement. Screenings and grit are hauled to the landfill for final disposal.

Flow from the headworks enters the treatment units through a splitter box which evenly distributes the flow to the north and south anoxic basins. Currently, four of the eight anoxic basins are being utilized. Dissolved oxygen is kept at approximately 0.5 mg/L to maximize denitrification. Each basin has its own

dissolved oxygen meter. The south basins are currently going through rehabilitation to replace the vertical shaft mixers.

From the anoxic zone, flow enters the aeration basins. The aeration basin has multiple fine bubble diffusers. Currently, only the north side of the train is functional as the south side of the train is undergoing rehabilitation and replacement of all diffusers. Dissolved oxygen in the aeration basins is kept between 2-3 mg/L.

Flow then enters the splitter box and is evenly distributed between the two clarifiers. The average flow is 3.5 – 4 MGD. There was algal growth along the weirs. The clarifiers are cleaned on a daily basis and are power washed over the weekend to keep algal growth to a minimum.

Wastewater then flows from the secondary clarifiers to the ultraviolet disinfection unit. There are ten modules for disinfection. After disinfection, the effluent passes through a Parshall flume and ultrasonic secondary flow measurement device before discharging to the Rio Grande, approximately three miles from the plant.

### **Sludge**

Return activated sludge (RAS) is continuously pumped from the bottom of the secondary clarifiers and sent back to the aeration basins. Waste activated sludge (WAS) is periodically pumped to the aerated holding tank for sludge with the decant water returned to the headworks. The sludge is then processed through a belt press. A polymer is added to aid in the thickening process. The processed sludge is then landfilled at the Rio Rancho Landfill which is managed by Waste Management.

Compliance Evaluation Inspection  
Rio Rancho Wastewater Treatment Plant #2  
NPDES Permit No. NM0027987  
June 14, 2012

**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 C – Operation and Maintenance – Overall rating of “Marginal”**

Permit requires in Part III, Section B.3:

- a. *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.*
- b. *The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance, and testing functions required to insure compliance with the conditions of this permit.*

**Findings** – Operation and Maintenance:

The permittee has approximately 27 lift stations in their collection system. The permittee does not have generators at each lift station to insure power is provided in the event of a power outage. However, the permittee does have portable generators which they can take to the lift station to provide power.

The south side train of 2A is currently off line for rehabilitation.

The permittee has had some ammonia and TSS excursions since January 2010.

The permittee has had a number of sanitary sewer overflows (SSOs), total of 13, since January 2010. The SSO's range in volume from 50 gallons to 3,000 gallons. Many of the SSO's are a result of a blockage in the collection system. It is imperative that the facility maintain the collection system in order to eliminate, as many as possible, SSO's in the future.

