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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

March 9, 2012

Mr. Paul Risso, Manager
New Mexico Water Service Company
401 Horner Street
Belen, NM 87002

RE: Minor Non-Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, New Mexico Water Service Company, Rio Communities Wastewater Treatment Plant, NM0027782, February 21, 2012

Dear Mr. Risso:

Enclosed, please find a copy of the report for the above 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 Region VI office in Dallas, Texas for their review. These inspections are used by the 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 you for the cooperation that was extended by your staff, Mr. Porfirio Baca, Operator, and Mr. Bobby Towle, Wastewater Operations Supervisor, while at this facility. If you have any questions concerning this inspection report, please feel free to contact me at the above address or by telephone at (505) 827-1041.

Sincerely,
/s/ Sandra Gabaldón

Sandra Gabaldón
Surface Water Quality Bureau
Point Source Regulation Section

Cc: Marcia Gail Adams, 6EN-AS, via email
Stacy Bennett-Dwyer, 6EN-AS, via email
Carol Peters-Wagnon, 6EN-WM, via email
Sonia Hall and Hannah Branning, USEPA (6EN-WC) via e-mail
Larry Giglio, 6W-QPP, 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 N 2 5 3	N M 0 0 2 7 7 8 2 11 12	1 2 0 2 2 1 17	18 C	19 S 20	1
Remarks					
P R I V A T E D O M E S T I C					
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 (For industrial users discharging to POTW, also include POTW name and NPDES permit number) Rio Communities Wastewater Treatment Plant In Belen, go east on NM309 (Renken Ave), right on NM 7 for ¼ mile, right on NM 304 for 1 mile to Vista Grande Estates & Turn right into subdivision on Chisam Road. Facility is at the end of Chisam Road on the left side. VALENCIA COUNTY	Entry Time /Date 10:20 / 02-21-2012	Permit Effective Date November 1, 2007
	Exit Time/Date 12:10 / 02-21-2012	Permit Expiration Date October 31, 2012
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Bobby Towle, Wastewater Operations Supervisor (505) 864-2218	Other Facility Data SIC 4952 N. 34.63396 W. -106.74036	
Name, Address of Responsible Official/Title/Phone and Fax Number Mr. Paul Risso, Manager (505) 864-2218 / (505) 864-8438 (fax) New Mexico Water Service Company 401 Horner Street Belen, NM 87002	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	M	Flow Measurement	S	Operations & Maintenance	N	CSO/SSO
S	Records/Reports	S	Self-Monitoring Program	S	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	S	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	M	Laboratory	N	Storm Water	N	Other:

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

1. See checklist and further explanation for details

Name(s) and Signature(s) of Inspector(s) SANDRA GABALDON /s/ Sandra Gabaldón	Agency/Office/Telephone/Fax NMED/SWQB/505-827-1041/505-827-0160	Date March 9, 2012
Signature of Management QA Reviewer RICHARD E. POWELL /s/ Richard E. Powell	Agency/Office/Phone and Fax Numbers NMED/SWQB/505-827-2798/505-827-0160	Date March 9, 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. See calculation check 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 YES).
 DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE 6-inch Parshall Flume
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. Y N NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. Y N NA
4. CALIBRATION FREQUENCY ADEQUATE. Y N NA
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES. Y N NA
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. Y N NA
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. Y N NA
6. HEAD MEASURED AT PROPER LOCATION. Y N NA
7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES. Y N NA

SECTION F - LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED YES).
 DETAILS:

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

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED Y N 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 ___ % OF THE TIME. Y N NA

6. SPIKED SAMPLES ARE ANALYZED. ___ % OF THE TIME. Y N NA

7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME Wilkins Environmental

LAB ADDRESS 832 NW 67 Street, Oklahoma City, OK 73116 4301 Masthead, NE, Albuquerque, NM 87109

PARAMETERS PERFORMED Biomonitoring BOD, TSS, E. coli

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	NO	NO	NO	NO	Clear	

RECEIVING WATER OBSERVATIONS

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: N/AI (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

**Compliance Evaluation Inspection
New Mexico Water Service Company
Rio Communities Wastewater Treatment Facility
NPDES permit No. NM0027782
February 21, 2012**

INTRODUCTION

A Compliance Evaluation Inspection (CEI) was conducted at the Rio Communities Wastewater Treatment Plant (WWTP) on February 21, 2012 by Sandra Gabaldón of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). This facility is a private domestic wastewater treatment facility classified under the federal Clean Water Act (CWA), Section 402 National Pollutant Discharge Elimination System (NPDES) permit program, and is assigned NPDES permit number NM0027782. The facility design flow is 0.3 million gallons per day (MGD).

The Rio Communities discharges into the Rio Grande Basin in Segment 20.6.4.105 (NMAC State of New Mexico Standards for Interstate and Intrastate Surface Waters). Designated uses include: Irrigation, marginal warmwater aquatic life, livestock watering, public water supply, wildlife habitat and primary contact.

The inspector arrived at Rio Communities at 1010 hours and conducted an entrance interview with Mr. Bobby Towle, Supervisor. The inspector made introductions, presented her credentials and discussed the purpose of the inspection with Towle. An exit meeting was held with Mr. Towle at the New Mexico Water Service Company office at approximately 1134 hours to 1210 hours. Ms. Gabaldón explained to Mr. Towle the preliminary findings of the inspection and requested records for review.

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

The Rio Communities WWTP serves a population of approximately 2000. Currently, the treatment plant design flow is 0.3 MGD. Wastewater influent enters the facility via three lift stations. It proceeds through a barscreen and enters a grit chamber. Debris from the headworks is collected into an on-site dumpster and disposed of at the landfill.

Wastewater then enters a wet well with two screw pumps and two submersible pumps. Next, the wastewater enters the aeration basin where it then proceeds to the clarifier. The effluent is disinfected prior to discharge by ultraviolet lights.

SLUDGE MANAGEMENT

Waste activated sludge (WAS) is sent to the sludge holding basin on a daily basis and then it is sent to centrifuge for removal of decant. The sludge is then placed into a dumpster and is later transported to the landfill for final disposal. The decant from the sludge is sent back to the headworks for further treatment.

Compliance Evaluation Inspection
Rio Communities
NPDES Permit No. NM0027782
February 21, 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 E – Flow Measurement – Overall Rating of “Marginal”

Permit Requirements for Flow Measurement:

The Permit in Part III, Section C.6 states:

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy of reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from the true discharge rates throughout the range of expected discharge volumes.

Findings for Flow Measurement:

The permittee provided the inspector with an annual calibration report; however, there were no records that the permittee periodically did calibration checks between the secondary and the primary device to insure that the measured flow was not more than 10% deviated from the true discharge. This is necessary to provide data for pollutant mass loading calculations and provide operating and performance data on the wastewater treatment plant. **This is a repeat finding.**

Section F – Laboratory – Overall Rating “Marginal”

Permit Requirements for Laboratory:

The Permit in Part III, Section C.5.c states:

- 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:

Duplicate sampling is being performed at this facility for E. coli. Other parameters are not being duplicated at this time. The purpose of laboratory control procedures is to ensure high quality analyses. At least 10% of samples should be duplicated as part of their quality assurance/quality control program.

DISCHARGE MONITORING CALCULATION CHECK

AUGUST 2011

E. Coli

Sample Dates:	08/03/2011	08/10/2011	08/17/2011	08/31/2011	Data reported on DMR
E. coli (#100ml)	517.2	<1.0	<1.0	Not Provided	
Daily Max	517.2*				5.2*
30-day Average: Log of colonies per 100 mL Add all logs and divide by number of samples. Geometric Mean is antilog.	$\text{Log}(517.2) + \text{log}(1.0) + \text{log}(1.0) = 2.71$ $2.71 + 0 + 0 = 2.71 / 3 = 0.90$ Antilog 0.90 = 7.94				2.3*

*Please see note below

BOD

Sample Date:	Daily Flow (MGD)	BOD (mg/l)	Calculated Daily Load
08/03/2011	0.207700	2.4	$(0.207700)(8.34)(2.4) = 4.16$
08/17/2011	0.199440	ND (2.0)	$(0.199440)(8.34)(2.0) = 3.33$
08/31/2011	0.190650	ND (2.0)	$(0.190650)(8.34)(2.0) = 3.18$
Calculated Monthly Average (Loading):	$4.16 + 3.33 + 3.18 = 10.67 / 3 = 3.56^{**}$		
Calculated Monthly Average (Conc.):	$2.4 + 2.0 + 2.0 = 2.13 \text{ mg/L} \checkmark$		
Reported on DMR	3.55 lbs/d 30-D Avg.; 4.16 lbs/d 7-D Avg. \checkmark 2.13 mg/L 30-D Avg.; 2.40 mg/L 7-D Avg. \checkmark		

**Because this is such a slight discrepancy, it may be related to rounding of numbers.

\checkmark Matches calculations made by inspector as well as what was reported on DMR.

TSS

Sample Date:	Daily Flow (MGD)	TSS (mg/l)	Calculated Daily Load
08/03/2011	0.207700	ND (10.0)	$(0.207700)(8.34)(10.0) = 17.32$
08/17/2011	0.199440	ND (4.0)	$(0.199440)(8.34)(4.0) = 6.65$
08/31/2011	0.190650	Not provided	Unknown
Calculated Monthly Average (Loading):	$17.32 + 6.65 = 23.97 / 2 = 11.99 \text{ lbs/d}^*$		
Calculated Monthly Average (Conc.)	$10.0 + 4.0 = 14.0 / 2 = 7.0 \text{ mg/L}^*$		
Reported on DMR	10.11 lbs/d 30-D avg.*; 17.32 lbs/d 7-D avg. \checkmark 6.0 mg/L 30-D avg.*; 10.0 mg/L 7-D avg. \checkmark		

*Results for August 31, 2011 for E. coli and TSS were not provided by the permittee. However, the chain of custody indicates that these were submitted by the Permittee to the laboratory for analysis. Unfortunately, the permittee failed to provide copies of these two parameters. Because of this oversight, calculations will not be accurate to what was reported on the DMR for the month of August 2011.

\checkmark Matches calculations made by inspector as well as what was reported on DMR.