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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

Certificated Mail – Return Receipt Requested

August 13, 2012

Craig and Virginia Simmens
Rio de Arenas, LLC
5251 W. Conestoga Street
Beverly Hills, Fl 34465

Re: Minor Non Municipal; SIC 6515; NPDES Compliance Evaluation Inspection; Rio de Arenas Mobile Home Manor; Waste Water Treatment Plant; NM0027375, Arenas Valley, New Mexico; July 25, 2012

Dear Mr. and Ms. Simmens:

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing, both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Diana McDonald
US Environmental Protection Agency
Allied Bank Tower
Region VI Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Program Manager
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

I appreciate your and your operator's cooperation during the inspection. If you have any questions about this inspection report, please contact me at (505) 827-2575.

Sincerely,

/s/Daniel Valenta

Daniel Valenta
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail
Carol Peters, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Larry Giglio, USEPA (6WQ-PP) by e-mail
Hannah Branning, USEPA (6EN-WC) by e-mail
NMED District III 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 2 7 3 7 5 11 12	1 2 0 7 2 5 17	18 C	19 S 20	2
Remarks					
I N D U S T R I A L D O M E S T I C W W T P					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 2	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)	Entry Time /Date 1605/07-25-2012	Permit Effective Date October 1, 2009
Rio De Arenas Mobile Home Manor, Arenas Valley, NM 88022. From Silver City, Take US Hwy 180 approximately 6 miles to Rio De Arenas Road at gas station, travel past warehouse and through mobile home park to rock wall with locked gate. Grant County	Exit Time/Date 1825/07-25-2012	Permit Expiration Date September 30, 2014
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data	
Manny Orosco / Certified Level IV Wastewater Operator / 575-388-4981	Outfall 001	
Name, Address of Responsible Official/Title/Phone and Fax Number	Latitude N. 32.77325° Longitude W. -108.19304°	
Craig Simmens, Rio de Arenas, LLC, 5251 W. Conestoga Street, Beverly Hills, Fl 34465/ 352-601-6608	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>	SIC 6515

Section C: Areas Evaluated During Inspection (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

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

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

- Rio De Arenas, LLC is a domestic limited liability company organized February 27, 2006 in New Mexico. Craig and Virginia Simmens are the owners of the Rio de Arenas Mobile Home Manor.**
- See attached checklist report with further explanations and photo log.**

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Daniel Valenta /s/Daniel Valenta	NMED/SWQB/505-827-2575	8/13/2012
Signature of Management QA Reviewer	Agency/Office/Phone and Fax Numbers	Date
Richard E. Powell /s/Richard Powell	NMED/SWQB/505-827-2798	8/13/2012

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 Yes)

- 1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs. **See further explanations for TRC & pH.** 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
See futher explanation for flow, pH, and TRC
- 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. **Portable generator would have to be brought in.** S M U NA
- 4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. S M U NA
Power could be shut off at the site, no lock on controls or alarm system to prevent this.
- 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. **Spare blower motor.** 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:

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

No documentation to review for TRC & pH.

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: **In line meter failed.**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE **GPI TM Series Electronic in line meter was being installed**

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. Y N NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. Y N NA
No secondary measurement device.

4. CALIBRATION FREQUENCY ADEQUATE. Y N NA
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES. Y N NA
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. Y N NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. Y N NA

6. HEAD MEASURED AT PROPER LOCATION. Y N NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES. Y N NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED Yes)
 DETAILS: **pH and TRC conducted on site. Contract laboratories not inspected.**

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES) **pH and TRC not documented** 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
pH and TRC measurements not documented
4. QUALITY CONTROL PROCEDURES ADEQUATE. **No written procedures** S M U NA
5. DUPLICATE SAMPLES ARE ANALYZED. 0 % OF THE TIME. Y N NA
6. SPIKED SAMPLES ARE ANALYZED. % OF THE TIME. Y N NA
7. COMMERCIAL LABORATORY USED. **Lab for WET monitoring (once per permit term) had not been arranged.** Y N NA

LAB NAME **Silver City WWTP Lab**
 LAB ADDRESS **1660 Filaree Road, Silver City, NM 88062**
 PARAMETERS PERFORMED **BOD5, 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	Clear	No	No	No	

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. **Receipts kept for liquid waste hauler** 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

**Rio de Arenas Mobile Home Park
Compliance Evaluation Inspection
WWTP – NM0027375
July 25, 2012**

Further Explanations

Introduction

On July 25, 2012, Daniel Valenta of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Rio de Arenas Mobile Home Manor, Waste Water Treatment Plant (WWTP), Arenas Valley, Grant County, New Mexico. This facility has a design flow of 0.04 million gallons per day (MGD) and 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 NM0027375 which authorizes discharge of treated wastewater to an unclassified series of dry arroyos named Whiskey Creek, thence to Rio de Arenas, thence to San Vicente Arroyo, and unclassified tributary of the Mimbres River in the Closed Basin.

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 on-site representatives, observations made by the NMED inspector, records, and reports kept or brought to the site by the Permittee and/or kept by NMED.

The Inspector arrived at the Rio de Arenas Mobile Home Manor at approximately 1605 hours, shortly afterward Manny Orosco, Facility Operator arrived. Upon Mr. Orosco's arrival, the inspector presented credentials, made introductions, explained the purpose of the investigation and started the tour of the treatment works. The inspector conducted an exit interview on-site to discuss preliminary findings with Mr. Orosco and contacted Mrs. Virginia Simmens by phone at a later date to review the inspection finding. The inspector left the facility at approximately 1825 hours on July 25, 2012.

Treatment Scheme and Solids Management

A restaurant in front of the Rio de Arenas Mobile Home Park has been closed and torn down. In the past the restaurant was a source of grease entering the facility, this has now been removed. Effluent entering the WWTP is only coming from the trailer park. Rio de Arenas Mobile Home Manor WWTP is an activated sludge package plant system with chlorine disinfection. Influent enters the plant via gravity flow into a beehive shaped brick structure, flows through a downward sloped concrete structure with a bar screen, then into an aerated equalization tank to accommodate fluctuating flows. From the equalization tank, wastewater enters an aeration basin, then clarifier basins for settling. A sludge digester unit located between the aeration basin and the equalization tank receives waste activated sludge (WAS) from the clarifiers. Return activated sludge (RAS) flows back from the clarifiers to the equalization basin where it mixes with influent before going to the aeration basin. After the clarifiers, flow enters an open basin or trough, then a chlorine contact chamber with serpentine baffle design. Calcium hypochlorite tablets are manually placed into the open trough below the clarifiers' effluent weir. An outlet pipe at the bottom of the chlorine contact chamber allows effluent to exit the package plant. Effluent is then piped to Outfall 001. Before reaching the outfall the effluent flow is metered and then flows into a sodium sulfite de-chlorination tablet unit. Effluent is discharged into a short (approximately 60 foot long) unnamed tributary then to Whiskey Creek and Rio de Arenas. Whiskey Creek is shown on topographic maps to join Rio de Arenas above the WWTP outfall. Biosolids are removed from the plant by a septic tank cleaning service (Humphrey's Enterprises Inc, Silver City, New Mexico).

**Rio de Arenas Mobile Home Park
Compliance Evaluation Inspection
WWTP – NM0027375
July 25, 2012**

Section B - Recordkeeping and Reporting Evaluation – Overall Rating of “U = Unsatisfactory”

Section D - Self-Monitoring – Overall Rating of “U = Unsatisfactory”

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

Permit Requirements for Recordkeeping and Reporting; Self-Monitoring, and Laboratory

Part III.B.1 (Standard Conditions, Need to Halt or Reduce Not a Defense) of the permit states:

The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes...”

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

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...”

Part III.C.4 (Standard Conditions, Record Contents) of the permit states:

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;*
- b. The individual(s) who performed the sampling or measurements;*
- c. The date(s) and time(s) analyses were performed;*
- d. The individual(s) who performed the analyses;*
- e. The analytical techniques or methods used; and*
- f. The results of such analyses.*

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

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities. c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

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Part III.D.4 (Standard Conditions, Discharge Monitoring Reports and Other Reports) of the permit states:

Monitoring results must be reported on Discharge Monitoring Report (DMR) Form EPA No. 3320-1 in accordance with the “General Instructions” provided on the form.

NPDES PERMIT No. NM0027375

Page 1 of PART I

PART I – REQUIREMENTS FOR NPDES PERMITS

SECTION A. LIMITATIONS AND MONITORING REQUIREMENTS

1. FINAL Effluent Limits – 0.04 MGD Design Flow

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge treated municipal wastewater to dry arroyos named Whiskey Creek, thence to Rio De Arenas, thence to San Vicente Arroyo an unclassified ephemeral tributary of the Mimbres River in the Closed Basin, from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		Standard Units			
POLLUTANT	STORET CODE	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	00400	6.6	8.8	1/Month (*1)	Grab

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
		lbs/day, unless noted			mg/l, unless noted				
POLLUTANT	STORET CODE	30-DAY AVG	DAILY MAX	7-DAY AVG	30-DAY AVG	DAILY MAX	7-DAY AVG	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	50050	Report MGD	Report MGD	Report MGD	***	***	***	5/Week	Instantaneous
Biochemical Oxygen Demand, 5-day	00310	10	N/A	15	30	N/A	45	1/Month	Grab
Total Suspended Solids	00530	10	N/A	15	30	N/A	45	1/Month	Grab
E. Coli Bacteria	51040	N/A	N/A	N/A	126 (*1)	410 (*1)	N/A	1/Month	Grab
Total Residual Chlorine	50060	N/A	N/A	N/A	N/A	11 ug/l	N/A	1/Week	Instantaneous Grab (*2)

Finding

- The level of sludge in the clarifier is used to determine or regulate clarifier operations (when to waste and/or recycle activated sludge). On-site representatives indicated that the “sed” percentages recorded on daily logs were from sediment measurement checks of the clarifier. Clarifier sludge blanket depth measurements (in feet) were not recorded on daily logs to confirm the sediment percentage calculations. Normally used to determine the level of sludge is with the use of a sludge judge. The Operator said they used to have one but it was stolen. A sludge judge is a basic piece of equipment needed to properly operate a WWTP.

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- Per the New Mexico Wastewater Systems Operator Certification Study Manual, it is recommended that a minimum dissolved oxygen level of 1.0 mg/l be maintained for extended aeration activated sludge processes such as this. Oxygen measurements taken at the facility by the operator indicated the oxygen levels were below the 1.0 minimum. The aeration units are on 24/7 at the present time. The operator discussed plans to spread the aeration units more uniformly in the tank to increase the oxygen levels.
- The facility has large areas that have rusted through the paint with metal flaking off, (see photo 2). The plant is showing its age, manufactured in 1974, with most piping converted to PVC pipe. Any preventative aid in stopping or slowing down the rusting of the containment/treatment sections will extend the life of the facility.
- The facility has no standby power or alarm system. Because this is a small facility and staff is not present onsite for long periods of time, it is important to have some sort of an alarm system for notification of power failures or other problems at the plant. The aeration pump on/off switch is located in an unlocked shelter, (see photo 3). If someone was to turn the switch off with the low oxygen levels and no alarm system the plant could lose its biological organisms. The facility is responsible for any non-compliance, even if it is caused by outside influences.
- The clarifier has developed a substantial short circuiting around the weir teeth on one bank. One side of weir plate appears even with smooth flow. The other side has a gap between the teeth and the support beam. The weir teeth on this side also appear to be higher than the level of the water (see photo 4). Short circuiting will result in reduced retention time thus reducing the treatment capacity of the unit.
- TRC and pH monitoring records (benchesheet logs) have not been kept. There is no record of pH calibrations and measurements. There is no record of TRC measurements, units reported or other required information. Record should include location(s) of sampling; name of individual performing sampling; analytical methods and techniques; and name of person(s) performing analyses. Records should include time of sampling and time of analyses to confirm holding time requirements in 40 CFR 136.3 were met. **This is a repeat finding of the May 2010 inspection.**
- The permit requires testing for TRC once a week. During the inspection a sample was tested for TRC, the sample tested 0.05mg/l. This measurement converts to 50 ug/l. This sample exceeded the permit MQL of 33 ug/l. The chlorine meter reads samples in mg/l the reporting requirement is in ug/l. It does not appear the conversion from mg/l to ug/l was completed before reporting the information on DMR's. **This is a repeat finding of the May 2010 inspection.**

$$1 \text{ milligram} = 1,000 \text{ microgram}$$
$$\text{Reading from Meter (mg/l)} \times 1000 = \text{Permit Required Measurement (ug/l)}$$

- Since June 2010 the facility has been incorrectly reporting 7-Day Averages as the 30-Day Average. **This is a repeat finding of the May 2010 inspection.**

**Rio de Arenas Mobile Home Park
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Section E - Flow Measurement – Overall Rating of “U = Unsatisfactory”

Part III, Section C. of the permit states:

“Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and 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 is 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 true discharge rates throughout the range of expected discharge volumes.”

Finding

The facility has encountered repeat failures of the flow meter. Without accurate flow measurements mass loading calculations, required by the permit, cannot be completed.

BOD (mg/l) x MGD (Day of Sampling) x 8.34 = loading (lbs/day)

TSS (mg/l) x MGD (Day of Sampling) x 8.34 = Load (lbs/day)

A new in-line GPI TM Series Electronic meter has been purchased and was awaiting installation. The treatment facility had at one time a v-weir at the discharge point at the treatment facility for taking flow measurements. This was removed and is no longer functional. If failures occur with the new meter a secondary measurement device or method should be available.

**NMED/SWQB
Official Photograph Log**

Photo # 1

Photographer: Daniel Valenta	Date: 7/25/2012	Time: 1611 hours
City/County: Arenas Valley/Grant County		
Location: Rio De Arenas Mobile Home Park, Hwy 180 E, Arenas Valley, Silver City, NM 88061, facing north east.		
Subject: Waste Water Treatment Plant at the Rio De Arenas Mobile Home Park		



**NMED/SWQB
Official Photograph Log**

Photo # 2

Photographer: Daniel Valenta	Date: 7/25/2012	Time: 1622 hours
City/County: Arenas Valley/Grant County		
Location: Rio De Arenas Mobile Home Park, Hwy 180 E, Arenas Valley, Silver City, NM 88061, facing north.		
Subject: Facility has rusted through the paint in many areas, metal is flaking off.		



**NMED/SWQB
Official Photograph Log**

Photo # 3

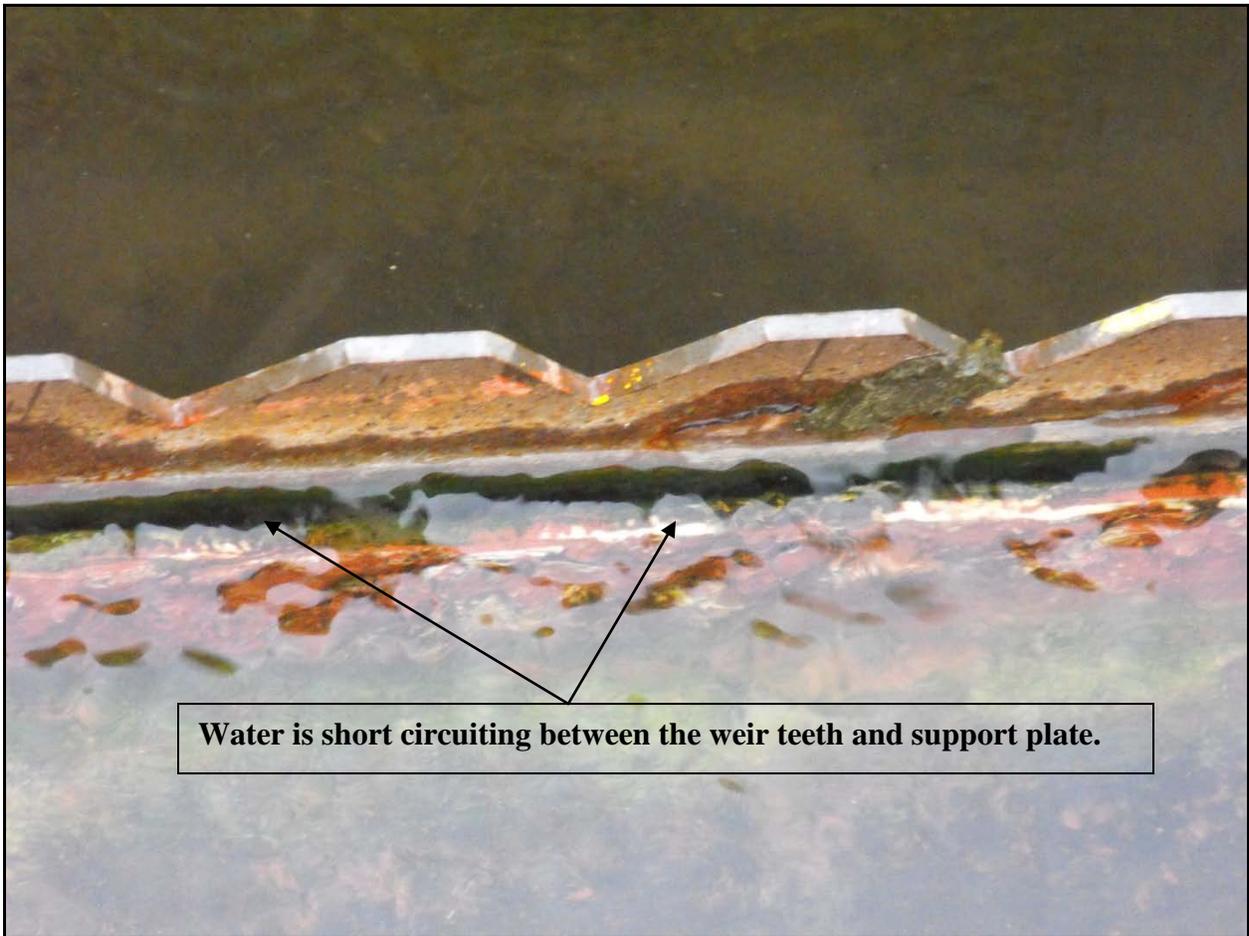
Photographer: Daniel Valenta	Date: 7/25/2012	Time: 1633 hours
City/County: Arenas Valley/Grant County		
Location: Rio De Arenas Mobile Home Park, Hwy 180 E, Arenas Valley, Silver City, NM 88061, facing east.		
Subject: Open pump shelter, on/off switch for the plant.		



**NMED/SWQB
Official Photograph Log**

Photo # 4

Photographer: Daniel Valenta	Date: 7/25/2012	Time: 1637 hours
City/County: Arenas Valley/Grant County		
Location: Rio De Arenas Mobile Home Park, Hwy 180 E, Arenas Valley, Silver City, NM 88061, facing west.		
Subject: Toothed weir plate on the clarifier.		



**NMED/SWQB
Official Photograph Log**

Photo # 4

Photographer: Daniel Valenta	Date: 7/25/2012	Time: 1652 hours
City/County: Arenas Valley/Grant County		
Location: Rio De Arenas Mobile Home Park, Hwy 180 E, Arenas Valley, Silver City, NM 88061, facing south.		
Subject: Discharge point for the facility.		



7/1/08	0.0437	3.00	3.00	7.30	7.30	0.0291	2.0000	2.0000	0.0154	0.0198	<.099	<1	<1	n/s				
6/1/08	0.3469	3.00	3.00	6.01	6.01	0.1156	1.00	1.00	0.0142	0.0184	0.0990	1	1	n/s				
5/1/08	0.3501	3.00	3.00	6.60	6.60	0.1167	1.00	1.00	0.3986	0.0143	0.0990	TNTC	TNTC	n/s				
4/1/08	1.1005	9.00	9.00	7.20	7.20	0.1223	1.00	1.00	0.0129	0.0147	0.0990	7	7	n/s				
3/1/08	0.9107	7.00	7.00	7.40	7.40	0.1301	1.00	1.00	0.0149	0.0175	0.099	3	3	ns				
2/1/08	1.9880	16.00	16.00	6.80	6.80	1.0560	8.50	8.50	0.0152	0.0211	0.099	9	9	ns				
1/1/08	0.2176	3.00	3.00	7.00	7.00	0.1451	2.00	2.00	0.0129	0.0155	0.099	63	63	ns				
12/1/07	0.0653	7.00	7.00	7.20	7.20	0.0234	2.50	2.50	0.0870	0.0112	0.099	1	1	ns				
11/1/07	0.0204	2.00	2.00	8.50	8.50	0.0407	4.00	4.00	0.0999	0.0147	0.099	1	1	ns				
10/1/07	0.0307	4.00	4.00	8.10	8.10	0.0384	5.00	5.00	0.0106	0.0225	0.099	67	67	ns				
9/1/07	0.4403	4.00	4.00	8.00	8.00	0.2202	2.00	2.00	0.0115	0.0266	0.099	bad sample	d sample	missing				
8/1/07	missing	2.00	2.00	7.60	7.60	missing	2.00	2.00	missing	missing	0.099	1	1	missing				
7/1/07	missing	11.00	11.00	7.40	7.40	missing	4.00	4.00	missing	missing	0.099	missing	missing	missing				
6/1/07	0.0997	4.00	4.00	7.20	7.20	0.0748	3.00	3.00	0.0178	0.0299	0.099	missing	missing	missing				
5/1/07	0.0590	4.00	4.00	6.40	6.40	0.0442	3.00	3.00	0.0152	0.0217	0.099	72.8	72.8	missing				
4/1/07	0.3002	2.00	2.00	6.80	6.80	0.5254	3.50	3.50	0.0119	0.0201	0.099	1	1	missing				
3/1/07	3.0000	3.00	6.40	6.40	6.40	missing	2.00	2.00	missing	missing	0.099	missing	missing	missing				
2/1/07	missing	13.00	13.00	6.80	6.80	missing	2.50	2.50	missing	missing	0.099	missing	missing	ns				
1/1/07	0.0634	4.00	4.00	7.20	7.20	0.0871	5.50	5.50	0.0164	0.0195	0.099	6	6	missing				
12/1/06	missing	5.00	5.00	7.10	7.10	missing	3.00	3.00	missing	missing	0.099	30	30	n/s				
11/1/06	missing	5.00	5.00	7.20	7.20	missing	17.50	17.50	missing	missing	0.099	missing	missing	missing				
10/1/06	missing	5.00	5.00	6.40	6.40	missing	2.50	2.50	missing	missing	0.099	151	151	missing				
9/1/06	0.0542	5.00	5.00	7.20	7.20	0.0217	2.00	2.00	0.0137	0.0140	missing	missing	missing	missing				
8/1/06	0.0500	4.00	4.00	6.30	6.30	0.0250	2.00	2.00	0.0139	0.0150	0.099	1	1	missing				
7/1/06	0.0400	5.00	4.00	6.80	6.80	0.0200	2.00	2.00	0.0118	0.0133	0.099	missing	missing	missing				
6/1/06	0.0400	4.00	4.00	7.40	7.40	0.0300	3.00	3.00	0.0107	0.0160	0.099	1	1	missing				
5/1/06	0.0350	4.00	4.00	6.90	6.90	0.0233	2.00	2.00	0.0114	0.0200	0.099	missing	missing	missing				
4/1/06	0.0450	3.00	3.00	6.80	6.80	1.0500	7.00	7.00	0.0148	0.0200	0.099	80	80	missing				