



NEW MEXICO  
ENVIRONMENT DEPARTMENT

*Surface Water Quality Bureau*

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DAVE MARTIN  
Secretary

BUTCH TONGATE  
Deputy Secretary

TOM SKIBITSKI  
Acting Director  
Resource Protection Division

**Certified Mail - Return Receipt Requested**

March 21, 2012

Ms. Sue Padilla, County Manager  
Dona Ana County  
845 North Motel Blvd  
Las Cruces, New Mexico

Re: **Major Municipal; SIC 4952; NPDES Compliance Evaluation Inspection; Dona Ana County  
South Central Treatment Plant; NM0030490; February 28, 2013**

Dear Ms. Padilla,

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. The main problems were found in the area Record Keeping & Reporting, Self-Monitoring Program, Operations & Maintenance, Laboratory, and Flow Measurement. 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, Region VI  
Enforcement Branch (6EN-WM)  
Allied Bank Tower  
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

If you have any questions about this inspection report, please contact me at (505) 827-2575 or [daniel.valenta@state.nm.us](mailto:daniel.valenta@state.nm.us).

Sincerely,

Daniel Valenta  
Environmental Scientist/Specialist  
Surface Water Quality Bureau

Cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail  
Samuel Tate, 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  
Jan Walker, USEPA (6EN) 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 3 0 4 9 0 11 12 1 2 0 2 2 8 17 18 C 19 S 20 2					
Remarks					
M A J O R W W T P					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 3	71 N	72 N	73	74 75 80

#### Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number)  <b>South Central Regional Wastewater Treatment Facility (WWTF). From I-25, travel west on NM 227 (Vado Exit), turn south on NM 478, turn west on NM 189 (Esslinger Road), turn south on Montes Road, turn east on E. Sloan Road and travel approximately 0.5 miles. Doña Ana County</b>  <b>Doña Ana County</b>	Entry Time /Date <b>09850/February 28, 2012</b>	Permit Effective Date <b>July 1, 2008</b>
	Exit Time/Date <b>1255/February 28, 2012</b>	Permit Expiration Date <b>June 30, 2013</b>
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)  <b>Mireya Carnero /Operations Manager/ 575-525-6194, cell 621-5084 fax 525-6199</b> <b>Jesus "Chuy" Reyes/Laboratory Technician/ 505-525-6194, cell 505-528-9820, fax 505-525-6199</b>	Other Facility Data  <b>LAT 32.09031 N</b> <b>LONG -106.65994 W</b> <b>SIC 4952</b>	
Name, Address of Responsible Official/Title/Phone and Fax Number  <b>Ms. Sue Padilla, County of Doña Ana, 845 North Motel Boulevard, Las Cruces, New Mexico 88007 / County Manager and Utilities Director / 575-647-7142 and fax 525-6199</b>	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	U	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	N	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	S	Laboratory	N	Storm Water	N	Other:

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

1. SEE REPORT AND FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s) <b>DANIEL VALENTA</b>	Agency/Office/Telephone/Fax <b>NMED/SWQB 505-827-2575/fax 505-827-0160</b>	Date
Signature of Management QA Reviewer <b>BRUCE YURDIN</b>	Agency/Office/Phone and Fax Numbers <b>NMED/SWQB 505-827-827-2795</b>	Date

**SECTION A - PERMIT VERIFICATION**

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS  S  M  U  NA (FURTHER EXPLANATION ATTACHED No.)  
DETAILS:

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.  S  M  U  NA (FURTHER EXPLANATION ATTACHED Yes)  
DETAILS:

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.  Y  N  NA
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.  S  M  U  N
- 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. **Missing time of analyses, unable to verify holding times for pH.**  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.  S  M  U  NA (FURTHER EXPLANATION ATTACHED Yes)  
DETAILS:

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. **On-site diesel generator**  S  M  U  N
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. **Two level fours**  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: **Flow is intermittent**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.  Y  N  NA  
 TYPE OF DEVICE **18-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. (DATE OF LAST CALIBRATION \_\_\_\_\_) **Ultrasonic level transducer has not been zeroed.**  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) **Only two buffers used, repeat finding.**  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.    % OF THE TIME.  Y  N  NA

7. COMMERCIAL LABORATORY USED.  Y  N  NA

LAB NAME Water Technology Associates **Bio-Aquatic Testing, Inc. (972-242-7750)**

LAB ADDRESS 4200 S. Research Dr., Genesis B, Las Cruces, NM 88003 **2501-Aquatic Testing, Inc. (972-242-7750)**

PARAMETERS PERFORMED Sludge **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
001A	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: **Processed sludge is hauled to the Corralitos Landfill.**

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY.  S  M  U  NA

2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503.  S  M  U  NA

3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: \_\_\_\_\_ (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

**SECTION I - SAMPLING INSPECTION PROCEDURES** (FURTHER EXPLANATION ATTACHED No.)

1. SAMPLES OBTAINED THIS INSPECTION.  Y  N  NA

2. TYPE OF SAMPLE OBTAINED  
 GRAB \_\_\_\_\_ COMPOSITE SAMPLE \_\_\_\_\_ METHOD \_\_\_\_\_ FREQUENCY \_\_\_\_\_

3. SAMPLES PRESERVED.  Y  N  NA

4. FLOW PROPORTIONED SAMPLES OBTAINED.  Y  N  NA

5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.  Y  N  NA

6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.  Y  N  NA

7. SAMPLE SPLIT WITH PERMITTEE.  Y  N  NA

8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.  Y  N  NA

9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.  Y  N  NA

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**South Central Regional Wastewater Treatment Facility**  
**Compliance Evaluation Inspection**  
**NPDES Permit No. NM0030490**  
**February 28, 2013**

**Further Explanations**

**Introduction**

On February 28, 2013 Daniel Valenta of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the South Central Regional Wastewater Treatment Facility (WWTF) in Doña Ana County, New Mexico. The facility has a design flow capacity of 1.05 million gallons per day (MGD) and is classified as a major municipal 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 NM0030490, which regulates discharge of treated municipal wastewater from outfall 001 to the Rio Grande in Segment 20.6.4.101 *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC)*.

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 inspectors, and records and reports kept by the Permittee and/or NMED.

The inspector arrived at the facility at approximately 0850 hours on February 28, 2013. The inspector made introductions, explained the purpose of the inspection, presented credentials and toured the facility with Mr. Jesus "Chuy" Reyes, Lab Technician. Ms. Mireya Carnero, Facility Supervisor, arrived shortly afterward. An exit interview to discuss preliminary findings was conducted with Ms. Carnero and Mr. Reyes on site. The inspector left the facility at approximately 1255 hours on the day of the inspection.

**Treatment Scheme**

Raw domestic sewage, collected from 28 lift stations and 16-inch force main, enters the plant's lift station and is then pumped to the entrance head works. According to the on-site permittee representative, influent flows are not measured. An on-site diesel generator is exercised once a week for approximately 30 minutes according to the on-site permittee representative.

At the entrance works, raw sewage flows through a 5 horsepower JWC Environmental shredder and then through a JWC Auger Monster. Rags are separated and dropped down a chute and into a container. A manual bar screen is available as a by-pass during maintenance. Influent then flows through a US Filter Link-Belt C&9 Grit Collector. Flow is then routed through a grit chamber and then passes to an equalization basin. There are two SBR reactors at the facility. Only one SBR basin is operated at a time for wastewater treatment. Floating solids and scum are collected manually. The reactor basins are designed to operate in a diffused aeration, clarification, and clear liquid decant sequence. After a programmed time interval, the aeration is stopped to allow for settling of the microorganisms from the treated wastewater. The solids settle to the bottom of the reactor and are either retained with in the reactor (RAS) or wasted (WAS) to a sludge holding tank (aerobic digester unit). There is an aerobic digester unit adjacent to the north of SBR #1 (north).

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The north SBR basin is presently being used to treat septage being trucked to the facility by contract septage haulers. After treatment in this unit the septage is sent to the digester in preparation to be mixed with the digested activated sludge and sent on to the belt filter press. Six, four-hour cycles are run per day in the aeration unit used to treat wastewater. The facility operators attempt to collect floating solids and scum manually. The decant water flows to the UV disinfection unit. The unit has two independent banks of UV bulbs which are on at the same time. Effluent flow is measured by an 18" Parshall flume and a Milltronics ultrasonic level transducer.

Sludge is wasted six times per day. Waste activated sludge is pumped to the aerobic digester for dewatering and thickening. The thickened sludge is pumped to a 2 meter belt filter press. Flow from the plant wash down and decant from the belt press are returned to the plant lift station and recirculated. A polymer is added to the sludge to enhance processing. Processed sludge is currently being hauled to the Corralitos Landfill.

The EPA is encouraging permittees to transition from submitting DMRs as paper copies to the NetDMR system. Mr. Kurt Moffatt is the person who fills out the DMRs. NetDMR is considered too burdensome to the permittee, so they prefer to continue submitting paper records.

Information on the NetDMR training information can be found at:

<http://epa.gov/netdmr/about/training.html>

Additionally, the State conducts classes on a periodic basis, through the Operator Certification Schools. Facility personnel are encouraged to attend these training sessions.

### **Further Explanations**

#### **Section B – Recordkeeping and Reporting: “Satisfactory”**

#### **Section F – Laboratory: “Satisfactory”**

Part III.C.2 (Representative Sampling) of the permit states:

*Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.*

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

*Records of monitoring information shall include:*

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- 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.*
- 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.*

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.*

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

*If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.*

## **pH**

Sampling and analyses bench sheets did not include the time of analyses. It was not documented that pH monitoring holding times conform to 40 CFR 136.3 (samples analyzed within 15 minutes of collection). SM 20<sup>th</sup> Edition 4500-H+ requires the use of three buffer solutions, but only 2 buffers were used in instrument calibration checks.

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Quality control/quality assurance duplicate analyses for pH was not documented in the reviewed records. Ten percent of the samples should be duplicated. This is a repeat finding from the **August 2010 inspection**.

**Section F – Flow Measurement: “Unsatisfactory”**

Part III, Section C.6 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.*

**Flow Measurement**

Flow measurements recorded on the facility's effluent flow totalizer logs may not meet permit requirements. It is not documented that the facility's flow measurement calibration checks (comparing the staff gage measurement with the depth and flow rate recorded at the meter) is sufficient. Performance checks of the facility's flume secondary instrumentation is conducted and documented once per quarter. Accuracy of flume-based measuring system depends upon a combination of accuracies of the flume and secondary instrumentation.

On the day of the inspection the flume secondary instrument did not read zero when no water was discharging (see photo 1-3). When water is running through the flume the meter appears to read correctly however the meter did not read zero when there is zero flow. Fans are used on site to cool the UV meters, when this air flow is across the flume meter a false positive is recorded. When the fans were turned off the meter reading began to drop. It is unknown if this false positive exceeded the 10% accuracy rule. It is suggested the fans should be redirected or a barrier installed to correct the problem.

**Loading Calculations for TSS and BOD5**

As previously discussed, flow measurement did not appear to meet permit requirements. Therefore there may be there insufficient record keeping to correctly calculate or verify loading for TSS and BOD5. It appears totalized flow measurements were logged prior to sample collection on the reviewed records. Always be sure to use the flow measurement determined on the day or representative of the day when samples are collected.

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**Section G – Effluent/Receiving Water Observation: “Satisfactory”**

**Permit Requirements** for Effluent Limitations and Monitoring Requirements

The permit requires, in Part I, Section A, Effluent Limitations and Monitoring Requirements

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>		
	<i>30 day Ave</i>	<i>7 day Ave</i>	<i>Daily Max</i>
<i>Biochemical Oxygen Demand (5-day)</i>	30	45	
<i>Total Suspended Solids</i>	30	45	
<i>E-coli (org/100ml)</i>	126		410

**Findings** for Effluent Limitations and Monitoring Requirements

As part of this inspection, the DMRs for this facility were reviewed for 6/1/2011 to 11/1/2012 (see the attached chart). There were no excursions of the NPDES permitted parameters during this period of review however there appears to be a missing DMR for 12/1/2011 it is unknown if the EPA received this DMR. The discharge was observed going into the Rio Grande. At this point the river was not flowing and the discharge is onto the sand. There were no solids, waste, or staining of the sand.

**Section A – Permit Requirements – Overall Rating of “Satisfactory”**

**Section C - Operations and Maintenance – Overall Rating of “Satisfactory”**

Part III.B.2 (Standard Conditions, Duty to Mitigate) of the permit states:

*The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.*

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

*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.*

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*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** for Operation and Maintenance

The operator indicated during the inspection that this facility would be taking on additional flow when other surrounding communities are added to the collection system. This flow could substantially increase the volume of wastewater entering the treatment plant from the community or I/I issues may increase. At present only one aeration basin is used to treat the influent and other is used to treat the septage waste hauled in to the facility. This may greatly change the balance of the WWTP process. The facility may have to change this procedure if the one aeration basin cannot treat the increased influent.

Notice of any significant increase in influent flow is required to be submitted to both EPA and NMED to determine if changes to the existing NPDES permit need to be made.

NMED/SWQB

**Official Photograph Log**

Photo # 1

Photographer: Daniel Valenta	Date: 2/28/2013	Time: 1009 hours
City/County: Three miles south east of La Mesa /Dona Ana		
Location: Dona Ana County WWTP, UV treatment room, New Mexico 32.09031, -106.65994		
Subject: Effluent flows through the UV chamber and around to the flume, fans keep the UV system cool however the draft interferes with the flow meter.		



NMED/SWQB

**Official Photograph Log**

Photo # 2

Photographer: Daniel Valenta	Date: 2/28/2013	Time: 1014 hours
City/County: Three miles south east of La Mesa /Dona Ana		
Location: Dona Ana County WWTP, UV treatment room, New Mexico 32.09031, -106.65994		
Subject: Ultrasonic level transducer meter records flow when no discharge present		



NMED/SWQB

**Official Photograph Log**

Photo # 3

Photographer: Daniel Valenta	Date: 2/28/2013	Time: 1012 hours
City/County: Three miles south east of La Mesa /Dona Ana		
Location: Dona Ana County WWTP, UV treatment room, New Mexico 32.09031, -106.65994		
Subject: Ultrasonic level transducer meter records flow when no discharge present		



## NM0030490

Date	BOD	BOD	BOD	BOD	pH	pH	TSS	TSS	TSS	TSS	Q	Q	Q	TRC	E Coil	E Coil
	lbs/day	lbs/day	mg/l	mg/l			lbs/day	lbs/day	mg/l	mg/l	mgd	mgd	mgd	ug/l	cfu/100ml	cju/100ml
	30 Day Ave	7 Day Ave	30 Day Ave	7 Day Ave	Min	Max	30 Daily Ave	7 Day Ave	30 Day Ave	7 Daily Ave	30 Daily Ave	7 Day Ave	Max	Inst Max	30 Day Ave	Daily Max
	263.00	294.00	30.00	45.00	6.60	9.00	263	394.0	30.0	45.00				19	126	410
11/1/12	16.20	20.30	6.54	7.98	7.29	7.42	19.12	30.5	7.7	12.00	0.30	0.31	0.34	n/a	2.55	42.00
10/1/12	18.26	26.65	7.42	10.41	7.35	7.61	19.19	52.5	7.8	20.50	0.30	0.31	0.36	n/a	1.00	1.00
9/1/12	16.49	28.73	6.42	10.97	7.37	7.49	10.63	16.4	4.1	6.25	0.31	0.31	0.35	n/a	1.41	2.00
8/1/12	13.50	20.02	5.06	7.50	7.20	7.45	17.91	35.6	6.7	13.33	0.32	0.32	0.37	n/a	1.00	1.00
7/1/12	13.57	17.22	5.07	5.75	7.41	7.68	18.50	35.6	6.9	11.90	0.32	0.36	0.54	n/a	1.00	1.00
6/1/12	11.25	14.47	4.54	5.67	7.37	7.45	21.20	36.0	8.6	14.10	0.30	0.31	0.34	n/a	3.01	82.00
							<b>WET</b>	Test								
5/1/12	8.75	12.53	3.45	4.91	7.40	7.71	15.67	23.8	6.2	9.33	0.30	0.31	0.37	n/a	1.55	9.00
4/1/12	11.40	13.77	4.54	5.31	7.39	7.80	10.42	12.2	4.2	4.70	0.30	0.31	0.36	n/a	4.28	14.00
3/1/12	29.79	42.38	11.71	16.34	7.41	7.82	14.58	23.1	5.7	8.89	0.31	0.31	0.35	n/a	3.31	12.00
2/1/12	17.33	23.02	6.77	8.60	7.53	7.75	18.51	28.2	7.2	10.53	0.31	0.32	0.35	n/a	6.72	191.00
1/1/12	19.83	42.43	7.50	15.37	7.44	7.73	13.83	35.2	5.2	12.75	0.32	0.33	0.38	n/a	2.83	16.00
12/1/11							<b>MISSING</b>									
11/1/11	8.71	13.42	3.38	4.98	7.54	7.74	15.10	32.4	5.9	12.03	0.31	0.32	0.35	n/a	2.40	10.00
10/1/11	15.34	24.87	6.11	9.65	7.46	7.59	26.99	44.8	10.8	17.39	0.30	0.31	0.34	n/a	5.36	14.00
9/1/11	15.09	22.88	5.80	8.29	7.46	7.68	15.12	19.7	5.8	7.14	0.31	0.33	0.37	0	1.00	1.00
8/1/11	8.65	11.24	3.04	3.85	7.61	7.71	8.90	12.4	3.1	4.26	0.34	0.35	0.40	0	1.64	6.00
7/1/11	11.45	24.19	4.21	8.36	7.58	7.74	15.00	24.8	5.5	8.57	0.33	0.35	0.38	0	1.19	2.00
6/1/11	13.15	17.51	4.88	6.50	7.61	7.75	19.42	22.8	7.2	8.47	0.32	0.32	0.36	0	1.82	20.00