



NEW MEXICO
ENVIRONMENT DEPARTMENT



Surface Water Quality Bureau

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Resource Protection Division

Certified Mail - Return Receipt Requested

August 19, 2013

Mr. Jose Terrones
Project Manager
Anthony Water and Sanitation District
P.O. Box 1751
Anthony, NM 88021

RE: Minor-Municipal; SIC 4952; NPDES Compliance Evaluation Inspection; Anthony Water and Sanitation District Waste Water Treatment Plant; NM0029629; July 18, 2013

Dear Mr. Terrones:

Enclosed, please find a copy of the report 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 Clean Water Act.

Problems noted (if any) during this inspection are discussed in the Further Explanations section of this inspection report. You are encouraged to review the inspection report, and 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 USEPA (Diana McDonald, USEPA (6EN-WC), 1445 Ross Ave., Dallas, TX 75202) and NMED (at the above address) regarding modifications and compliance schedules. Thank you for the cooperation and assistance of Mr. Ryan Lunderville during this inspection. If you have any questions about this inspection report, please contact me at 505-827-0212 or barbara.cooney@state.nm.us

Sincerely,

/S/ Barbara Cooney

Barbara Cooney
Environmental Scientist-Specialist
Surface Water Quality Bureau

Cc: Rashida Bowlin, USEPA (6EN-AS) by email
Diana McDonald, USEPA (6EN-WM) by email
Hannah Branning, USEPA (6EN-AS) by email
Darlene Whitten-Hill, USEPA (6EN-AS) by email
Carol Peters-Wagnon, USEPA (6EN-WM) by email
Brent Larsen, USEPA (6EN-PP) by email
Michael Kesler, NMED Dist. 3 Mgr, by email



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 9 6 2 9 11 12 1 3 0 7 1 8 17 18 C 19 S 20 1					
Remarks					
M I N O R M U N I C I P A L A N T H O N Y W W T P					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 1 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) ANTHONY WATER & SANITATION DISTRICT, WASTEWATER TREATMENT FACILITY, 1470 NORTH 4TH, ANTHONY, NEW MEXICO 88021. From Las Cruces take I-10 towards Texas Boarder, Take EXIT 162, NM404 (East O'Hara Road) → Turn Right - road curves around - travel approx. 1/3 to 1/2 mile to stop light at NM460, Turn Left (South) → 4 th street is a small service road that parallels NM460. It is easiest to make a U-Turn at the intersection of East O'Hara Road and NM460 then take a quick right onto 4 th Street. - The WWTP is aprox. 1/2 Block down on the Left. The golf course is just past the WWTP. DONA ANA COUNTY	Entry Time /Date 1230 Hours / July 18, 2013	Permit Effective Date January 1, 2013
	Exit Time/Date 1635 Hours / July 18, 2013	Permit Expiration Date December 31, 2017
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Ryan Lunderville , Head Operator 575-882-3922 Charles Trujillo, Chief Water Operations 575-882- 3923	Other Facility Data SIC 4952 GPS location at the outfall to the Rio Grande Latitude: North 32° 01' 23" Longitude: West 106° 38' 54"	
Name, Address of Responsible Official/Title/Phone and Fax Number Jose Terrones, Project Manager 575-882-3922 Anthony Water and Sanitation District P.O. Box 1751 Anthony, NM 88021	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	S	Flow Measurement	U	Operations & Maintenance	N	CSO/SSO
M	Records/Reports	S	Self-Monitoring Program	U	Sludge Handling/Disposal	N	Pollution Prevention
U	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
U	Effluent/Receiving Waters	U	Laboratory	N	Storm Water	N	Other:

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

PLEASE SEE THE ATTACHED REPORT WITH FURTHER EXPLANATIONS

Name(s) and Signature(s) of Inspector(s) /S/ BARBARA COONEY	Agency/Office/Telephone/Fax NMED/SWQB	Date 19 August 2013
Signature of Management QA Reviewer /S/ BRUCE YURDIN	Agency/Office/Phone and Fax Numbers NMED/SWQB	Date August 20, 2013

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 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. 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. 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 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

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

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 2012) 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 NA3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. S M U NA4. QUALITY CONTROL PROCEDURES ADEQUATE. S M U NA5. DUPLICATE SAMPLES ARE ANALYZED. 10 % OF THE TIME. Y N NA6. SPIKED SAMPLES ARE ANALYZED. 10 % OF THE TIME. Y N NA7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME Water Technology Associates (Doug Roby)

Bio Aquatics

3501 Mesilla Hills Dr.

Carrollton, TX

LAB ADDRESS Las Cruces, NM 88005

PARAMETERS PERFORMED BOD, TSS, E coli

Whole Effluent Toxicity

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
	No	No	Slight	No	Yes	Yes	

RECEIVING WATER OBSERVATIONS See The Further Explanations Section of This Report

SECTION H - SLUDGE DISPOSALSLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED Yes.)
DETAILS:1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. S M U NA2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. S M U NA3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: Surface Disposal at landfill (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)**SECTION I - SAMPLING INSPECTION PROCEDURES** (FURTHER EXPLANATION ATTACHED No.)1. SAMPLES OBTAINED THIS INSPECTION. Y N NA

2. TYPE OF SAMPLE OBTAINED

GRAB _____ COMPOSITE SAMPLE ___ METHOD _____ FREQUENCY _____

3. SAMPLES PRESERVED. Y N NA4. FLOW PROPORTIONED SAMPLES OBTAINED. Y N NA5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. Y N NA6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE. Y N NA7. SAMPLE SPLIT WITH PERMITTEE. Y N NA8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. Y N NA9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. Y N NA

Introduction

On July 18, 2013 a Compliance Evaluation Inspection (CEI) was conducted at the Anthony Water and Sanitation District Wastewater Treatment Plant (WWTP) by Barbara Cooney of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). The inspection was conducted by NMED for the US Environmental Protection Agency (USEPA), Region VI, under the National Pollutant Discharge Elimination System (NPDES) permit program, in accordance with the Federal Clean Water Act. These inspections are conducted under contract with the USEPA and are used by USEPA to evaluate compliance with the NPDES permit program. This inspection report is based on information supplied by the Anthony Water and Sanitation District representatives (the permittee), observations made by the NMED inspectors, reports and records kept by the permittee and/or NMED.

The Anthony Water and Sanitation District WWTP is classified as a minor municipal discharger under the Federal Clean Water Act (CWA), section 402 NPDES permit program, and is assigned NPDES permit number NM0029629. The Standard Industrial Classification Code (SIC) is 4952. The facility is permitted for a design flow of 0.99 Million Gallons per Day (MGD). The discharge for the WWTP enters The Rio Grande in Water Quality Segment 20.6.4.101 NMAC. The Designated Uses for this segment of the river are: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat, and primary contact.

Inspection Details

The inspector arrived at the Anthony Water and Sanitation District WWTP at 1230 hours and met with Mr. Charles Trujillo and Mr. Ryan Lunderville. The inspector showed her credentials and explained the purpose of the inspection. Mr. Trujillo had other commitments at the time and was not available to join the inspection. Mr. Lunderville accompanied the inspector on a tour of the facility. A records review and laboratory inspection was conducted following the plant tour. Additional records were requested by the inspector and provided by the facility representatives, for further review by the inspector. An exit interview was conducted following the inspection with Mr. Lunderville. Preliminary findings were discussed during the exit interview. The inspector left the facility at 1635 hours.

Treatment Scheme

The Anthony WWTP has a hydraulic capacity of 0.99 MGD. The average daily flow entering this facility is approximately 0.650 MGD. Operations at this facility began January 28, 1996.

Flow from the City of Anthony enters the WWTP from twelve lift stations. Approximately 2000 sewer hookups from residences, businesses, schools and municipal government offices are within a 3 square mile service area. An instantaneous flow measuring device is located on the influent pipe as it enters the treatment works. This unit provides both instantaneous flow and a totalizer which is read daily at 0800 hours. A pager 7-day graph read out is located on a wall in the control building. These records are kept on site. The headworks consists of a manually cleaned bar screen. Screenings are placed in a container for shipment to a sanitary landfill after drying.

Flow from the headworks enters the first of four aeration basins. The aeration basins run in series. In between each aeration basin is an anoxic basin for nitrogen removal. Flow passes through all seven

basins during the treatment phase. All the basins including aeration and anoxic basins have been testing at <1.0 mg/L of dissolved oxygen (DO). The DO levels that should be maintained in the aeration basins are above 0.2 to 1.5 mg/L. The operator did not know what the Mixed Liquor Suspended Solids (MLSS) levels were. They should be maintained between 2800 and 3500 mg/l. DO in the anoxic basins should be near 0 mg/l. A mixer in the anoxic basins keeps the solids suspended and the contents moving, but provides no oxygenation. Air for the aeration basins is provided through in-line diffusers on the bottom of the aeration basins. Blowers provide the air for the aeration system. There are two blowers on site which are alternated, to allow one to rest and to reduce wear.

Flow from aeration basin number 4 enters the circular, centrally located secondary clarifier via an 18 inch influent line. Solids are allowed to settle in this unit and returned to the aeration basins through a return activated sludge (RAS) line. When MLSS levels get relatively high, sludge should be wasted to an aerobic digester. The clarifier is skirted to prevent floating material from exiting the unit. The weirs on this unit were not even and short circuiting did appear to be taking place. Solids were observed floating on the surface of the clarifier. A sweep arm scum removal system is employed to pick the foam off the surface and deposit it into a scum box. The scum box contents are drained into the digester. Scrappers are used on the bottom of this unit to move sludge to the center of the clarifier. A sludge blanket of approximately eight to ten feet is maintained in this unit. The sludge blanket should be maintained at two to three feet. Effluent from the clarifier flows by gravity in the weir gallery to a 16-inch clarifier effluent line. The contents of this unit were very clear and the operators indicated they were having problems with algal growth both in the clarifier and the weir gallery.

Flow from the secondary clarifier travels by gravity to the disinfection unit. Disinfection at this facility is accomplished through two banks of ultra violet (UV) lamps located in the effluent channel. An opacity meter at this unit determines when the lamps need to be cleaned.

After the disinfection unit effluent flow measurement takes place. An in-channel 12-inch Parshall flume is used to measure effluent flow with a secondary sonic sensor device for continuous readout of the flow in gpm and a totalizer. Flow then leaves the WWTP by gravity and enters the Rio Grande through an approximately two mile long discharge pipe.

Solids

Waste activated sludge (WAS) is pumped from the secondary clarifier to an aerobic digestion unit. The contents are aerated and mixed prior to going to the belt filter press. Dried sludge is then removed and transferred to a sanitary landfill in Sunland Park for final disposal. Sludge drying beds on site are used as a backup drying system.

Further Explanations

Note: The sections are arranged according to the format of USEPA Form 3560-3 and checklist, attached, rather than being ranked in order of importance.

Permit

Overall Rating For Permit Verification (Satisfactory)

Record Keeping and Reporting

Overall Rating For Record Keeping and Reporting (Marginal)

Permit Requirements For Record Keeping and Reporting

The permit requires, in III. C. Monitoring and Records

1. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by the law to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;*
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;*
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and*
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.*

Findings For Recordkeeping and Reporting

Records were reviewed for the month of March 2013. Concerns found during the records review are noted below under the sections for Self-Monitoring and Laboratory.

1. Daily logs kept at this facility are very general and need to be updated. The logs were not being filled out consistently.
2. O& M Manuals from the original plant design are in place but need to be updated.
3. Flow readings are not taken and recorded for composite samples.

The EPA is encouraging permittees to transition from submitting DMRs as paper copies to the NetDMR system. Information on the NetDMR training 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.

Operations And Maintenance

Overall Rating For Operation and Maintenance (Unsatisfactory)

Permit Requirements For Operation And Maintenance

The permit requires in Part III. B.

3. Proper Operations and Maintenance

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 that which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the condition of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back up 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 For Operation and Maintenance

1. The entire system was very overloaded with solids.
2. The pump for the washdown water was broken at the time of the inspection.
3. The solids in the aeration basins were very high and appeared to be aging. The operator did not know what the Mixed Liquor Suspended Solids (MLSS) concentrations were, because he had not had time to sample due to other maintenance. According to the operator the best concentrations are between 2500 and 3200 mg/L.
4. The DO concentration in the aeration basins is too low and likely caused by an overload of solids.
5. There was excess foam in the anoxic zones and some foam accumulation in the aeration basins.
6. There are not enough certified operators and maintenance workers at this treatment plant. The daily maintenance requirements are more than can be accomplished by a single operator and one laborer. This was evident by the number of broken broken down units and overall condition at the facility. The operator stated that they are also responsible for lift stations and drinking water systems.
7. The sludge blanket in the secondary clarifier was 10 feet and should be maintained at between 2 and 3 feet. Floating solids were also found in the clarifer.
8. Some uneven flow and short circuiting was observed in the secondary clarifiers. This is likely the result of the units settling into the ground over the years. However the weirs were free of excessive algae build up.

9. The sludge belt press dropped solid onto a concrete pad. These solids should be deposited directly into a hauling container. The concrete pad was not bermed and there was evidence of solids track out and runoff from the pad.
10. The piping for the air diffusers in the aeration basins was showing signs of rusting and deterioration.
11. There were not back up parts on site for the blowers or other equipment.
12. A mixer in the digester was not working at the time of the inspection.
13. The sludge drying bed liners are old and falling apart.
14. The backup power generator was out of service at the time of the inspection.
15. The alarm system for the WWTP was not working at the time of the inspection.

Self-Monitoring

Overall Rating For Self Monitoring (Satisfactory)

Permit Requirements For Self Monitoring

The permit requires in Part III. C. Monitoring and Records.

2. Representative Sampling

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

3. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. The period may be extended by request of the Director at any time.

Findings For Self Monitoring

Records were reviewed for the month of March 2013.

Flow Measurement

Overall Rating For Flow Measurement (Satisfactory)

Permit Requirements For Flow Measurements:

The permit requires in Part III C. 6. FLOW MEASUREMENTS:

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 flow with a maximum deviation 10% from true discharge tares throughout the range of expected discharge volumes.

Findings For Flow Measurements

1. The permittee does not do self calibration checks. To conduct these checks, the staff gauge should be read at the same time another person reads the pressure gauge readout in the laboratory. This should be recorded. The flow meter is calibrated annually by a contractor.

Laboratory

Overall Rating For Laboratory (Unsatisfactory)

Permit Requirements For Laboratory

The permit requires in Part C. Monitoring and Records. 4. Records Content

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 measurement;
- c. The date(s) and time(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical technique or method used; and
- f. The results of such analyses.

The permit requires in Part C. Monitoring and Records. 5. Monitoring Procedures

- 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.

Findings For Laboratory

1. Flow readings are not taken for composite samples. Samples are not composted correctly. This is the primary reason for the Unsatisfactory rating in this section.

2. The pH meter and buffers were stored and maintained correctly.

3. Duplicate samples were not analyzed for quality control at the onsite laboratory. The contract laboratory did show duplicate samples being analyzed for TSS.

4. Bench Sheet for E.coli Bacteria for the sample date Mrch 28, 2013 does not list the analysis date. The times of sampling and the time of analysis are listed.

Effluent And Receiving Water

Overall Rating For Effluent And Receiving Water (Unsatisfactory)

Permit Requirements For Effluent And Receiving Water

The permit requires in Part I Table I

EFFLUENT CHARACTERISTICS	DISCHARGE							MONITORING REQUIREMENTS	
	lbs/day, unless noted			mg/L, unless noted (*1)					
POLLUTANT	30-DAY AVG	DAILY MAX	7-DAY AVG	30-DAY AVG	DAILY MAX	7-DAY AVG	MEASUREMENT FREQUENCY	SAMPLE TYPE	
Flow	Report MGD	Report MGD	Report MGD	N/A	N/A	N/A	Daily	Totalizing Meter	
Total Suspended Solids	245.2	N/A	367.8	30	N/A	45	Three/Month	3-Hour Composite	
Total Suspended Solids, %	≥ 85% (*2)	N/A	N/A	N/A	N/A	N/A	Once/Month	Calculation (*2)	
Biochemical Oxygen Demand	245.2	N/A	367.8	30	N/A	45	Three/Month	3-Hour Composite	
Biochemical Oxygen Demand	≥ 85% (*2)	N/A	N/A	N/A	N/A	N/A	Once/Month	Calculation (*2)	
Total Residual Chlorine	N/A	N/A	N/A	N/A	19 µg/l	N/A	Five/Week	Instantaneous Grab (*3)	
<i>E. coli</i> Bacteria	4.30 (*4)	N/A	N/A	126 (*5)	410 (*5)	N/A	Three/Month	Grab	

Findings For Effluent And Receiving Water

1. Effluent exceedences for E.coli bacteria occurred in May 2013 and October 2012. The loading values for E.coli are not being reported as required in the permit.

SLUDGE HANDLING

Overall Rating For Sludge Handling (Unsatisfactory)

Permit Requirements For Sludge Handling

The permit requires in Part IV. MINOR - SEWAGE SLUDGE REQUIREMENTS ELEMENT 2-SURFACE DISPOSAL

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE SURFACE DISPOSAL

A. General Requirements

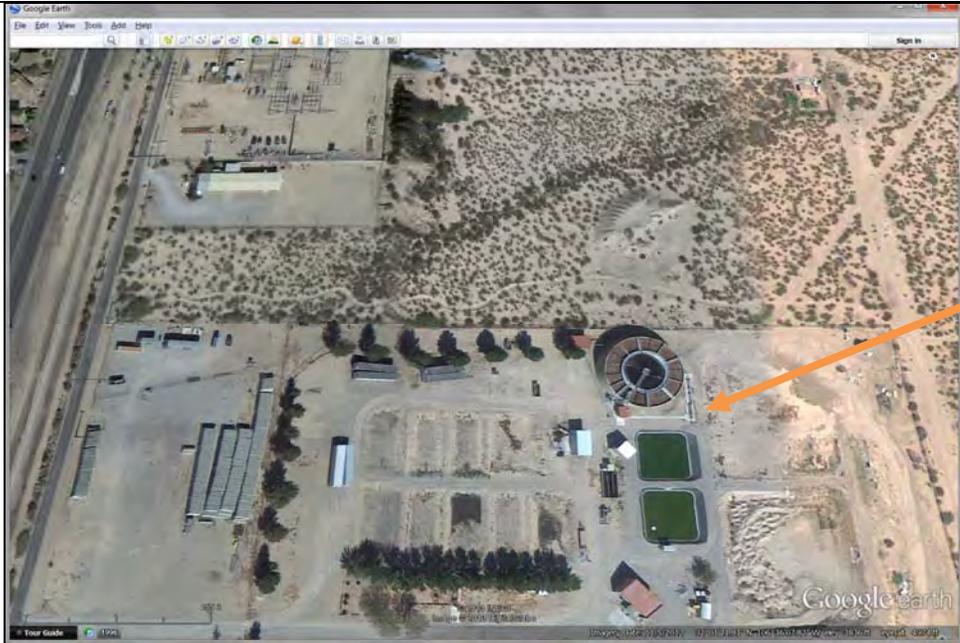
1. The permittee shall handle and dispose of sewage sludge in accordance with Section 405 of the Clean Water Act and all other applicable Federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present.

Findings For Sludge Handling

1. Testing and analysis of sewage sludge is not being sent to NMED - Surface Water Quality Bureau and therefore appears to not be done.
2. Solids are not being wasted at an adequate rate from this facility to optimize the operations of the treatment units and to maintain the quality of the effluent.
3. Solids coming off the belt press land on an unbermed concrete area. A backhoe then moves the sludge to the transport container. There is not a berm in place. Run off and track out is occurring from this area.
4. The sludge drying beds have liners that are breaking down and leaking.

**NMED/SWQB
Official Photograph Log
Photo # 1**

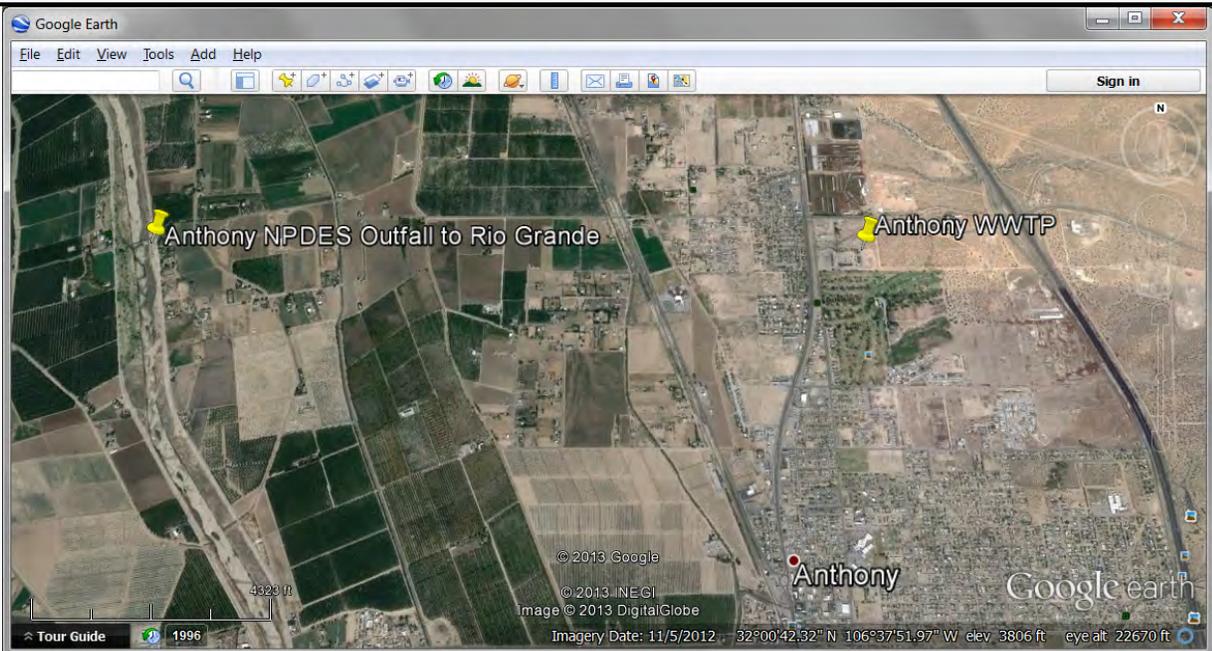
Photographer: B. Cooney	Date: 18 July 2013	Time: Unknown
City/County: Anthony / Dona Ana		State: New Mexico
Location: Anthony WWTP		
Subject: Google Earth Aerial View of Anthony WWTP		



**Sample Location:
End of UV Treatment**

**NMED/SWQB
Official Photograph Log
Photo # 2**

Photographer: : B. Cooney	Date: 18 July 2013	Time: Unkn own
City/County: Anthony / Dona Ana		State: New Mexico
Location: Anthony WWTP		
Subject: Google Earth Aerial View of Anthony WWTP and the Discharge Location at the Rio Grande River aprox. 2 miles away.		



NMED/SWQB
Official Photograph Log
Photo #3

Photographer: B. Cooney

Date: 18 July 2013

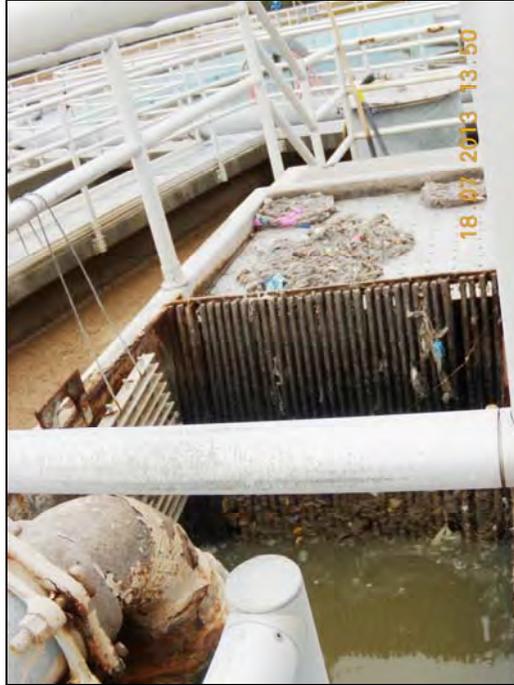
Time: 1350 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: influent bar screen. Cleaned manually by operators. The solids are placed in a dumpster and disposed of at a landfill. – No paint filter tests were being done.



NMED/SWQB
Official Photograph Log
Photo # 4

Photographer: B. Cooney

Date: 18 July 2013

Time: 1355 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Anoxic basin next to an aerated basin.



NMED/SWQB
Official Photograph Log
Photo # 5

Photographer: B. Cooney

Date: 18 July 2013

Time: 1404 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Aeration basin. The air distribution is uneven.



NMED/SWQB
Official Photograph Log
Photo # 6

Photographer: B. Cooney

Date: 18 July 2013

Time: 1405 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: anoxic basin – large amounts of foam accumulation is present.



NMED/SWQB
Official Photograph Log
Photo # 7

Photographer: B. Cooney

Date: 18 July 2013

Time: 1405 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Aeration Basin – some foam accumulation



NMED/SWQB
Official Photograph Log
Photo # 8

Photographer: B. Cooney

Date: 18 July 2013

Time: 1330 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Air Blowers - one unit was running at the time of the inspection. These units showed some signs of aging and some oil leakage.



NMED/SWQB
Official Photograph Log
Photo # 9

Photographer: B. Cooney

Date: 18 July 2013

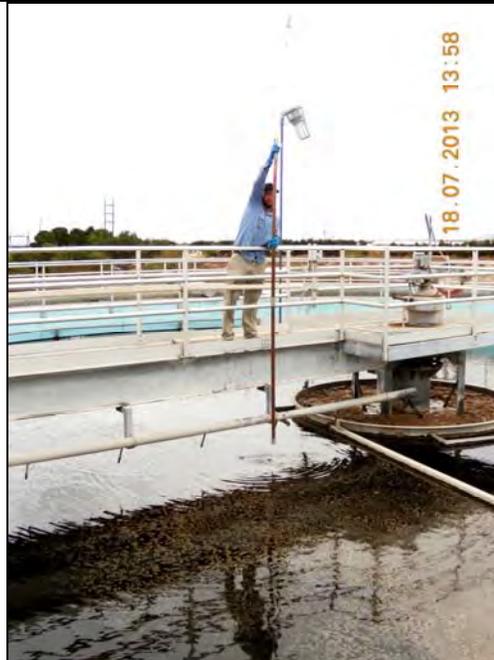
Time: 1358 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Secondary Clarifier sludge test. There was nine to ten feet of a solids blanket in the basin. Solids wasting rates need to be increased. The solids were aging and some floating solids were observed. An optimal solids blanket would be two to three feet in this basin.



NMED/SWQB
Official Photograph Log
Photo # 10

Photographer: B. Cooney

Date: 18 July 2013

Time: 1359 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Secondary Clarifier – large amounts of floating solids in the basin.



NMED/SWQB
Official Photograph Log
Photo # 11

Photographer: B. Cooney

Date: 18 July 2013

Time: 1403 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Secondary Clarifier Weirs- uneven flow and short circuiting was observed. Also noted were floating solids getting past the weirs. The weirs were largely clear of accumulated algae growth.



NMED/SWQB
Official Photograph Log
Photo # 12

Photographer: B. Cooney

Date: 18 July 2013

Time: 1336 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Effluent Channel and UV disinfection treatment units. The channel is covered with tarps to reduce the sunlight in the chamber that causes algae accumulation and growth.



NMED/SWQB
Official Photograph Log
Photo # 13

Photographer: B. Cooney

Date: 18 July 2013

Time: 1342 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Ultra Violet (UV) disinfection units. The bulbs appeared to be free of algae accumulation.



NMED/SWQB
Official Photograph Log
Photo # 14

Photographer: B. Cooney

Date: 18 July 2013

Time: 1338 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Effluent staff gauge and pressure sensor for flow measurement at the Parshall Flume.



NMED/SWQB
Official Photograph Log
Photo # 15

Photographer: B. Cooney

Date: 18 July 2013

Time: 1336 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Effluent past the UV disinfection. The color of the effluent was slightly greenish. Some turbidity and some floating solids were noted. – Additional screens could be located before the UV chamber to catch large floating solids that make it past the other treatment works.



NMED/SWQB
Official Photograph Log
Photo # 16

Photographer: B. Cooney

Date: 18 July 2013

Time: 1417 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Holding ponds for treated effluent before it is sent to reuse.



NMED/SWQB
Official Photograph Log
Photo # 17

Photographer: B. Cooney

Date: 18 July 2013

Time: 1422 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Old chlorine contact chamber no longer in use because of UV disinfection. These basins hold the effluent water that backs up in the pipes when the river water level is higher than the effluent pipes.



NMED/SWQB
Official Photograph Log
Photo # 18

Photographer: B. Cooney

Date: 18 July 2013

Time: 1422 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Old chlorine contact chamber no longer in use because of UV disinfection. These basins hold the effluent water that backs up in the pipes when the river water level is higher than the effluent pipes.



NMED/SWQB
Official Photograph Log
Photo # 19

Photographer: B. Cooney

Date: 18 July 2013

Time: 1333 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Sludge Belt Press – and concrete pad where it is dropped. – Bins should be placed under the belt press to capture the processed solids.



NMED/SWQB
Official Photograph Log
Photo # 20

Photographer: B. Cooney

Date: 18 July 2013

Time: 1311 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Sludge Belt Press down from operation at the time of the inspection.



NMED/SWQB
Official Photograph Log
Photo # 21

Photographer: B. Cooney

Date: 18 July 2013

Time: 1314 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Sludge belt press deposits solids onto a concrete pad. The solids are eventually scooped up with a backhoe and deposited in transport bins (see one in background of photo). The concrete pad has no berm. Run off and track out is visible.



NMED/SWQB
Official Photograph Log
Photo # 22

Photographer: B. Cooney

Date: 18 July 2013

Time: 1317 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Sludge Drying Bed – one of six. These beds are used as a backup. The plastic lining of the beds is deteriorated and likely very permeable.



NMED/SWQB
Official Photograph Log
Photo # 23

Photographer: B. Cooney

Date: 18 July 2013

Time: 1442 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Discharge Location at the Rio Grande is approx. 2 miles from the WWTP.



NMED/SWQB
Official Photograph Log
Photo # 24

Photographer: B. Cooney

Date: 18 July 2013

Time: 1444 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: Effluent pipe to the Rio Grande- The effluent mixing with the River. The Rio Grande is the typical turbid sandy color found during rain storms. The effluent water is greenish and less turbid than the river.



NMED/SWQB
Official Photograph Log
Photo # 25

Photographer: B. Cooney

Date: 18 July 2013

Time: 1539 hours

City/County: Anthony / Dona Ana

State: New Mexico

Location: Anthony WWTP

Subject: pH Buffers – labeled and dated.

