



NEW MEXICO
ENVIRONMENT DEPARTMENT



Surface Water Quality Bureau

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DAVE MARTIN
Secretary

RAJ SOLOMON, P.E.
Deputy Secretary

Certified Mail - Return Receipt Requested

May 11, 2011

Dr. Jorge A. Garcia, Utilities Director
City of Las Cruces
P.O. Box 20000
Las Cruces, New Mexico 88004

Re: Major-Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, City of Las Cruces, East Mesa Water Reclamation Facility, NM0030872, Doña Ana County, New Mexico, July 7, 2010

Dear Dr. Garcia:

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.

I wish to thank you for the cooperation of the East Mesa Water Reclamation Facility WWTP representatives including, Mr. Raymond Parsons, Mr. Jose Hernandez, Mr. Doug Paczinski, and Mr. Louise Guerra during this inspection.

If you have any questions about this inspection report, please contact me at (505) 827-0212.

Sincerely,

/S/ Barbara Cooney

Barbara Cooney
Surface Water Quality Bureau

cc: Marcia Gail Adams, USEPA (6EN-AS) by e-mail
Samuel Tate, USEPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Larry Giglio, USEPA (6WQ-PP) by e-mail
NMED District III Manager 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 8 7 2 11 12 1 1 0 4 0 6 17 18 C 19 S 20 1					
Remarks					
M A J O R M U N I C I P A L L C E A S T M E S A					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 1 69	70 4	71 N 72 N 73	74 75	M A J 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) City of Las Cruces, East Mesa Water Reclamation Facility, 5150 E. Lohman Ave, Las Cruces. From I-25, take Exit 3 (E. Lohman Ave approx 1.9 mi), continue on dirt road to locked gate. Doña Ana County	Entry Time /Date April 6, 2011 / 09:25	Permit Effective Date November 1, 2007
	Exit Time/Date April 6, 2011 / 15:52	Permit Expiration Date October 31, 2012
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Raymond Parsons - Plant Operator Level II Jose Hernandez - Operations Supervisor 575-528-3601 Doug Paczynski - Interim Facility Manager 575-528-3594 Eric R. Lopez - Water Resource Administrator 575-642-7013 Louise Guerra - Laboratory Manager 575-528-3609	Other Facility Data Outfall 001 Latitude N 32.33022 Longitude W 106.71729 SIC 4952	
Name, Address of Responsible Official/Title/Phone and Fax Number Dr. Jorge A. Garcia / City of Las Cruces, 680 Motel Blvd, Las Cruces, NM 88005 / Utilities Director / 575-528-3502 and 528-3511	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	S	Operations & Maintenance	N	CSO/SSO
M	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)

SEE: ATTACHED FURTHER EXPLANATIONS

Name(s) and Signature(s) of Inspector(s) /S/ Barbara Cooney	Agency/Office/Telephone/Fax NMED/SWQB/505-827-0212	Date May 11, 2011
Signature of Management QA Reviewer /S/ Richard E. Powell	Agency/Office/Phone and Fax Numbers NMED/SWQB/505-827-2798	Date May 18, 2011

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS DETAILS: S M U NA (FURTHER EXPLANATION ATTACHED Yes)

- 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 **Records for January & February 2011 reviewed.** S M U NA (FURTHER EXPLANATION ATTACHED Yes)

- 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 pH only one time recorded-unknown if it is sampling or analysis time Y N NA
- b) NAME OF INDIVIDUAL PERFORMING SAMPLING Y N NA
- c) ANALYTICAL METHODS AND TECHNIQUES. Wrong Standard Method Edition Listed- or missing Y N NA
- d) RESULTS OF ANALYSES AND CALIBRATIONS. Y N NA
- e) DATES AND TIMES OF ANALYSES. Y N NA
- f) NAME OF PERSON(S) PERFORMING ANALYSES. Y N NA
- 3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE. S M U NA
- 4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR. S M U NA
- 5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA. Y N NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. DETAILS: S M U NA (FURTHER EXPLANATION ATTACHED Yes)

- 1. TREATMENT UNITS PROPERLY OPERATED. S M U NA
- 2. TREATMENT UNITS PROPERLY MAINTAINED. S M U NA
- 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED. S M U NA
- 4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. S M U NA
- 5. ALL NEEDED TREATMENT UNITS IN SERVICE S M U NA
- 6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. S M U NA
- 7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. S M U NA
- 8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. Y N NA
- STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. Y N NA
- PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. Y N NA

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? Y N NA
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? Y N NA
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS? Y N NA
10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? Y N NA
 IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT? Y N NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED No.)
 DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT. Y N NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES. Y N NA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT. Y N NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT. Y N NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT. Y N NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE Y N NA
- a) SAMPLES REFRIGERATED DURING COMPOSITING. Y N NA
- b) PROPER PRESERVATION TECHNIQUES USED. Y N NA
- c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3. Y N NA
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT? Y N NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED No.)
 DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE Y N NA
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. RECORDS MAINTAINED OF CALIBRATION PROCEDURES. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. Y N NA
 Y N NA
 Y N NA
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. -in line flow meter 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: **Staff from Jacob A. Hands WWTP laboratory travel to the East Mesa Facility to collect samples for effluent monitoring. Commercial laboratories and Jabob A. Hands WWTP Laboratory not inspected.**

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

City of Las Cruces - East Mesa Water Reclamation Facility

PERMIT NO. **NM0030872**

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED Y N NA
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. S M U NA
4. QUALITY CONTROL PROCEDURES ADEQUATE. S M U NA
5. DUPLICATE SAMPLES ARE ANALYZED 10 % OF THE TIME. Y N NA
6. SPIKED SAMPLES ARE ANALYZED. 10 % OF THE TIME. Y N NA
7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME **Jabob A. Hands WWTP Lab** **Continental Analytical Services, Inc.** **Environ International Corporation**
 LAB ADDRESS **2851 W. Amador, Las Cruces** **POB 3737 Salina, KS 67402** **201 Summit View Drive, STE. 300, Brentwood, TN 37027**
 PARAMETERS PERFORMED **pH (on-site), E.coli, TSS, BOD5** **Once Per Permit Term** **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
001	None	None	None	None	None	No	No

RECEIVING WATER OBSERVATIONS: No Discharge to surface waters at the time of the inspection. Effluent sent to the reuse holding tank was observed.

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED No).

DETAILS: **East Mesa Water Reclamation Facility sludge transported off-site to Jacob A. Hands WWTP.**

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: **Compost – Public** (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

**Compliance Evaluation Inspection
City of Las Cruces, East Mesa Water Reclamation Facility
NPDES Permit Number NM0030872
April 6, 2011**

Introduction

On April 6, 2011 a Compliance Evaluation Inspection (CEI) was conducted at the City of Las Cruces, East Mesa Water Reclamation Facility in Doña Ana County, New Mexico by Barbara Cooney and Steven Baumgarn of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB).

This inspection was conducted by NMED for the US Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the federal Clean Water Act. 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 supplied by East Mesa Water Reclamation Facility representatives (the permittee), observations made by the NMED Inspectors, reports and records kept by the permittee or NMED.

The facility is a wastewater treatment plant (WWTP) with a design flow of 1.0 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. This facility is assigned the permit number NM0030872, which regulates discharge of treated sanitary wastewater from Outfall 001 to the Southfork of the Las Cruces Arroyo, thence to the Alameda Arroyo, thence to the Las Cruces Lateral, thence 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)*) of the Rio Grande Basin.

Inspection Details

The inspectors arrived at the WWTP at 09:25 on April 6, 2011, introduced themselves to Mr. Raymond Parsons, Plant Operator, presented credentials and explained the purpose of the inspection. Mr. Jose Hernandez, Plant Supervisor and Mr. Dough Paczinski, Interim Facility Manager joined the inspection. Following the site inspection, a records review was conducted at the City of Las Cruces Jacob A. Hands WWTP. Following the records review, an exit interview to discuss preliminary findings was conducted with Mr. Joshua Rosenblatt, Environmental Service Analyst, Mr. Eric Lopez, Water Resource Administrator, Mr. Jose Hernandez, Mr. Doug Paczinski and Mr. Louise Guerra, Laboratory Manager. The inspectors left the WWTP at 15:52 hours.

Treatment Scheme

The East Mesa Water Reclamation Facility is newly constructed and was completed in December of 2009. The plant is the Aero-Mod Design for activated sludge treatment, including the SEQUOX biological nutrient removal process for wastewater. Transport of raw sewage through the collection system is by both gravity and via a forced main. One lift station is located near Lana Street. Currently the influent volume is between 0.225 MGD and 0.300 MGD, roughly ¼ the capacity of the plant design. The service area is primarily the residential Sonoma Ranch area. Waste is also accepted from the Mountain View Regional Medical Center Hospital/Extended Care and a separate dialysis center. The plant size of 1.0 MGD was built in anticipation of future development in the service area. Previously wastewater from the east mesa side of Las Cruces was treated at the City of Las Cruces Jacob A. Hands Wastewater Treatment Facility (NPDES Permit No. NM0023311). The collection system still allows wastewater to pass to the Jacob A. Hands Wastewater Treatment Facility, if needed. The City of Las Cruces has a pretreatment program approved by USEPA on January 25, 1984 that is required to include all of the publically owned treatment plants owned and operated by the City.

Compliance Evaluation Inspection
City of Las Cruces, East Mesa Water Reclamation Facility
NPDES Permit Number NM0030872
April 6, 2011

The pumps for the forced main transporting sewage to the WWTP are flow volume dependent so influent flow is periodic. Floating volume sensors for the pumps are located in the wet well of the lift station to the forced main. The raw sewage enters the treatment works through a mechanical fine screen drum with ¼ inch pass through screening. An automatic spray washes the screen with treated water. Screenings are collected in a hopper/dumpster for disposal at the land fill after passing the paint filter test. The plant has two trains (east and west). At the time of this inspection, the daily influent flow was approximately ¼ of the plant design capacity so only one treatment train was being operated, the west train. The east train is filled with treated water to protect the mechanisms from the effects of exposure to the sun and weather.

From the influent drum screen, the flow is to the primary selector basins where the wastewater can be directed to either of the two trains. Each train design is as follows: After the selector, flow is to first stage aeration basins where nitrification occurs. A “blockout” in the aerator tanks can be operated to allow wastewater to flow to the two second stage basins for aerobic (with air) and anaerobic (without air) cycles, where denitrification takes place. The Mixed Liquor Suspended Solids (MLSS) are maintained at between 1300 to 1500 mg/L Solids can be wasted from the bottom of both the first and second stage basins to the aerobic digester, by air pump. Following the second stage basin, wastewater flows through an inlet screen to a rectangular clarifier basin.

The aeration and digester basins have wall mounted aerators supplied by a total of five air compressors/blowers. Plant operators stated that two blowers were sufficient to run the west train. At the time of the inspection 2 blowers were in use. The blowers are alternated and rested on a regular cycle.

Air Pumps move the Return Activated Sludge (RAS) to a trough that allows it to gravity flow back to the head of the first aeration basin. Following the clarifier, flows are collected below the water surface and through a regulating weir and orifice to a fine mesh disc filter drum unit contained in a separate enclosed basin. The clarifiers have “skimmers” that draw off floating solids, sending them back to the head of the plant. The operators also use net skimmers to pull off excess floating grease and solids.

To clean the fine mesh filter, solids are backwashed from the disc filter drum then pumped back to the head of the treatment works. After the filter basin, effluent passes over six pipe weirs then through an enclosed channel to Ultra Violet (UV) disinfection. This stage of the process is entirely contained, allowing no exposure to sun light that could cause excessive algal growth.

A diesel generator is used for backup power and is exercised every Thursday. Plant operations are monitored by the Supervisory Control and Data Acquisition (SCADA) system. This system can also be monitored at the Jacob A. Hands Wastewater Treatment Facility which has 24 hour staff coverage. The SCADA also has a call out alarm system.

After disinfection, the flow is split to two trains either, the 2 million gallon holding tank for reuse followed by the golf course pond or to the NPDES outfall 001 at the arroyo. At the plant, there are two effluent flow meters, one for the discharge to the first side of the split to the holding tank/ golf course pond and one for the discharge to outfall 001. This is an inline meter Siemens – Ultrasonic Totalizer. Effluent that goes directly to the golf course and not into the storage tank is also measured further down the line.

The City of Las Cruces has an NMED Ground Water Discharge Permit (GWDP) for reuse of the treated effluent (reclaimed wastewater) for irrigation at city parks, other locations, construction and dust control (NMED GWQB DP-1536).

**Compliance Evaluation Inspection
City of Las Cruces, East Mesa Water Reclamation Facility
NPDES Permit Number NM0030872
April 6, 2011**

Air scrubbers using mulch and other organic materials are in place to minimize odors from the treatment works. Air is drawn off the surface of the treatment units and sent through the scrubbers. At the time of the inspection, no noxious odors were observed at the WWTP.

Sludge Handling

Solids are not processed at this site. Wasted bio-solids from the digester are transported using a 6,000 gallon truck to the Jacob A. Hands Wastewater Treatment Facility. The solids from the two WWTPs are combined for processing. This combined sludge is then sent to the City of Las Cruces West Mesa Compost facility. The compost is made available to area residents for use. The compost site was not included in this inspection.

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.

Section A - Permit Verification – Overall Rating of “Satisfactory”

Permit Requirements for Permit Verification

Part III.D.9 (Standard Conditions, Other Information) of the permit states:

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

Findings for Permit Verification

The WWTP has three discharge locations, one to surface water at outfall 001, one to a holding tank 2 million gallon holding tank – storage for reuse on the golf course, and the final discharge is to the golf course which has a holding pond.

The majority of the treated wastewater (95%) according to plant representatives goes either to the pond on the golf course, or to the storage holding tank for reuse. Only a small portion is discharged through Outfall 001 goes to surface water. The permit does not identify or note the reuse portion of the discharge from this plant.

Section B - Recordkeeping and Reporting Evaluation – Overall Rating of “Marginal”

Section D - Self-Monitoring – Overall Rating of “Satisfactory”

Section F – Laboratory – Overall Rating of “Satisfactory”

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

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.*

**Compliance Evaluation Inspection
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April 6, 2011**

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

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.

Findings for Recordkeeping and Reporting; Self-Monitoring; and Laboratory Records

Records for the Months of January and February 2011 were reviewed as part of this inspection.

The “pH Log Book” is where the Sampler and Laboratory Analyst maintains the weekly records. The cover of the log book identifies the analytical method as “pH SM 4500 H+B”. The version of Standard Methods is not indicated. This should also be noted in the pH log book if these are the samples used for DMR reporting.

It is noted however, on the bench sheets for the Total Suspended Solids and pH; the pH method is listed at the bottom of the page and Standard Methods, 20th Edition is also listed.

The log book also has a column for time. It was unclear if that was the time the sample was collected, or the time the sample was analyzed. Both Collection time and Analysis time should be recorded.

The laboratory bench sheets for E. coli bacteria, incorrectly identifies the Standard Methods Edition being used as the 18th Edition. This should be changed to the 20th Edition.

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

Permit Requirements for Operations and Maintenance

Part III.B.3.a (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.*”

Part III.B.6 (Standard Conditions, Removed Substances) of the permit states, “*Unless otherwise authorized, solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.*”

Findings for Operation and Maintenance

The fine screen drum filter at the head of the WWTP appears to be shredding some of the solids entering the plant, causing some fine floatable solids to travel through. This increases the amount of floating solids that have to be hand scraped/netted.

Some floating grease was observed in the final clarifier and was being skimmed off by hand and the auto skimmers. As the influent to the plant increases the City of Las Cruces may consider review it’s grease ordinances to minimize that coming into the WWTP.

During warm summer seasons, operators noted some instances of bulking solids occurring. It is important to note that if the permittee uses Chlorine as a means to knock down bulking solids, then Chlorine must be monitored and reported for the effluent.

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: B. Cooney

Date: 2011.04.06

Time: 8:22 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Influent Filter Screen – Operators noted a problem with fine screen causing shredding and allowing small floatable solids to enter the main treatment works.



NMED/SWQB
Official Photograph Log
Photo # 2

Photographer: B. Cooney

Date: 2011.04.06

Time: 08:23 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Screenings from head works into the hopper. Final disposal at the Land fill.



NMED/SWQB
Official Photograph Log
Photo # 3

Photographer: B. Cooney

Date: 2011.04.06

Time: 09:38 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Second photo of the Screenings from head works into hopper. Also note the net used to screen off floating solids from the final clarifier.



NMED/SWQB
Official Photograph Log
Photo #4

Photographer: B. Cooney

Date: 2011.04.06

Time: 08:28 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: WWTP final clarifier in foreground.



NMED/SWQB
Official Photograph Log
Photo #5

Photographer: B. Cooney

Date: 2011.04.06

Time: 08:28 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Stage one basin.



NMED/SWQB
Official Photograph Log
Photo # 6

Photographer: B. Cooney

Date: 2011.04.06

Time: 08:29 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Solids being wasted from the digester will be hauled to the Jacob Hand WWTP for processing.



NMED/SWQB
Official Photograph Log
Photo # 7

Photographer: B. Cooney

Date: 2011.04.06

Time: 09:04 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: First Basin in the second stage treatment process. Note the rich brown color indicating health bacterial growth for the activated sludge treatment process.



NMED/SWQB
Official Photograph Log
Photo # 8

Photographer: B. Cooney

Date: 2011.04.06

Time: 09:04 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Treatment works – the east train w/ treated water – not in use.



NMED/SWQB
Official Photograph Log
Photo #9

Photographer: B. Cooney

Date: 2011.04.06

Time: 08:31 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Final Clarifier with surface skimmers and note the floating solids and grease. The floating solids are in part due to the shredding effect of the influent drum filter shredding solids.



NMED/SWQB
Official Photograph Log
Photo # 10

Photographer: B. Cooney

Date: 2011.04.06

Time: 10:01 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Storage Tank in background 2 million gallon capacity, for reuse. Right side of photo is location of the covered UV disinfection unit. Tanker Truck is collecting solids to be transported to the Jacob Hand WWTP for processing.



NMED/SWQB
Official Photograph Log
Photo # 11

Photographer: B. Cooney

Date: 2011.04.06

Time: 10:05 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: East Train – Processed water is kept in the train to protect it from Sun and weather.



NMED/SWQB
Official Photograph Log
Photo # 12

Photographer: B. Cooney

Date: 2011.04.06

Time: 9:22 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Final Clarifier with surface skimmer for floating solids.



NMED/SWQB
Official Photograph Log
Photo # 13

Photographer: B. Cooney

Date: 2011.04.06

Time: 10:06 a.m.

City/County: Las Cruces / Doña Ana County

State: New Mexico

Location: Las Cruces East Mesa WWTP

Subject: Top of one of the air scrubbers.

