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Governor

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## NEW MEXICO ENVIRONMENT DEPARTMENT

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RYAN FLYNN  
Cabinet Secretary

BUTCH TONGATE  
Deputy Secretary

### **Certified Mail - Return Receipt Requested**

September 22, 2014

Mr. Byron J. Landfair, Infrastructure Director  
City of Artesia  
612 N. Roselawn St.  
P.O. Box 1310  
Artesia, NM 88211-1310

Re: Major Municipal; SIC 4952; Compliance Evaluation Inspection; Artesia Wastewater Treatment Plant;  
NPDES Permit No. NM0022268; July 23, 2014

Dear Mr. Landfair:

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.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Racquel Douglas  
US Environmental Protection Agency, Region VI  
Enforcement Branch (6EN-WM)  
1445 Ross Avenue  
Dallas, Texas 75202-2733

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

City of Artesia  
September 22, 2014  
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If you have any questions about this inspection report, please contact Barbara Cooney at (505) 827-0212 or at [barbara.cooney@state.nm.us](mailto:barbara.cooney@state.nm.us).

Sincerely,  
*/S/ Bruce J. Yurdin*

Bruce J. Yurdin  
Program Manager  
Point Source Regulation Section  
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail  
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail  
Raquel Douglas, USEPA (6EN-WM) by e-mail  
Gladys Gooden-Jackson, USEPA (6EN) by e-mail  
Steven Stedman, NMED District III, by e-mail



Form Approved  
OMB No. 2040-0003  
Approval Expires 7-31-85

### NPDES Compliance Inspection Report

#### Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
1 N 2 5 3 N M 0 0 2 2 2 6 8 11 12 1 4 0 7 2 3 17 18 C 19 S 20 1					
Remarks					
A R T E S I A C I T Y O F W W T P					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 1 69	70 3	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 Artesia Waste Water Treatment Plant 1702 Halderman Road Artesia, New Mexico 88210 Driving Directions: South on Hwy 285 from Roswell – go to Main Street in town and turn Left (East) onto East Main Street (US82) travel approximately 2.14 mile to Halderman Road → turn Left (North) travel 1 mile to WWTP Entrance on Right (East) side of road. Eddy County	Entry Time /Date 12:30 Hours / 23 July 2014	Permit Effective Date 01 September 2013
	Exit Time/Date 17:00 Hours / 23 July 2014	Permit Expiration Date 31 August 2018
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Frank Trujillo, Operator Level III 575-746-9651 Fax 575-546-0068 Patsy Hernandez, Operator Level IV 575-746-9651 Fax 575-546-0068 Jerry Whitehead (not present during the inspection but present at exit interview) Wastewater Supervisor 505-513-2635 (cell) / Fax 575-546-0068	Other Facility Data Latitude 32.85555900 Longitude -104.35837000	
Name, Address of Responsible Official/Title/Phone and Fax Number Byron Landfair, Infrastructure Director 575-748-0272 Fax 575-546-0068 612 N. Roselawn St. Street P.O. Box 1310 Artesia, NM 88211-1310	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	SIC 4952

#### Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

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

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

See Further Explanations For Details.

Note: A Pretreatment Review was not conducted as part of this inspection. For additional information see the Further Explanations section of this report.

Name(s) and Signature(s) of Inspector(s) /S/ Barbara Cooney	Agency/Office/Telephone/Fax NMED/SWQB 505-827-0212 / Fax 505-827-0160	Date 9-18-2014
Signature of Management QA Reviewer /S/ Shelly Lemon	Agency/Office/Phone and Fax Numbers NMED/SWQB 505-827-2819 / Fax 505-827-0160	Date 9-22-2014

## SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS

 S  M  U  NA (FURTHER EXPLANATION ATTACHED YES )

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  NA5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA. Influent Flow Data Used for Loading Calculations  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. Improvements have been made from previous years however some areas are addressed in the further explanation section of this report.

 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:

Influent flows from industry is not adequately monitored in the collection system. – Additional sampling point are necessary.

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.  
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. (DATE OF LAST CALIBRATION UNKNOWN \_\_\_\_\_)

 Y  N  NA

RECORDS MAINTAINED OF CALIBRATION PROCEDURES.

 Y  N  NA

CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.

 Y  N  NA

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

 Y  N  NA

6. HEAD MEASURED AT PROPER LOCATION.

 Y  N  NA

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

 Y  N  NA

## SECTION F - LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS.

 S  M  U  NA (FURTHER EXPLANATION ATTACHED YES \_\_)

DETAILS:

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

 Y  N  NA

**SECTION F - LABORATORY (CONT'D)**

- 2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED  Y  N  NA
- 3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.  S  M  U  NA
- 4. QUALITY CONTROL PROCEDURES ADEQUATE.  S  M  U  NA
- 5. DUPLICATE SAMPLES ARE ANALYZED. 10 % OF THE TIME. NEED TO DO DUPLICATE SAMPLING  Y  N  NA
- 6. SPIKED SAMPLES ARE ANALYZED. 10 % OF THE TIME. THE LABORATORY TAKES PART IN THE DMR-QA STUDY PROGRAM.  Y  N  NA
- 7. COMMERCIAL LABORATORY USED.  Y  N  NA

LAB NAME Cardinal Laboratory Bio Aquatics  
 LAB ADDRESS 101 E. Marilyand / Hobbs, NM 86240 2501 Maynes Rd. Ste.100 / Carlton, TX 75006  
 PARAMETERS PERFORMED Selenium Whole Effluent Toxicity Test

**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	SLIGHT GREEN GREY	NA

RECEIVING WATER OBSERVATIONS A small amount of floating solids were observed.

**SECTION H - SLUDGE DISPOSAL**

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO ).  
 DETAILS:

- 1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. Solids age in basin is older than optimal. This is covered in O/M  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: CITY PARKS AND BALL FIELDS (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

### **Introduction**

On July 23, 2014 a Compliance Evaluation Inspection (CEI) was conducted at the City of Artesia Wastewater Treatment Plant (WWTP) by Barbara Cooney and Shelly Lemon 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 City of Artesia representatives (the permittee), observations made by the NMED inspectors, reports and records kept by the permittee and/or NMED.

The Artesia WWTP is classified as a major municipal discharger under the Federal Clean Water Act (CWA), section 402 NPDES permit program, and is assigned NPDES permit number NM0022268. The Standard Industrial Classification Code (SIC) is 4952. The facility is permitted for a design flow of 2.6 Million Gallons per Day (MGD). The plant was originally built to treat 1.3 MGD of wastewater. A second treatment train, identical to the original was built a few years later. The NPDES effluent limit loading values in pounds per day were based on the original plant design capacity of 1.3 MGD. Even though the current NPDES permit states the facility is 2.6 MGD, because the facility has not gone through an Antidegradation review, all effluent loading values are based on the previous design of 1.3 MGD that is also found in the previous permit. The discharge for the WWTP enters the Pecos River in Water Quality Segment 20.6.4.206 NMAC. The Designated Uses for this segment of the river are: irrigation, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

### **Inspection Details**

The inspectors arrived at the Artesia WWTP at 12:30 hours and met with Mr. Frank Trujillo, Wastewater Forman and Ms. Patsy Hernandez, showed their credentials and explained the purpose of the inspection. Mr. Trujillo accompanied the inspectors on a tour of the facility. A records review and laboratory inspection was conducted later that day with Patsy Hernandez, Laboratory Manager. The inspectors left the facility at 17:10 hours. An exit interview was conducted with Mr. Byron Landfair, Mr. Jerry Whitehead, and Ms. Hernandez by phone Thursday July 24, 2014 from 14:00 to 15:00 hours. Preliminary findings were discussed during the exit interview.

### **Treatment Scheme**

Raw Sewage is delivered to the City of Artesia Wastewater Treatment Plant (WWTP) through a collection system that extends 56 miles with five lift stations. The service area is slightly more than two square miles and includes a population of approximately 11,320 persons. Contributing industries include: Navajo Refining Company LLC, oil and gas industry support businesses, restaurants, hotels, carwashes, gas stations, laundromats, schools and the Federal Law Enforcement Training Center. According to the permit application for the City of Artesia WWTP signed January 30, 2012, the influent flow from the Navajo Refinery may reach up to 0.261 MGD. The July 2014 contribution from this industry is recorded as a maximum of

0.208871 MGD. The total influent flow maximum for that time period was 1.675693 MGD. This industrial contribution is approximately 12 % of the wastewater being treated at the City of Artesia WWTP. According to facility representatives, plans are being made to increase the volume of wastewater from the refinery to 0.576 MGD.

A septage receiving station is located at the WWTP wet well before the raw sewage enters the treatment works. At the head of the treatment plant, the influent gravity flows to the first of two automatic bar screens for large solids removal. The majority of the treatment units are above ground due to the high water table in the area. Following the first bar screen are a set of Flygt pumps that lift the sewage to the second bar screen and to the influent flow measurement Parshall flume with a staff gauge and a Drexelbrook differential pressure sensor that records the totalized flow. The original plant design had only one bar screen located after the Flygt pumps. Large solids were damaging to the pumps so the additional bar screen was built. Following that is a rectangular aerated grit removal chamber. The solids removed from the screens and from the grit chamber are dried and after passing the paint filter test, disposed of at the county landfill between Carlsbad and Hobbs, New Mexico. The treatment plant is monitored with a SCADA control system. An alarm call out system is in place with the operators' phone numbers programmed in. The facility has a backup diesel generator for power that is exercised weekly.

Following grit removal, the liquid waste is sent to one of four race track design oxidation ditches, extended air treatment units. These are built as two parallel trains. Each train can also be run parallel. At the time of the inspection, all four race tracks - oxidation ditches were in operation. The Mixed Liquor Suspended Solids (MLSS) in the first phase oxidation ditch was 1700 mg/L according to the operators and less, approximately 1400 mg/L, in the other basins. The oxidation ditches are run through four phases a day lasting eight hours each. The cycles rotate between aerobic and anaerobic, mixing and settling. According to the operators, the DO in the basin during the aerated cycles is measured from one location a few feet below the surface and is recorded to be >1.0 mg/L. The anoxic phase DO levels are typically 0.0 mg/L to 0.6 mg/L. Solids are wasted to the digester every 3 hours for 45 minutes. Approximately 11,000 gallons a day are wasted.

Following the oxidation ditches are two secondary clarifiers, one each for the separate treatment trains. Solids are wasted from the oxidation ditches and the secondary clarifiers. Return Activated Sludge (RAS) from the secondary clarifier is sent back to the head of the plant.

Decants from the secondary clarifiers are sent to the ultraviolet disinfection system, consisting of a single channel with three banks of lights. Following disinfection is the effluent flow meter Parshall flume with a staff gauge and a Drexelbrook differential pressure sensor that records the totalized flow. The effluent flow meter is not installed correctly and though was recording measurements, was not being used for NPDES reporting. The influent flow was being used for reporting at the time of the inspection.

Beyond the effluent flow measurement is a splitter well that can direct the effluent to either the outfall at the Pecos River or to a reuse holding pond. The outfall at the Pecos River is through an

enclosed pipe approximately ½ to 1 mile to the North East. A rough rock structure has been installed at the outfall location to stabilize the soils, prevent erosion and to enhance aeration of the treated water as it enters the river. The reuse water is sent to parks in the city. This is regulated under the State of New Mexico, NMED Ground Water Quality Bureau (GWQB) Discharge Permit Number 258.

Solids wasted from the treatment units are sent through a belt filter press where a polymer is added for dewatering. They are then dried in concrete beds with under drains, mixed with mulch to achieve Class A quality as defined under the 40 CFR 503 sludge regulations for compost and used on parks in the City of Artesia. The under drains that collect the liquids are plumbed so liquids are sent back to the head of the treatment plant.

#### **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)

#### **Findings For Permit**

The permit was renewed by EPA and became effective September 1, 2013.

According to the permit application for the City of Artesia WWTP signed January 30, 2012, the influent flow from the Navajo Refinery may reach up to 0.261 MGD. The July 2014 contribution from this industry is recorded as a maximum of 0.208871 MGD. The total influent flow maximum for that time period was 1.675693 MGD. This industrial contribution is approximately 12 % of the wastewater being treated at the City of Artesia WWTP. According to facility representatives, plans are being made to increase the volume of wastewater from the refinery to 0.576 MGD.

If an increase of influent from the Navajo Refining Company LLC is expected to be above the amount identified in the permit application (0.261 MGD), notice must be given to EPA and NMED prior to that increase.

The City of Artesia has developed a pretreatment program and local limits to address industrial contributions. The pretreatment program was not included in this inspection.

#### **Record Keeping and Reporting**

Overall Rating For Record Keeping and Reporting (Marginal)

#### **Permit Requirements For Record Keeping and Reporting**

The permit requires, in Part III. D. Reporting Requirements.1.Planned Changes  
*b. Municipal Permit*

*Any change in the facility discharge (including the introduction of any new source or significant discharge or change in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitation specified herein.*

### **Findings For Recordkeeping and Reporting**

1. Laboratory, sampling and operational records were reviewed for the month of February 2014. During this timeframe, records were found to be complete with the exception of effluent flow reading. The flow reading used to calculate the loading for effluent discharges to the Pecos River are being done with the influent flow reading.
2. DMR records were not submitted for the months of April, May and June 2014 and for September and October 2013.
3. The effluent flow meter is not installed correctly and cannot be used to measure nor to report effluent flow volumes and pollutant loading values. The influent flow meter flow values are being used for reporting purposes (See the section below “Flow Measurement” for permit requirements). This is a repeat finding.
4. 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 (Marginal)

### **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 effluent flow meter is improperly installed. The meter cannot be used for flow measurements. Influent flow is being used for reporting. This is a repeat finding. Engineers for the facility met with NMED on July 30, 2014 to discuss plans for improving the effluent meter design so that the problem may be corrected. As of the date this report is written, changes have not been made.
2. Past the influent bar screens and grit removal system, the splitter box gate is improperly designed. Operators could not effectively control the flow of wastewater to the separate aeration basins. Therefore one basin always received a higher portion of the flow than the other. A piece of equipment, an actuator valve replacement, to regulate the flow and improve controls, was on order. At the time of this report being written, the actuator has been installed and operators are more able to control an even split of the raw wastewater to each basin.
3. The Mixed Liquor Suspended Solids (MLSS) concentration were lower than is typical for this type of treatment system. The north basin concentrations were 1700 mg/L and the south basin concentrations were 1,400 mg/L. Operators indicated that because of the low food to mass ratio (F/M ratio) coming into the treatment plant, they were compensating by limiting the volume of solids being wasted. If this is not managed carefully, the microbial populations typically found in older solids in a basin become less effective in the activated sludge treatment process. The operators are monitoring the microbial populations under a microscope on a weekly basis or more often when needed. The F/M ratio coming into the WWTP is very low as a result of the high volume of industrial waste the facility is accepting from the Navajo Refinery.
4. Flock shearing was noted in the aeration basins. This is an indication of interference with the optimal activated sludge process. The cause is not specifically identified in this report, however this condition is consistent with an interference occurring from unknown substances in the influent and improper mixing.
5. Some floating solids and pinfloc were observed in the secondary clarifier, which were being sent with the decant to the next treatment process, ultraviolet disinfection.
6. The Dissolved Oxygen (DO) meters in the oxidation ditches were out of order at the time of the inspection. These meters are an important part of monitoring for operational controls. It is advisable for the permittee to either repair or replace the meters.
7. Floating solids were entering the Ultraviolet Disinfection System, and being discharged with the effluent to the reuse pond. At the time of the inspection water was not being discharged to the Pecos River. Typically this facility only discharges to the Pecos River during winter months.

9. Collection system monitoring included sampling being done at the discharge location for the Navajo Refinery process water station where that waste stream enters the City of Artesia collection system. That location has a flow meter, but there are no records for flow calibration. An additional, presumably domestic wastestream, is entering the City of Artesia collection system from the same refinery property. However, there is no monitoring for pollutants, nor for volume from this wastestream. It is highly advisable for the City of Artesia to monitor this additional wastestream.

10. At the time of the inspection, the City of Artesia had five certified operators. It is noted however, that in the last year there were not enough qualified operators to properly maintain this facility. The City of Artesia can find Operator Certification Information at the New Mexico Environment Department's Website for the Operator Certification Program at: <http://www.nmenv.state.nm.us/swqb/UOCP/Compliance/Survey/#Resources>

11. There is no quality control or monitoring of septage at the facility.

12. A drainage canal through the property to an outside area off-property was observed. The drainage canal goes to a playa lake outside the fenced area and towards the Pecos River. This was noted in the previous reports.

### **Self-Monitoring**

Overall Rating For Self Monitoring (Unsatisfactory)

### **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.*

The permit requires in Part III. D. Reporting Requirements.1. Planned Changes.

#### *b. Municipal Permits.*

#### *5. Additional Monitoring By the Permittee*

*If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and reporting of the data*

*submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.*

### **Findings For Self Monitoring**

1. The loading calculations on the Discharge Monitoring Reports (DMRs) are not being done with effluent flow readings. The effluent flow meter is not installed correctly and cannot be used to measure or to report effluent flow volumes and pollutant loading values. The influent flow meter flow values are being used for reporting purposes.
2. Flow monitoring at the Navajo Refinery is by an inline flow meter. There is no way to calibrate the meter. There is no back up flow meter at the refinery and no monitoring of the collection system downstream from the property boundary, below both the domestic waste and industrial waste received from the refinery.
3. Additional monitoring should be conducted below the final location for the refinery connection to the collection system, including the connection for the domestic waste from the refinery.

### **Flow Measurement**

Overall Rating For Flow Measurement (Unsatisfactory)

### **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 rates throughout the range of expected discharge volumes.*

### **Findings For Flow Measurements**

1. The effluent flow meter is not installed correctly and cannot be used to measure nor to report effluent flow volumes and pollutant loading values. The influent flow meter flow values are being used for reporting purposes.
2. The influent stream is somewhat turbulent and does not have a steady laminar flow as it enters the Parshall flume flow measurement device.

### **Laboratory**

Overall Rating For Laboratory (Satisfactory)

### **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.

### **Findings For Laboratory**

Laboratory records and procedures were reviewed for both the months of February and July 2014.

1. The ISCO composite sampler at the effluent weir was observed. There was no back up thermometer in the sampling chamber. The unit's digital thermometer read 4.7 degrees centigrade. It is advisable for quality assurance purposes to have a back up mercury thermometer as well.
2. There were no other adverse findings in the records or for laboratory procedures.

### **Effluent And Receiving Water**

Overall Rating For Effluent And Receiving Water (Marginal)

### **Permit Requirements For Effluent And Receiving Water**

The Fact Sheet for this permit sates on page 13 of 19:

#### *VIII. Antidegradation*

*The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. Although the design flow has been double since the last issued permit, the total mass loads for BOD and TSS are remained the same as the expired permit. Therefore, the NMED waived the antidegradation evaluation. The permit requirements and the limits are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.*

The permit requires in Part I, page 4.

*Floating Solids, Visible Foam And/Or Oils.*

*There shall be no discharge of floating solids or visible foam in other than trace amounts.*

*There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coating on stream banks.*

The permit requires in Part I. Final Effluent Limits –2.6 MGD Design Flow

*E. coli bacteria 30 Day Average = 548 cfu/100 ml*

*E. coli bacteria Daily Maximum = 2, 507 cfu/ 100 ml*

The permit requires in Part I. Final Effluent Limitations

*Total Selenium 30 Day Average lbs/day - Report*

*Total Selenium 7 Day Average lbs/day - Report*

*Total Selenium 30 Day Average = 5.0 µg/1 (\*3)*

*Total Selenium Daily Maximum = 7.4 µg/1 (\*3)*

*\*3 Monitoring only beginning the effective date of the permit and lasting through three years from the effective date of the permit; then, the effluent limitations take effect on the date four years from the effective date of the permit. See Part I, section B. for details of compliance schedule.*

**Findings For Effluent And Receiving Water**

1. The facility is permitted for a design flow of 2.6 Million Gallons per Day (MGD), however because the facility has not gone through an Antidegradation review, all effluent loading values are based on the previous design of 1.3 MGD as found in the previous permit. If the permittee in the future intends to increase the volume of wastewater treated at this facility and a corresponding increase in the load is expected, an Antidegradation review shall be necessary.
  
2. Floating solids were noted at the ultraviolet disinfection basin, and slight amounts were also observed making it through the outfall.
  
3. The permit requirement for selenium is a monitoring requirement with a three year compliance schedule. The limits become effective September 1, 2016. One of the samples reported is at the effluent limit. None of the samples reported exceeded the effluent limit.

The DMR reports for selenium are:

Limits to become effective Sept. 1, 2016	<i>Total Selenium 30 Day Average = 5.0 µg/1 (*3) same as footnote above</i>	<i>Total Selenium Daily Maximum = 7.4 µg/1 (*3) same as footnote above</i>
Date:		
11/2013	1.98	3.7
12/2013	2.53	5.5
1/2014	2.69	2.9
2/2014	5.0	7.4
3/2014	2.8	3.1

**SLUDGE HANDLING**

Overall Rating For Sludge Handling (Satisfactory)

NMED/SWQB  
Official Photograph Log  
Photo # 1

Photographer: Google Earth

Date: June 10, 2011

Time: Unknown

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Aerial View of the Artesia WWTP



NMED/SWQB  
Official Photograph Log  
Photo # 2

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:03 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Headworks has two mechanical bar screens. The first in the foreground is ahead of the influent pumps – lift station. Large solids and rags were interfering with the lift station so this lower bar screen was installed to address that problem.. The second headworks are in the background. The septage receiving station is immediately ahead of this lower barscreen.



NMED/SWQB  
Official Photograph Log  
Photo # 3

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:04 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Lower mechanical bar screen.



NMED/SWQB  
Official Photograph Log  
Photo # 4

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:03 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Lower bar screen solids hopper. Solids and grit removed are sent to the county land fill after passing the paint filter test.



NMED/SWQB  
Official Photograph Log  
Photo # 5

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:15 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Influent Parshall Flume. Flow measurement is taken at this location.



NMED/SWQB  
Official Photograph Log  
Photo # 6

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:14 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Influent flow measurement with a Drexelbrook meter – at the time this photo was taken the instantaneous influent flow was 1.97 Million Gallons Per Day (MGD). The influent meter is used for NPDES and Ground Water Discharge Permit reporting.



NMED/SWQB  
Official Photograph Log  
Photo # 7

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:13 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Large solids and grit removal at the second bar screen of the head works.



NMED/SWQB  
Official Photograph Log  
Photo # 8

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:08 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Grit and large solids hopper at the second bar screen at the headworks of the WWTP.



NMED/SWQB  
Official Photograph Log  
Photo # 9

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:11 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: North aeration basins.



NMED/SWQB  
Official Photograph Log  
Photo # 10

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:19 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: The Splitter box for influent flow was not working properly at the time of the inspection. Operators were unable to control the an even flow to all basins. A replacement piece of equipment, the actuator, was on order. As of the date this report was written, the replacement actuator has been installed, and operators have better control of flows throughout the treatment works. In the distance are the South aeration basins.



NMED/SWQB  
Official Photograph Log  
Photo # 11

Photographer: B. Cooney

Date: 23 July 2014

Time: 14: 38 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: North basin is very dark. Similar to finding in the January 2013 inspection, there is a higher than normal volume being held in the basin. Solids are retained for longer periods than other similar treatment systems, possibly due to the highly dilute influent from the industrial contributor, the Navajo Refinery.



NMED/SWQB  
Official Photograph Log  
Photo # 12

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:38 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Aeration basin and anoxic zone. A Dissolved Oxygen (DO) meter is seen in the foreground. According to Operators, the DO meters are old and unreliable.



NMED/SWQB  
Official Photograph Log  
Photo # 13

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:38 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Aeration basin, anoxic phase with mixing.



NMED/SWQB  
Official Photograph Log  
Photo # 14

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:41 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Aeration basins - aerobic phase.



NMED/SWQB  
Official Photograph Log  
Photo # 15

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:41 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: North aeration basin in the settling phase. There is some flock sheer noted in the basin.



NMED/SWQB  
Official Photograph Log  
Photo # 16

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:41 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Secondary Clarifier and Sludge Composting site behind the Clarifier. Both treatment trains were on line and both secondary clarifiers were operating at the time of this inspection.



<b>NMED/SWQB Official Photograph Log Photo # 17</b>		
Photographer: B. Cooney	Date: 23 July 2014	Time: 14:49 Hours
City/County: Artesia/ Eddy County		State: New Mexico
Location: Artesia WWTP		
Subject: Secondary Clarifier weirs were clean and free of algae and debris. There was not evidence of older solids floating up from the blanket at the bottom of the basin. This is an improvement from the conditions of this unit observed during the January 2013 NMED inspection.		



<b>NMED/SWQB Official Photograph Log Photo # 18</b>		
Photographer: B. Cooney	Date: 23 July 2014	Time: 14:53 Hours
City/County: Artesia/ Eddy County		State: New Mexico
Location: Artesia WWTP		
Subject: Another view of the Secondary Clarifier shows the weirs in the other direction and around the other side of the basin are also clean and for the most part free of debris and there is an even flow throughout. A slight amount of floating solids does appear near the sweeper arm and does escape the unit with the decant.		



NMED/SWQB  
Official Photograph Log  
Photo # 19

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:59 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Another view of the Secondary Clarifier. Secondary Clarifier weirs were clean and free of algae and debris. The rotating – sweeper arm both sweeps floating solids from the surface and pumps solids from the bottom back to the center ring. Solids are wasted from this clarifier daily.



NMED/SWQB  
Official Photograph Log  
Photo # 20

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:58 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Composting area. Solids are dried and dewatered, then moved from the drying beds to this composting area and mixed with chipped wood. Visible are piles before on the left and after mixing w/ the wood chips on the right.



NMED/SWQB  
Official Photograph Log  
Photo # 21

Photographer: B. Cooney

Date: 23 July 2014

Time: 14:58 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Another close up view of piles before on the left and after mixing w/ the wood chips on the right.



NMED/SWQB  
Official Photograph Log  
Photo # 22

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:04 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: The composting pad is located to the left; to the right is the Ultraviolet Disinfection area; the effluent Parshall Flume and effluent flow measurement. The smaller white building is the flow splitter control where treated effluent is either sent to the Pecos River or sent to the reuse holding pond. The larger building in the distance is the sludge belt press and hauling truck area.



NMED/SWQB  
Official Photograph Log  
Photo # 23

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:16 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: The larger building is where the sludge belt press is housed and hauling truck area. Visible in this photo is also a drainage area directly from the belt press building that is channelized to flow off the property to a playa lake.



NMED/SWQB  
Official Photograph Log  
Photo # 24

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:16 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Continuing from the previous photo; visible in this photo is also a drainage area directly from the belt press building that is channelized to flow off the property to a playa lake.



NMED/SWQB  
Official Photograph Log  
Photo # 25

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:16 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Continuing from the previous photo; visible in this photo is also a drainage area directly from the belt press building that is channelized to flow off the property to a playa lake.



NMED/SWQB  
Official Photograph Log  
Photo # 26

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:17 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: The open air Aerobic Digester for solids.



NMED/SWQB  
Official Photograph Log  
Photo # 27

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:23 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Sludge Drying Beds – Under drains sends the water back to the Headworks.



NMED/SWQB  
Official Photograph Log  
Photo # 28

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:06 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Treated wastewater entering the Ultraviolet Disinfection Unit has floating solids present.



NMED/SWQB  
Official Photograph Log  
Photo # 29

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:11 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Effluent Parshall Flume – There is considerable turbulence due to the design of the pipe out of the flume area that is causing back flow into the flow monitoring area. A smooth laminar flow is necessary for accurate flow reading. This flow meter location cannot be verified to meet the requirement of being within 10% of the actual flow. IN part, the cause of the problem is that during the construction of the Plant, a change was made to the engineering design from the original plans, creating the hydraulic back up.



NMED/SWQB  
Official Photograph Log  
Photo # 30

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:12 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Another view: Effluent Parshall Flume – There is considerable turbulence due to the design of the pipe out of the flume area that is causing back flow into the flow monitoring area. A smooth laminar flow is necessary for accurate flow reading. This flow meter location cannot be verified to meet the requirement of being within 10% of the actual flow. During the plant construction the engineering design was changed, causing improper hydraulic head, resulting back up flows from the effluent pipe.



NMED/SWQB  
Official Photograph Log  
Photo # 31

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:15 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Effluent Parshall Flume – There is considerable turbulence due to the design of the pipe out of the flume area that is causing back flow into the flow monitoring area. A smooth laminar flow is necessary for accurate flow reading. This flow meter location cannot be verified to meet the requirement of being within 10% of the actual flow.



NMED/SWQB  
Official Photograph Log  
Photo # 32

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:15 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: Effluent Parshall Flume – There is considerable turbulence due to the design of the pipe out of the flume area that is causing back flow into the flow monitoring area. A smooth laminar flow is necessary for accurate flow reading. This flow meter location cannot be verified to meet the requirement of being within 10% of the actual flow.



NMED/SWQB  
Official Photograph Log  
Photo # 33

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:09 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: The effluent ISCO composite sampler.



NMED/SWQB  
Official Photograph Log  
Photo # 34

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:09 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: The ISCO Composite Sampler at the effluent. This sampler has a digital thermometer. There was not a backup thermometer in the sample chamber at the time of the inspection.



NMED/SWQB  
Official Photograph Log  
Photo # 33

Photographer: B. Cooney

Date: 23 July 2014

Time: 15:09 Hours

City/County: Artesia/ Eddy County

State: New Mexico

Location: Artesia WWTP

Subject: The ISCO Composite Sampler at the effluent. This sampler has a digital thermometer. There was not a backup thermometer in the sample chamber at the time of the inspection. The digital reading was 4.7 degrees centigrade.

