



NEW MEXICO
ENVIRONMENT DEPARTMENT



Surface Water Quality Bureau

SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

Harold Runnels Building, N2050
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, NM 87502-5469
Phone (505) 827-0187 Fax (505) 827-0160
www.nmenv.state.nm.us

RYAN FLYNN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

ERIKA SCHWENDER
Director
Resource Protection Division

Certified Mail - Return Receipt Requested

April 3, 2014

The Honorable Tony J. Roybal, Mayor
Village of Pecos
Post Office Box 337
Pecos, New Mexico

**Re: Village of Pecos Wastewater Treatment Plant; Minor; Individual Permit; SIC 4952;
Compliance Evaluation Inspection; NPDES Permit NM0029041; March 19, 2014**

Dear Mayor Roybal:

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)
Fountain Place
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

Village of Pecos
April 3, 2013
Page 2

If you have any questions about this inspection report, please contact Sandra Gabaldon at (505) 827-1041 or at sandra.gabaldon@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
Racquel Douglas, USEPA (6EN-WM) by e-mail
Gladys Gooden-Jackson (6EN-WC) by e-mail
NMED District II, Robert Italiano, 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	2	9	0	4	1	11	12	1	4	0	3	1	9	17	18	C	19	S	20	1							
Remarks																																			
M I N O R						W W T p																													
Inspection Work Days						Facility Evaluation Rating						BI		QA		Reserved																			
67						70	2	71	N	72	N	73			74	75													80						

Section B: Facility Data

Name and Location of Facility Inspected <i>(For industrial users discharging to POTW, also include POTW name and NPDES permit number)</i> Take I-25 North to Pecos exit. Go north onto Hwy 63. Pass Pecos Municipal building. Turn left onto Acequia lane. Turn right onto Camino Laguna. Follow road to WWTP.		Entry Time /Date 0920 hours / 03-19-2014		Permit Effective Date 09-01-2012	
		Exit Time/Date 1220 hours / 03-19-2014		Permit Expiration Date 08-31-2017	
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Leonard Quintana, Level IV Certified Operator (505)470-3697				Other Facility Data SIC 4952	
Name, Address of Responsible Official/Title/Phone and Fax Number Honorable Tony Roybal, Mayor (505) 757-6591 / mayor@villageofpecos.com Post Office Box 337 Pecos, New Mexico 87552				Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Section C: Areas Evaluated During Inspection

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

S	Permit	M	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
U	Records/Reports	M	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	M	Laboratory	N	Storm Water	N	Other:

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

1. Please see further explanations.

Name(s) and Signature(s) of Inspector(s) /s/ Sandra Gabaldon Sandra Gabaldón	Agency/Office/Telephone/Fax NMED/SWQB/(505) 827-1041/(505) 827-0167	Date April 1, 2014
Signature of Management QA Reviewer /s/ Michelle Lemon Michelle Lemon, Municipal Team Leader	Agency/Office/Phone and Fax Numbers NMED/SWQB/(505) 827-2795/(505) 827-0167	Date April 1, 2014

VILLAGE OF PECOS WASTEWATER TREATMENT PLANT

PERMIT NO. NM0029041

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 X U NA (FURTHER EXPLANATION ATTACHED YES)

DETAILS:

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs. Y X N NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE. S M X U NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING Y X 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 X N NA

e) DATES AND TIMES OF ANALYSES. Y X 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 X N NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. S X M U NA (FURTHER EXPLANATION ATTACHED YES)

DETAILS:

1. TREATMENT UNITS PROPERLY OPERATED. S M O U NA

2. TREATMENT UNITS PROPERLY MAINTAINED. S M O U NA

3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED. S M O U NA

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. S M O U NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE S M O U NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. S M X 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 O N NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. Y X N NA

VILLAGE OF PECOS WASTEWATER TREATMENT PLANT

PERMIT NO. NM0029041

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: Closed pipe system, no primary 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. 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

VILLAGE OF PECOS WASTEWATER TREATMENT PLANT

PERMIT NO. NM0029041

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. 0 % OF THE TIME. Y N NA

6. SPIKED SAMPLES ARE ANALYZED. % OF THE TIME. Y N NA

7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC. BIO AQUATIC TESTING, INC
 LAB ADDRESS 3310 Win Street, Cuyahoga Falls, OH 44223 2501 Mayes Road, Suite 100; Carrollton, TX 75006
 PARAMETERS PERFORMED BOD, TSS, E. Coli Biomonitoring

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	CLEAR	

RECEIVING WATER OBSERVATIONS Pecos River clear, no visible foam, floatable solids, or odor.

SECTION H - SLUDGE DISPOSAL

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

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

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

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

SECTION I - SAMPLING INSPECTION PROCEDURES (FURTHER EXPLANATION ATTACHED).

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

VILLAGE OF PECOS
NPDES PERMIT #NM0029041
COMPLIANCE EVALUATION INSPECTION
MARCH 19, 2014

INTRODUCTION:

A Compliance Evaluation Inspection (CEI) was conducted at the Village of Pecos Wastewater Treatment Plant (WWTP) on March 19, 2014 by Sandra Gabaldón and Mr. Daniel Valenta, of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). This facility is classified as a minor discharger under the federal Clean Water Act (CWA), Section 402. This facility is regulated under the National Pollutant Discharge Elimination System (NPDES) permit program, and is assigned NPDES permit number NM0029041. The facility design flow is 0.25 million gallons per day (MGD).

The Village of Pecos WWTP discharges into the Pecos River at Latitude N35°34'01.7", Longitude W -105°4'20.6' in Segment 20.6.4.217 of the Pecos River Basin. This segment, as classified under the *Standards for Interstate and Intrastate Surface Water 20.6.4 NMAC*, has designated uses of: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the main stem of the Pecos River.

The inspectors arrived at the Village of Pecos WWTP at 0920 hours and conducted an entrance interview with Mr. Leonard Quintana, Level IV Operator. The inspector made introductions, presented her credentials, and discussed the purpose of the inspection with Mr. Quintana. An exit interview to discuss preliminary findings of the inspection was conducted with Mr. Quintana and the Honorable Mayor Tony J. Roybal.

The NMED performs a specific number of CEI's annually for the United States Environmental Protection Agency (USEPA). The purpose of this inspection is to provide the USEPA with information to evaluate the permittee's compliance with their NPDES permit. The enclosed inspection report is based on verbal information supplied by the permittee's representatives, observations made by the NMED inspector, and a review of records maintained by the permittee, commercial laboratories, and/or NMED. Findings of the inspection are detailed on the attached EPA form 3560-3 and in the narrative Further Explanations section of the report.

TREATMENT SCHEME:

The Village of Pecos serves a population of approximately 1,000 people. The WWTP is a Sequencing Batch Reactor (SBR). Raw wastewater enters the plant through a three inch Parshall Flume. A Vulcan Filter Stair Screen then removes debris by moving the debris upward by rotating the screen upwards; slowly moving the debris to the next level. Once the debris reaches the top step, it is discharged to a trash receptacle for later disposal.

The influent is gravity fed to the two SBR basins by a splitter pipe which can be manually closed and opened to allow influent to either basin. In the SBR, wastewater goes through three phases of treatment. These include: react, settle and decant.

During the react phase, the wastewater undergoes 168 minutes of alternate periods of anoxic mix and aeration. In the settle phase, the aerators are stopped, which allows the solids to settle out and move to the bottom. This allows the clear wastewater to stay on top. Then, the decant phase starts and the decanter removes clarified supernatant to the ultraviolet system for final disinfection. The effluent is measured by an enclosed Sparling Magnetic Flow Meter.

SLUDGE:

Waste activated sludge is wasted to the aerated sludge digester. The thickened sludge is sent from the digester to the sludge drying beds where they can be dewatered. The solids are then stored onsite. The solids have been stored for approximately one year. The operator was advised to remove the biosolids prior to the two year limit.

Section B – Recordkeeping and Reporting – Overall Rating of “Unsatisfactory”

Permit requires in Part I, Section B.5, Overflow Reporting:

The permittee shall report all overflows with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in a tabular format. The summaries shall include the date, time, duration, location, estimated volume, and cause of the overflow, observed environmental impacts from the overflow, action taken to address the overflow, and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary). Overflows which endanger health or the environment shall be orally reported to EPA at (214)665-6595, and the NMED surface Water Quality Bureau at (505) 827-0187 within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment shall be provided within five (5) days of the time the permittee becomes aware of the circumstance. The written reports shall be sent to both EPA and the NMED Surface Water Quality Bureau.

Permit requires in Part II, Section B.1 Monitoring and Reporting:

- b. Monitoring information shall be reported in accordance with Part III.D.4 of this permit and shall be submitted quarterly. Each quarterly submittal shall include separate forms for each month of reporting period.*

Permit requires in Part III, D.4:

Monitoring results must be reported to EPA on either the electronic or paper Discharge Monitoring Report (DMR) approved formats. Monitoring results can be submitted electronically in lieu of the paper DMR form.

Permit requires in Part III, C.4 Record Content:

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling 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 analysis;*
- e. The analytical techniques or methods used; and*
- f. The results of such analyses.*

Findings for Recordkeeping and Reporting:

According to a letter sent from Ground Water Quality Bureau (GWQB) to the permittee dated December 21, 2012, the permittee had an overflow occur at the intersection of highway 50 and Pinon Lane, with written notification received by GWQB on October 31, 2012. This overflow was not reported to EPA or NMED. The sewage spill of approximately 200-300 gallons was discovered by Village staff at 9:00 AM on October 24, 2012, discharging from a manhole. The spill was caused by a blockage of grease, debris and roots in the sewer line. The staff cleaned the line by rodding it and then cleaned the area by disinfecting with lime.

Discharge monitoring reports for biomonitoring for 2013 have not been received. The permittee is required to monitor every six months. No DMRs for these requirements have been found in the file, nor were they found on the EPA website NetDMR.

The permittee provided benchsheets from the contract laboratory, Summit Environmental Technologies, Inc. The laboratory failed to provide the exact location sample was taken. It also did not provide the time analysis was run. This makes it difficult to determine holding times of the samples.

The permittee also provided their own benchsheets for pH. The exact location of the sample taken is not provided. The only information provided on the benchsheet with regard to the sample location is "effluent". Exact location needs to be used so verification can be made that the sample was taken at discharge from the final treatment unit prior to the discharge to the receiving stream.

The benchsheet for pH did not show any results of calibration for the method being used. Verification could not be determined in the permittee was adequately calibrating the instrument each time the sample was analyzed.

There are no Discharge Monitoring Reports (DMRs) in the NMED file for the last quarter of 2013. This would include October, November and December. The permittee is required to submit their DMR quarterly report no later the 28th day of the month following each reporting

period. In this case, January 28th, 2014, was the deadline for reporting their last quarter of 2013. Because there was no DMR on file, NMED could not verify effluent loading results, daily effluent flow, or daily analytical data for December 2013.

There are no DMRs for biomonitoring (WET) results on file for the year of 2013. The permittee is required to sample for *Daphnia pulex* and *Pimephales promelas* once every six months.

Section C – Operation and Maintenance – Overall Rating of “Marginal”

Permit requires in Part III, Section B.3 Proper Operation 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 which will minimize upsets or discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back 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 adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.*

Findings for Operation and Maintenance:

The permittee has only one certified operator employed. It is imperative that another certified operator be employed and able to run the facility in an efficient manner in the event that the primary operator is unavailable.

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

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

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise)		Frequency	Sample Type
	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.		

Flow	N/A	N/A	Report (MGD)	Report (MGD)	Daily	Instantaneous
Biochemical Oxygen Demand (BOD ₅)	38	56	30	4 5	2/Month	8-hr composite
Total Suspended Solids (TSS)	38	56	30	4	2/Month	8-hr composite
BOD ₅ % Removal ⁽¹⁾	85%	N/A	N/A	N/A	2/Month	Calculation
TSS % Removal ⁽¹⁾	85%	N/A	N/A	N/A	2/Month	Calculation
Total Residual Chlorine ⁽²⁾ (TRC)	N/A	N/A	0.019 Instantaneous		Daily	Grab
E. coli (colonies/100 ml)	N/A	N/A	126	2 3	2/Month	Grab
pH	N/A	N/A	6.6 s.u. Minimum	8.8 s.u.	Daily	Grab

Findings for Self-Monitoring:

The permittee is required to grab a sample daily for pH. The benchsheets provided by the permittee show the following days samples were grabbed for pH:

<u>July</u> <u>2013</u>	<u>August</u> <u>2013</u>		<u>NOVEMBER</u> <u>2013</u>	<u>DECEMBER</u> <u>2013</u>	<u>JANUARY</u> <u>2013</u>
07-03-2013	08-01-2013		11-15-13	12-3-13	01-01-14
07-04-2013	08-02-2013		11-19-13	12-4-13	01-02-14
07-05-2013	08-03-2013		11-20-13	12-5-13	01-03-14
07-06-2013	08-04-2013		11-21-13	12-7-13	01-04-14
07-08-2013	08-05-2013		11-22-13	12-12-13	01-05-14
07-09-2013	08-06-2013		11-29-13	12-13-13	01-06-14
07-23-2013	08-07-2013			12-17-13	01-07-14
07-25-2013	08-09-2013			12-27-13	
07-26-2013	08-10-2013			12-28-13	
07-27-2013	08-11-2013			12-30-13	
07-28-2013	08-12-2013			12-31-13	
07-29-2013	08-13-2013				
07-30-2013	08-14-2013				
	08-15-2013				
	08-16-2013				
	08-20-2013				

The table shows that samples were not taken daily as required by the permit.

The operator is taking his samples from a manhole prior to discharge into the Pecos River. However, because of the difficulty in obtaining the sample, the operator is using a dip stick to get the sample for E. coli and then transferring the sample to the sampling bottle for the contract laboratory. This is an invalid collection technique for E.coli. The sample for E.coli is to be collected directly into the sampling bottle. The operator has been doing this for a number of years. He was instructed to collect the sample directly into the sample bottle as required by 40 CFR 136.

Section E – Flow Measurement – Overall Rating of “Marginal”

Permit requires in Part III, C.6 Flow measurement:

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

Findings for Flow measurement:

The permittee has failed to calibrate their mag meter to insure the device is measuring flow with a maximum deviation of less than 10% from true discharge rates.

The mag meter is located in a confined space, and the operator is not certified to enter a confined space. This is a situation in which the ultraviolet system and mag meter were placed in an area which are not accessible to the operator. This presents a substantial problem for the facility.

Section F – Laboratory – Overall Rating of “Marginal”

Permit requires in Part III, C.5 Monitoring Procedures:

- a. *An adequate analytical quality control program, including the analysis 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:

It appears that the permittee has failed to do 10% duplicate sampling as part of their quality control procedures. The purpose of laboratory control procedures is to ensure high-quality analyses by the use of control samples, control charts, reference materials, and instrument calibration. The permittee must initiate and maintain controls throughout the analysis of samples. Specifically, each testing batch must contain at least one blank, standard, duplicate, and spiked (as applicable) sample analysis. When a batch contains more than 10 samples, every tenth sample should be followed by a duplicate and a spike (as applicable).

DISCHARGE MONITORING REPORT CALCULATION CHECK

JULY 2013

E. Coli

Sample Dates:	07/24/2013	07/31/2013			Data reported on DMR
E. coli (#100ml)	12.1	3.1			
Daily Max					12.1
30-day Average: Log of colonies per 100 mL Add all logs and divide by number of samples. Geometric Mean is antilog.	$\text{Log}(12.1) + \text{log}(3.1) =$ $1.083 + 0.491 = 1.574 / 2$ $\text{Antilog } 1.574 = 6.124$				4.8

*Does not match what was reported on DMR

BOD

Sample Date:	Daily Flow (MGD)	BOD (mg/l)	Calculated Daily Load
07/24/2013	Unknown	5.8	No Flow Data provided for July 2013 – unable to verify calculations
07/31/2013	Unknown	5.0	
			% Removal = (Inflow Conc. – Effluent Conc.) / Inflow Conc.
07/24/2013 – INFLUENT		455	$(455 - 5.8) / 455 = 99\%$
07/31/2013 – INFLUENT		84.0	$(84 - 5.0) / 84 = 94\%$
Calculated Monthly Average (Loading):			
Calculated Monthly Average (Conc.):	$5.8 \text{ mg/L} + 5.0 \text{ mg/L} = 10.8 \text{ mg/L} / 2 = 5.4 \text{ mg/L}$		
Reported on DMR	2.9 lbs/d 30-D Avg.; 3.6 lbs/d 7-D Avg. 5.4 mg/L 30-D Avg.; 5.8 mg/L 7-D Avg.		

ü Results match with what was reported on DMR

TSS

Sample Date:	Daily Flow (MGD)	TSS (mg/l)	Calculated Daily Load
07/24/2013	Unknown	13.0	No flow data provided for July 2013 – unable to verify calculations
07/31/2013	Unknown	No data	No data available
			% Removal = (Inflow Conc. – Effluent Conc.) / Inflow Conc.
07/24/2013 - INFLUENT		194	(194 – 13) / 194 = 93%
07/31/2013 – INFLUENT		No data	No Data
Calculated Monthly Average (Loading):			
Calculated Monthly Average (Conc.)			
Reported on DMR	7.59 lbs/d 30-D avg.; 7.59 lbs/d 7-D avg. 13.0 mg/L 30-D avg.; 13.0 mg/L 7-D avg.**		

****Although this matches what was reported on the DMR, it is incorrect because the permit requires two samples per month and the permittee only did one sample for the month of July.**

DECEMBER 2013 – NO DMR WAS SUBMITTED TO NMED