



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO ENVIRONMENT DEPARTMENT

Harold Runnels Building
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

Certified Mail - Return Receipt Requested

May 21, 2014

Mr. Francisco Espinoza, Public Utilities Director
Town of Taos
Taos Municipal Building
400 Camino De La Placitas
Taos, NM 87571

Re: Town of Taos Waste Water Treatment Plant; Major; Municipal; SIC 4952; NPDES Compliance Evaluation Inspection; NPDES Permit NM0024066; April 10, 2014

Dear Mr. Espinoza:

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

Town of Taos

May 21, 2014

Page 2

If you have any questions about this inspection report, please contact Barbara Cooney at (505) 827-0212 or at 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
Robert Italiano, NMED District II, 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 4 0 6 6 11 12	1 4 0 4 1 0 17	18 C	19 S 20	1
Remarks					
T A O S W A S T E W A S T E W A T E R T R E A T M E					
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) Town of Taos WWTP: 182 Los Cordovas Road (Physical Location Not Mailing Address) Driving Directions: On Hwy 68 travel north to Ranchitos Road in the center of Town – Turn Left and go approx., 2.3 miles to Las Cordovas Road – Turn Right and go approximately 1.8 miles to WWTP Taos County	Entry Time /Date 10:45 Hours / April 10, 2014	Permit Effective Date September 1, 2012
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Mr. Anthony Martinez - Operation Manager for OMI contractor 575-758-8401 Ms. Celsa Vigil - Laboratory Analyst for OMI contractor 575-758-8401 Mr. Jerome Salazar - Operator 575-758-8401	Exit Time/Date 17:00 Hours / April 10, 2014	Permit Expiration Date August 31, 2017
Name, Address of Responsible Official/Title/Phone and Fax Number Mr. Francisco Espinoza 575-751-2047 Taos, Public Utilities Director Taos Municipal Building 400 Camino De La Placitas	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Other Facility Data LAT 36° 22' 24.21" N LONG -105° 39' 21.38" W SIC Code: 4952

Section C: Areas Evaluated During Inspection

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

S	Permit	S	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
S	Records/Reports	S	Self-Monitoring Program	S	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	S	Compliance Schedules	S	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 Further Explanations Section Of This Report

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
/S/ Barbara Cooney	NMED/SWQB 505-827-0212 / 505-827-0160	5/20/2014
Signature of Management QA Reviewer	Agency/Office/Phone and Fax Numbers	Date 5/21/2014
/S/ Shelly Lemon	505-827-0187 / 505-827-0160	

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS

 S M U NA (FURTHER EXPLANATION ATTACHED Yes)

DETAILS: New Mayor and New Public Utilities Director

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE New Mayor and New Public Utilities Director

 Y N NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES

 Y N NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT

 Y N NA

4. ALL DISCHARGES ARE PERMITTED

 Y N NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.

 S M U NA (FURTHER EXPLANATION ATTACHED Yes)

DETAILS:

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs.

 Y N NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.

 S M U NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING

 Y N NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING

 Y N NA

c) ANALYTICAL METHODS AND TECHNIQUES.

 Y N NA

d) RESULTS OF ANALYSES AND CALIBRATIONS.

 Y N NA

e) DATES AND TIMES OF ANALYSES.

 Y N NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.

 Y N NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.

 S M U NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.

 S M U NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.

 Y N NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.

 S M U NA (FURTHER EXPLANATION ATTACHED Yes)

DETAILS:

The Marginal rating is a result of two internal overflows that occurred at the facility in the previous 12 months.

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. – Electrical Failures have resulted in call out system malfunction

 S M U NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE. Noted is the discontinued use of blowers in the aerated grit chamber.

 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?
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?

Y N NA
 Y N NA
 Y N NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?
 IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?

Y N NA
 Y N NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS.
 DETAILS:

S M U NA (FURTHER EXPLANATION ATTACHED Yes.)

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.
 DETAILS:

S M U NA (FURTHER EXPLANATION ATTACHED No.)

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 2013)
 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.

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.
 DETAILS:

S M U NA (FURTHER EXPLANATION ATTACHED Yes.)

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. Y N NA
6. SPIKED SAMPLES ARE ANALYZED. Yearly % OF THE TIME. The DMR-QA study spiked samples are analyzed once a year Y N NA
7. COMMERCIAL LABORATORY USED. Y N NA
- LAB NAME _____ Hall Environmental Lab _____ CH2M Hill OMI Applied Science Labs _____ Bio Aquatics
- LAB ADDRESS _____ Albuquerque, New Mexico _____ Corvallis, Oregon _____ Carlton, Texas
- PARAMETERS PERFORMED BOD _____ Total Nitrogen, Total Phosphorous, Ammonia, Hg _____ 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
001	None	None	None	None	None	Clear	None

RECEIVING WATER OBSERVATIONS

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED Yes).

DETAILS: Solids processed to compost cannot be stored on site more than two years.

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. S M U NA
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. S M U NA
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: _____ (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

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

1. SAMPLES OBTAINED THIS INSPECTION. Y N NA
2. TYPE OF SAMPLE OBTAINED
GRAB _____ COMPOSITE SAMPLE ___ METHOD _____ FREQUENCY _____
3. SAMPLES PRESERVED. Y N NA
4. FLOW PROPORTIONED SAMPLES OBTAINED. Y N NA
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. Y N NA
6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE. Y N NA
7. SAMPLE SPLIT WITH PERMITTEE. Y N NA
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. Y N NA
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. Y N NA

Town of Taos Wastewater Treatment Plant
Compliance Evaluation Inspection
NPDES Permit Number NM0024066
April 10, 2014
Page 1 of 7

Introduction

On April 10, 2014 a Compliance Evaluation Inspection was conducted at the Town of Taos Wastewater Treatment Plant (WWTP) by Barbara Cooney and Shelly Lemon of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB), Point Source Regulation Section (PSRS).

The 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. These inspections are conducted under contract with the USEPA and are used to evaluate compliance with the NPDES permit program. This inspection report is based on information supplied by the Town of Taos representatives (the permittee), observations made by the NMED Inspector, reports and records kept by the permittee or NMED.

The WWTP is classified as a major municipal discharger, with a design flow of two million gallons per day (MGD) and is assigned the NPDES permit number NM0024066. The SIC code for this facility is 4952. The discharge from the WWTP enters a manmade channel leading to the Rio Pueblo de Taos in Segment 20.6.4.122NMAC of the Rio Grande Basin. The outfall location into the unnamed ditch is now considered a Waters of the United States, and Water of The State. This water is perennial as created by the discharge from the WWTP and is classified in the New Mexico Water Quality Standard as Water Quality Segment 20.6.4.99., the designated uses are, warmwater aquatic life, livestock watering, wildlife habitat and primary contact. The Rio Pueblo de Taos is classified in the New Mexico Water Quality Standard. The designated uses are coldwater aquatic life, fish culture, irrigation, livestock watering, wildlife habitat and primary contact. The Rio Pueblo de Taos is also considered by the Taos Pueblo to be within it's jurisdiction as the northern banks of the river are Pueblo lands. The EPA website in the document, Pueblo of Taos Water Quality Standards, enacted August 13, 2002 lists: *[the] Rio Pueblo, Below Los Cordovas, as having the designated uses of domestic water supply (incl. groundwater recharge), wildlife habitat, cold water fishery, irrigation, livestock watering & wildlife watering, aquatic life (acute & chronic criteria), primary human contact/ceremonial use.*

Inspection Details

The Inspector notified plant personnel that she was going to conduct an inspection of the WWTP that day. The Inspectors arrived at the Taos WWTP at 10:45 hours, April 10, 2014. The Inspectors showed credentials and discussed the purpose of the inspection with Mr. Anthony Martinez, Plant Operator-Manager, for Operations Management Inc. (OMI), Mr. Jerome Salazar, Lead Operator OMI, Ms. Celsa Vigil, Operator-Laboratory Analyst OMI. OMI is the contract operator of the WWTP for the Town of Taos. Following the inspection and records review an exit interview was conducted with Mr. Francisco Espinoza, Director of Public Works for the Town of Taos, Mr. Martinez and Mr. Salazar. The inspectors left all Town of Taos facilities at 17:00.

Town of Taos Wastewater Treatment Plant
Compliance Evaluation Inspection
NPDES Permit Number NM0024066
April 10, 2014
Page 2 of 7

Treatment Units

The raw wastewater flows by gravity to the enclosed entrance works. The sewage is screened through parallel channels with mechanical bar screens and grinders. There is no manual bypass channel for influent flow. The removed solids are compacted by the grinder and screening process and sent to a hopper for final disposal at the Rio Rancho Landfill. Influent flow volume is measured past the bar screen, then enters the aerated grit chamber.

A septage receiving station is located at the head works. In order to protect the WWTP process, septage haulers must test their loads for pH before being allowed to dump the waste at the treatment plant. A log is kept of these loads and is also used for billing by the Town of Taos.

The aerated grit removal chamber is a square basin with two designated blowers. The blowers were out of service at the time of the inspection and had been for three months according to facility personnel. A new blower has been ordered and plans were being made to rebuild the other blower. According to facility personnel, because of the effective removal of solids and grit at the headworks, there has not been a change in the quality or removal of grit with the blower being out of order. The blowers however provide the first stage of aeration to the influent. Typical of wastewater influent, it enters the treatment plant in a septic state due to the anaerobic conditions created by flowing through the collection system. The blower in the aerated grit removal chamber aid in the activated sludge treatment process.

Flow is then directed through a splitter box that sends the wastewater to either the East or West aeration basin. The basins are reanimates from the old treatment plant. They have been reconfigured so that ½ of each basin has a series of fine bubble diffusers to create an aerated zone, and the other ½ of each basin has mixers only that constitute the anoxic zone. The water enters the basins in the anoxic zone and exits the basin past the aerobic zone. The anoxic zone had dense grey foam about 1 foot thick on the surface. Control of the foam layer was not discussed. Residence time in the basins and through the processes was not discussed.

The partially treated wastewater then enters the Membrane Biological Reactor (MBR) system. The MBR consists of four basins with filters, aerators and mixers. The basins are run simultaneously and in parallel. Return Activated Sludge (RAS) is sent back to the splitter box past the grit removal basin. Waste Activated Sludge (WAS) is pulled from the return line. Wasting of solids is done every day for one to five hours depending on flow and Mixed Liquor Suspended Solids (MLSS). The MBR system can accommodate a much higher MLSS than other activated sludge processes, from 7500 mg/L to 9000 mg/L according to operators. The processed water is called Permeate Water and is sent to UV disinfection.

The UV chamber consists of two banks of lights with 14 modules of 8 bulbs each, which are kept submerged by a weighted check dam. The lights are turned on 100% of the time. Following in the treatment train is a 12 inch Parshall flume and staff gauge with a backup Drexelbrook flow measurement device. A portion of the flow is diverted to a golf course storage pond for reuse

Town of Taos Wastewater Treatment Plant
Compliance Evaluation Inspection
NPDES Permit Number NM0024066
April 10, 2014
Page 3 of 7

irrigation during the warm months of the year. At this time, no water was being diverted to the irrigation ponds.

Sludge

Waste Activated Sludge (WAS) is pulled from the return line. Wasting of solids is done every day for one to five hours depending on flow and Mixed Liquor Suspended Solids (MLSS). The sludge that consists of 2% - 5% solids, is sent to the belt press for dewatering. A polymer coagulant is added to the solids. From the belt press solids are deposited into a large roll-off dump truck and taken to the Rio Rancho Landfill for final surface disposal. Compost processing pads were constructed before the new WWTP was built and the permittee intended to compost the majority of the solids. However numerous odor complaints from nearby residents have made it necessary to discontinue the composting efforts.

The liquid from the belt press is sent back to the splitter box at the end of the aerated grit chamber. The composting pad is approximately 114'x172' and fitted with an under-drain that sends liquids to the sludge pond on site.

Further Explanations

Note: The sections are arranged according to the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

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

Section B – Record Keeping and Reporting – Overall Rating of “Satisfactory”

Permit Requirements for Record Keeping and Reporting

The permit states in Part III.D. Reporting Requirements:

4. Discharge Monitoring Reports And Other Reports

Monitoring results must be reported on Discharge Monitoring Report (DMR) Form EPA No. 3320-1 in accordance with the “General Instructions” provided on the form. The permittee shall submit the original DMR signed and certified as required in Part III.D. II and all other reports required by Part III.D. to the EPA at the address below. Duplicate copies of DMR’s and all other reports shall be submitted to the State agency (ies) at the following address (es):

EPA:

*Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733*

New Mexico:

Program Manager

Town of Taos Wastewater Treatment Plant
Compliance Evaluation Inspection
NPDES Permit Number NM0024066
April 10, 2014
Page 4 of 7

*Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
1190 Saint Frances Drive
Santa Fe, NM 87502*

The permit states in Part III.D. Reporting Requirements: 7. Twenty-four Hour Reporting:

a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

- (1) A description of the noncompliance and it's cause;*
- (2) The period of non compliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,*
- (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.*

The permit requires in Part III.C. Monitoring Records: 3. *Retention Of Records:*

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording 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. This period may be extended by request of the Director at any time.

The permit requires in Part III.C. Monitoring Records: 4. Records Contents:

Records of monitoring information shall include:

- a. The date, exact place and time of sampling or measurement.
- 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;
- f. The results of such analyses.

Findings for Record Keeping and Reporting

As part of this inspection, records were reviewed for the month of February 2014, for laboratory and operations and maintenance. Records contained the required information and were consistent with reporting on the Discharge Monitoring Reports.

Records provided to the Inspector include laboratory bench sheets for:

5 day Biochemical Oxygen Demand (BOD5)

Total Suspended Solids

pH

Town of Taos Wastewater Treatment Plant
Compliance Evaluation Inspection
NPDES Permit Number NM0024066
April 10, 2014
Page 5 of 7

E. coli
Fecal Coliform bacteria
Nitrate – Nitrite
Total Kjeldahl Nitrogen
Ammonia
Mercury
Whole Effluent Toxicity Tests

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

Permit Requirements for Operation and Maintenance

The 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 system 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...

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operations, maintenance and testing functions required to insure compliance with the conditions of this permit.

Findings for Operation and Maintenance

During the site visit and the records review of the WWTP, the following observations were made:

1. The month of September 2013, the Town of Taos and the entire State of New Mexico experienced extremely high rainfall. During this time, the WWTP was filled to capacity and overflows from the aeration basins occurred for several days. The volume could not be measured because flows exceeded all monitoring thresholds. Estimated volumes were in the range of 300, 000 gallons per day for several days. This situation was exacerbated in Taos because a new sewer line was being installed. The new line gave an open path for storm water to enter the collection system and further inundate the WWTP.
2. Internal overflow from basins – failure of power back up system to operate properly and to send a call out notification.
3. Septage Receiving Station: area is not graded to prevent run off in the event of an accidental spill. Containment berms should be installed around this location and grading should be considered to prevent track out onto the public road.
4. Chemical storage in the MBR building should be in an area bermed to contain any spills.

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

Section E – Flow Measurements – Overall Rating of “Satisfactory”

Section F - Laboratory - Overall Rating of "Satisfactory"

Permit Requirements for Laboratory

The permit requires, in Part III, Section B.3. , Proper Operation and Maintenance

a. ...Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures...

The permit requires, in Part III, Section 5. , Monitoring Procedures

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the permit or approved by the Regional Administrator.

Findings for Laboratory

The laboratory incubator is very old and it was suspected to have variable temperatures during the incubation cycle for BOD. This piece of equipment should be replaced.

Laboratory records were reviewed for February 2014.

The records review includes bench sheets and summary reports for:

Biochemical Oxygen Demand (BOD)

pH

Total Suspended Solids (TSS)

Total Residual Chlorine (TRC)

Bacteria, E. coli, and Fecal Coliform

Ammonia

Total Nitrogen

Total Phosphorous

Bio-monitoring records were also reviewed. The most recent Bio-monitoring – Whole Effluent Toxicity test was conducted in first Quarter 2014, and passed.

Section G - Effluent and Receiving Water - Overall Rating "Satisfactory"

Finding for Effluent / Receiving Waters

No effluent exceedences were reported for the previous 12 month period.

The month of September 2013, the Town of Taos and the entire State of New Mexico experienced extremely high rainfall. During this time, the WWTP was filled to capacity and overflows from the aeration basins occurred for several days. The volume could not be measured because flows exceeded all monitoring thresholds. Estimated volumes were in the

Town of Taos Wastewater Treatment Plant
Compliance Evaluation Inspection
NPDES Permit Number NM0024066
April 10, 2014
Page 7 of 7

range of 300, 000 gallons per day for several days. This same finding is noted in the section above for Operation and Maintenance.

Sludge Handling and Disposal

Overall Rating For Sludge Handling and Disposal (Satisfactory)

Permit Requirements for Sludge Disposal

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 the 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.

40CRF Part 503 Subpart A. General Provisions states:

(y) *Store or storage of sewage sludge* is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

Findings for Sludge Handling and Disposal

The compost piles on site are nearing two years of age and cannot be stored long term at this facility. This must be moved to a certified landfill or distributed to another location for beneficial use.

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:34

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Septage Receiving Station. The area is not bermed to contain run off. A log in records all haulers who use the station.



NMED/SWQB
Official Photograph Log
Photo # 2

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:34

City/County: Town of Taos / Taos

State: New Mexico

Location:

Subject: Septage Receiving Station. The area is not bermed to contain run off.



NMED/SWQB
Official Photograph Log
Photo #3

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:35

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Septage Receiving Station. The area is not bermed to contain run off.



NMED/SWQB
Official Photograph Log
Photo #4

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:39

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Headworks – parallel solids and grit removal channels. Both channels are mechanical without a manual back up. As a design, this could be problematic if there were a power failure and the generators failed to start.



NMED/SWQB
Official Photograph Log
Photo # 5

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:41

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Solids removal at the headworks to a dumpster. The solids are sent to a landfill after passing the paint filter test for liquid content.



NMED/SWQB
Official Photograph Log
Photo #6

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:44

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Influent biological air scrubber helps reduce odors. Residential development has been built up around the WWTP since it was built several decades ago.



NMED/SWQB
Official Photograph Log
Photo # 7

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:46

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Backup generator for the headworks – one of two backups for the treatment plant. The generator is exercised weekly.



NMED/SWQB
Official Photograph Log
Photo # 8

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:47

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: The aerated grit removal system is part of the old treatment system. The chambers are still in place but the blowers that provide air for grit removal are out of service. According to facility operators, the new headworks are more effective at grit removal than the previous system and the aerators are no longer necessary for this chamber.



NMED/SWQB
Official Photograph Log
Photo # 9

Photographer: B. Cooney

Date: April 10, 2014

Time: 11:53

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: West Aeration Basin is now set up with an aerobic and anaerobic section. However the plumbing of the basin is not designed to move the same water through both phases, instead the two sides are mixed together as the water is sent to the Membrane Bio Reactor treatment phase. It is possible that lower levels of Total Nitrogen could be achieved all the wastewater was sent through both phases.



NMED/SWQB
Official Photograph Log
Photo # 10

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:07

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: In the distance of this photo is the composting location. When the new WWTP was built the intention was to compost 100% of the solids produced at the facility. This effort has been abandoned in part due to citizen complaints about odors. The solids are now sent to the Rio Ranch Landfill, as was done in the past.



NMED/SWQB
Official Photograph Log
Photo # 11

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:10

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Second Back Up Generator for the Membrane Bio Reactor (MBR) portion of the treatment works. This is exercised weekly.



NMED/SWQB
Official Photograph Log
Photo # 12

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:23

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Fine bubble diffusers for the MBR.



NMED/SWQB
Official Photograph Log
Photo # 13

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:23

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Membranes for the MBR system.



NMED/SWQB
Official Photograph Log
Photo # 14

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:23

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Several of the Membrane units have failed because of broken clamps.



NMED/SWQB
Official Photograph Log
Photo # 15

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:26

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Several of the Membrane units have failed because of broken clamps.



NMED/SWQB
Official Photograph Log
Photo # 16

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:26

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Chemicals (Sodium Hypochlorite) stored on site. There was no evidence of spillage at the time of the inspection. Though storage drums should be kept in a bermed and contained area.



NMED/SWQB
Official Photograph Log
Photo # 17

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:26

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Chemicals (Sodium Hypochlorite) stored on site. There was no evidence of spillage at the time of the inspection. Though storage drums should be kept in a bermed and contained area.



NMED/SWQB
Official Photograph Log
Photo # 18

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:30

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: MBR Mixer



NMED/SWQB
Official Photograph Log
Photo # 19

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:34

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Permeate Water – part of the membrane backwash cleaning system. Treated water sent



NMED/SWQB
Official Photograph Log
Photo # 20

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:36

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Sodium Hypochlorite and Citric Acid dosing system for MBR



NMED/SWQB
Official Photograph Log
Photo # 21

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:40

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Output Turbidity meter measured in NTUs.



NMED/SWQB
Official Photograph Log
Photo # 22

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:40

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Bulk Tank – buffer for back pulse through the MBR system for flushing and cleaning of the filters.



NMED/SWQB
Official Photograph Log
Photo # 23

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:42

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Decommissioned secondary clarifiers. Because these units collect and contain standing rain water and precipitation, it is possible during warmer seasons they could become breeding grounds for mosquitoes, if not attended to.



NMED/SWQB
Official Photograph Log
Photo # 24

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:43

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Decommissioned secondary clarifiers. Because these units collect and contain standing rain water and precipitation, it is possible during warmer seasons they could become breeding grounds for mosquitoes, if not attended to.



NMED/SWQB
Official Photograph Log
Photo # 25

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:46

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Screens before the Ultraviolet Disinfection System.



NMED/SWQB
Official Photograph Log
Photo # 26

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:46

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Ultra Violet Disinfection System, light banks are covered by plywood for protection and to reduce the amount of sunlight in the channel. Lights are cleaned semiannually. At this time of year, excessive algae growth was not observed. However, in past inspections it was noted that more frequent cleaning may be necessary due to the large amount of algae growing in the channel during warmer months. At the time of the past inspection, the channels were also covered with plywood for protection.



NMED/SWQB
Official Photograph Log
Photo # 27

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:51

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Effluent Channel



NMED/SWQB
Official Photograph Log
Photo # 28

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:51

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Effluent Flow meter and staff gauge.



NMED/SWQB
Official Photograph Log
Photo # 29

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:54

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject:



NMED/SWQB
Official Photograph Log
Photo # 30

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:54

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Effluent channel past the Parshall Flume and effluent flow meter. The effluent was clear and free of floating solids.



NMED/SWQB
Official Photograph Log
Photo # 31

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:58

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Outfall pipe to ditch. Note the algae growth along the ditch bottom, indicating the presence of plant nutrients.



NMED/SWQB
Official Photograph Log
Photo # 32

Photographer: B. Cooney

Date: April 10, 2014

Time: 12:58

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Outfall ditch has duck weed and algae growing directly below the pipe.



NMED/SWQB
Official Photograph Log
Photo # 33

Photographer: B. Cooney

Date: April 10, 2014

Time: 13:04

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Sludge after belt press is put in a roll off dumpster then hauled to the Rio Rancho Landfill. The dumpster is not covered. If there is a rain or snow event, added liquids would cause failure of the paint filter test.



NMED/SWQB
Official Photograph Log
Photo # 34

Photographer: B. Cooney

Date: April 10, 2014

Time: 13:05

City/County: Town of Taos / Taos

State: New Mexico

Location: Town of Taos Wastewater Treatment Plant

Subject: Polymer feed to the solids going through the belt filter press was not mixed correctly the day of the inspection and spilled throughout the building, as seen by the wet shiny floor in the photo.



**NMED/SWQB
Official Photograph Log
Photo # 35 and 36**

Photographer: B. Cooney	Date: April 10, 2014	Time: 14:38
City/County: Town of Taos / Taos		State: New Mexico
Location: Town of Taos Wastewater Treatment Plant		
Subject: Laboratory pH buffers were labeled and stored correctly.		



**NMED/SWQB
Official Photograph Log
Photo # 37**

Photographer: B. Cooney	Date: April 10, 2014	Time: 14:48
City/County: Town of Taos / Taos		State: New Mexico
Location: Town of Taos Wastewater Treatment Plant		
Subject: Laboratory Dissolved Oxygen Meter: Laboratory analytical equipment is calibrated and maintained. This meter was last checked for accuracy by an outside contractor August 2013.		

