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RYAN FLYNN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

Certified Mail - Return Receipt Requested

December 15, 2014

Mr. Richard Galli, Mayor
Village of Maxwell
P.O. Box 356
Maxwell, NM 87728

Re: Minor Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, Maxwell Wastewater Treatment Plant, NM0029149, December 10, 2014

Dear Mr. Galli,

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

If you have any questions about this inspection report, please contact Shelly Lemon at (505) 827-2819 or at shelly.lemon@state.nm.us.

Sincerely,

/s/ Bruce Yurdin

Bruce J. Yurdin
Program Manager

Village of Maxwell
December 15, 2014
Page 2

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
NMED District II by e-mail

SECTION A - PERMIT VERIFICATIONPERMIT SATISFACTORILY ADDRESSES OBSERVATIONS
DETAILS: S M U NA (FURTHER EXPLANATION ATTACHED NO)

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: **NOT ALL DMRS HAD BEEN RECEIVED FOR 2014; RECEIVED COPIES FROM FACILITY REPRESENTATIVE.**

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 NAc) ANALYTICAL METHODS AND TECHNIQUES. **FORMS FOR pH AND TRC NEED TO SPECIFY METHOD USED** Y N NA

d) RESULTS OF ANALYSES AND CALIBRATIONS.

 Y N NA

e) DATES AND TIMES OF ANALYSES.

 Y N NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.

 Y N NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.

 S M U NA

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

 S M U NA

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

 Y N NA**SECTION C - OPERATIONS AND MAINTENANCE**TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.
DETAILS: S M U NA (FURTHER EXPLANATION ATTACHED YES)

1. TREATMENT UNITS PROPERLY OPERATED.

 S M U NA2. TREATMENT UNITS PROPERLY MAINTAINED. **TEARS IN LAGOON LINERS.** 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 NA6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. **ONLY ONE CERTIFIED OPERATOR** S M U NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.

 S M U NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.

 Y N NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.

 Y N NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.

 Y N NA

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? Y N NA
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? Y N NA
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS? Y N NA

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

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED NO).
 DETAILS: **NOT EVALUATED - NO DISCHARGE**

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT. Y N NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES. Y N NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT. Y N NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT. Y N NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT. Y N NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE Y N NA

a) SAMPLES REFRIGERATED DURING COMPOSITING. Y N NA

b) PROPER PRESERVATION TECHNIQUES USED. Y N NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3. Y N NA

7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT? Y N NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED NO)
 DETAILS: **NO DISCHARGE REPORTED SINCE MAY 2006**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE: **WEIR PLATE WITH METAL STAFF GAUGE & VALVE TO CONTROL AMOUNT OF FLOW**

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 _____) 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 NO)
 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. ___% OF THE TIME. Y N NA
6. SPIKED SAMPLES ARE ANALYZED. ___% OF THE TIME. Y N NA
7. COMMERCIAL LABORATORY USED. **pH and TRC ARE ANALYZED ON SITE USING FISHER pH PROBE AND HACH CHLORINE COLORIMETER** Y N NA

LAB NAME HALL ENVIRONMENTAL
 LAB ADDRESS 4901 HAWKINS NE, ALBUQUERQUE, NM 87109
 PARAMETERS PERFORMED BOD5, TSS, E. COLI, TOTAL PHOSPHORUS, AND TOTAL NITROGEN (TKN, NO2+NO3, AMMONIA)

** FACILITY REPRESENTATIVE SAID THAT VILLAGE WILL USE AN ENVIRONMENTAL LAB IN LOVELAND, COLORADO FOR WET TESTING BUT COULD NOT PROVIDE INSPECTOR WITH NAME OF LAB. HE SAID THAT HE HAS BEEN IN CONTACT WITH THE LAB AND THEY CAN PERFORM THE TESTING REQUIRED.

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	NO DISCHARGE						

RECEIVING WATER OBSERVATIONS: **NO DISCHARGE REPORTED SINCE 2006 – NO ODORS OR OFFENSIVE SMELLS COMING FROM PONDS.**

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED _NO_).
 DETAILS: **ACCORDING TO FACILITY REPRESENTATIVE, PONDS HAVE NEVER BEEN DREDGED, BUT SLUDGE WAS EVALUATED WITH A SLUDGE JUDGE (APPROX. 2 YEARS AGO) AND FOUND TO BE OKAY.**

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: ___NA___ (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 NATURE OF DISCHARGE. Y N NA
7. SAMPLE SPLIT WITH PERMITTEE. Y N NA
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. Y N NA
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. Y N NA

**Compliance Evaluation Inspection
Maxwell Wastewater Treatment Plant
NPDES Permit No. NM0029149
December 10, 2014**

Introduction

On December 10, 2014, Shelly Lemon of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Maxwell Wastewater Treatment Plant (WWTP). The Maxwell WWTP has a design flow capacity of 0.02 MGD (million gallons per day) and is classified as a minor municipal discharger under the Federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0029149. This permit regulates the WWTP discharge to the Canadian River in Water Quality Segment 20.6.4.305 of the New Mexico Administrative Code (NMAC). This segment includes the designated uses of irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

The NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the Federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the permittee's representatives, observations made by the NMED inspector, and records and reports kept by the permittee and/or NMED.

Upon arrival at the WWTP at approximately 1110 hours on the day of this inspection, the inspector made introductions, presented her credentials, and explained the purpose of the inspection to Mr. Elmer Chavez, Maintenance Superintendent, Village of Maxwell. The inspector and Mr. Chavez toured the facility. At the end of the tour, the inspector conducted an exit interview with Mr. Chavez to discuss preliminary findings of the inspection. The meeting concluded at approximately 1250 hours.

Treatment Scheme

Raw wastewater currently flows by gravity to the headworks of the plant. The influent enters the headworks through a 4" Parshall flume and proceeds through a 1" rectangular manually cleaned bar screen.

Following the headworks, the flow is divided equally through a splitter box to two lagoons. The splitter box provides the option of operating the lagoons in parallel, in series, or it also provides the option of bypassing the south lagoon by routing the wastewater from the north lagoon directly to the chlorine contact chamber.

If discharging, the wastewater would then proceed to the chlorine contact chamber where chlorine tablets are added to disinfect the water through a Spears chlorine dispenser. Baffles in the chlorine contact chamber increase detention time. The flow is then sent through a weir plate with a metal staff gauge that indicates flow in gallons per minute. The weir is the primary measurement device and, when discharging, is calibrated by using a bucket and a watch.

After chlorination, the flow enters a dechlorination unit on the line headed to the outfall. The outfall discharges to a broad arroyo which was dry at the time of the inspection. The Canadian River is less than a half mile from the outfall.

According to the DMRs and the facility representative, this facility has not discharged since May 2006.

Solids Management

According to the facility representative, the solids at the plant have never been removed from the lagoons; however, Mr. Chavez also stated that he tested the solids with a sludge judge approximately 2 years ago.

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

The permit states in Part I.F Copy of DMR Reports that, *“The permittee shall send a copy of DMRs, all other reports required in the permit, as well as a copy of application for permit renewal to NMED...”*

The permit requires in Part III.C.4, Record Contents:

Records of monitoring information shall include:

- 1. The date, exact place, and time of sampling or measurements;*
- 2. The individual(s) who performed the sampling or measurements;*
- 3. The date(s) and time(s) analyses were performed;*
- 4. The individual(s) who performed the analyses;*
- 5. The analytical techniques or methods used; and*
- 6. The results of such analyses.*

Findings for Recordkeeping and Reporting:

Only the 3rd Quarter DMRs had been received by NMED at the time of inspection. The DMRs were on file at the Village’s offices and the facility’s representative copied the remaining DMRs for 2014 for the inspector.

The permittee has not sampled the effluent since 2006 because there has been no discharge from the ponds. However, the inspector reviewed the permittee’s paperwork to ensure the permittee’s readiness in the event a discharge needs to take place in the future. The pH Worksheet reviewed at the time of this inspection did not indicate the specific method used to test the sample (see Appendix A). It was recommended that the form be updated to include the specific “EPA Method” to comply with permit requirements for record keeping and reporting. In addition, it was suggested that the TRC Worksheet be revised to incorporate similar information as the pH form (i.e., #1 – 6 above and calibration information).

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

The permit states, in Part III.B.3.a & b, 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 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 operation, maintenance and testing functions required to ensure compliance with the conditions of this permit.*

Findings for Operations and Maintenance:

During the tour of the facility’s ponds, tears were noted in the lagoon liners. This was an issue during the last two NPDES inspections of the site (Photo #1). The facility representative indicated that maintenance and repair of the liners is scheduled and should be resolved soon. The effluent discharge pipe is also broken and needs to be repaired (Photo #2).

Currently, Mr. Chavez is the only certified operator for this site. A laborer has been hired, but has not passed the NM Wastewater Systems Level 1 exam. It is highly recommended that a backup certified operator is available in the event that Mr. Chavez is sick or takes a vacation.

Self-Monitoring, Flow Measurement, & Laboratory – “Not Evaluated”

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

5. Monitoring Procedures

- a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.*
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.*
- c. An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.*

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 flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

USEPA’s NPDES Inspection Manual, Chapter 6 states, “*The facility must ensure that their flow measurement systems are calibrated by a qualified source at least once a year to ensure their accuracy.*”

Guidance for Self-Monitoring, Flow Measurement, and Laboratory:

The facility’s representative indicated that the Village was planning to repair/replace the pond liner at some point in the near future. Since the facility has not discharged in almost a decade, the inspector would remind the permittee of the permit requirements in Part III.C, as stated above, in the event of a discharge and recommends that the permittee take some preventative measures to assure compliance with the NPDES permit, such as:

- Ordering chemicals and supplies necessary for disinfection, equipment calibration, and sample preservation,
- Cleaning the chlorine contact chamber and dechlorination shed,
- Repairing the effluent outfall pipe,
- Calibrating equipment, including flow gauge(s), to ensure accurate and precise measurements,
- Contacting the contract labs to discuss parameters of concern, sample collection and containers, sample preservation, transportation/chain of custody, QA/QC procedures, and any other requirements or conditions,
- Dredging ponds and disposing of sludge when ponds are lowered for maintenance, and
- Recording whether or not the effluent discharge flowed to the Canadian River.

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Shelly Lemon	Date: 12-10-2014	Time: 12:10 hours
City/County: Maxwell/Colfax County		
Location: Maxwell WWTP		
Subject: Tear in the lagoon liner. This tear has existed since at least the 2011 inspection.		



NMED/SWQB
Official Photograph Log
Photo # 2

Photographer: Shelly Lemon	Date: 12-10-2014	Time: 12:20 hours
City/County: Maxwell/Colfax County		
Location: Maxwell WWTP		
Subject: Effluent pipe broken.		



**APPENDIX A: Village of Maxwell
Wastewater Treatment pH Worksheet**

Phone: (505) 375-2752
Anthony R. Mitchell, Mayor
Michael L. Marquez, Mayor Pro-tem

VILLAGE of MAXWELL
P.O. Box 356, 316 Maxwell Ave.
Maxwell, NM 87728
villageomaxwell@bacavalley.com

Fax: (505) 375-2753
Pedro Valerio, Council
David Wright, Council
Lawrence Linson, Council

Rudy Cordova, Clerk/Treasurer

**WASTEWATER TREATMENT
pH Worksheet**

Name of Facility _____

Method Used: EPA Methods

Date of Sample _____

Exact Time of Sampling _____ Make, Model of pH Meter Fisher Accumet

Exact Sampling Location _____ Sample Temperature _____

Signature of Analyst _____

Type of Sample _____

Instantaneous Flow _____

Signature of Sampler _____

pH Meter Calibration

Date of Calibration: _____ Time of Calibration: _____

pH meter adjusted to sample temperature: _____

First pH buffer used for standardization: _____ Meter Reading: _____

Date purchased: _____ Date Opened: _____ Clarity: _____ Expiration Date: _____

Second pH buffer used for standardization: _____ Meter Reading: _____

Date purchased: _____ Date Opened: _____ Clarity: _____ Expiration Date: _____

Third pH buffer used to check calibration: _____ Meter reading: _____
(Data should be within .1 pH unit of last buffer)

Sample Data:

Exact Time of Analysis:
pH Reading:

Comments:

