



**NEW MEXICO
ENVIRONMENT DEPARTMENT**



Resource Protection Division

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Acting Division Director**

Certified Mail – Return Receipt Requested

May 15, 2013

The Honorable Danny J. Cruz
Town of Springer
Post Office Box 488
Colbert Avenue
Springer, New Mexico 87747

**RE: Minor Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, Town of Springer
Wastewater Treatment Plant, NM0030295, April 18, 2013**

Dear Mr. Cruz:

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Problems noted during this inspection are discussed in the further explanations section of the inspection report. You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing, both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Diana McDonald
US Environmental Protection Agency
Allied Bank Tower
Region VI Enforcement Branch (6EN-
WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

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

Town of Springer
Mr. Danny J. Cruz
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May 15, 2013

I wish to thank your staff for their cooperation during this inspection. If you have any questions concerning this inspection report, please feel free to contact me at the above address or by telephone (505) 827-1041.

Sincerely,

/s/ Sandra Gabaldon
Sandra Gabaldón
Surface Water Quality Bureau

Cc: Rashida Bowlin, 6EN-WC, via email
Darlene Whitten-Hill, 6EN-WC, via email
Carol Peters-Wagnon, 6EN-WM, via email
Jan Walker, 6EN-WC, via e-mail
Larry Giglio, 6WQ-PP, via email
Diana McDonald, 6EN-WM, via email
District II, via e-mail

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS S M U NA (FURTHER EXPLANATION ATTACHED YES)

DETAILS: Permit Issued on March 1, 2008; Permit Expired: February 28, 2013. There is no application on file with NMED or USEPA for this facility.

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE Permit has "City" of Springer, rather than Town of Springer. Y X N NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES O Y N X NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT X Y N NA

4. ALL DISCHARGES ARE PERMITTED Y X N NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. O S M U X NA (FURTHER EXPLANATION ATTACHED NO)

DETAILS: The Town of Springer does not discharge effluent to the Cimarron River at this time. No compliance sampling being done.

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

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

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

b) NAME OF INDIVIDUAL PERFORMING SAMPLING Y N X NA

c) ANALYTICAL METHODS AND TECHNIQUES. Y N X NA

d) RESULTS OF ANALYSES AND CALIBRATIONS. Y N X NA

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

f) NAME OF PERSON(S) PERFORMING ANALYSES. O Y N X NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE. S M U X NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR. S M U X NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA. Y N X NA

SECTION C - OPERATIONS AND MAINTENANCE

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

DETAILS:

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

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

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

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

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

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

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. O S M X U NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. Y X N NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. Y X N NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. Y X 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 X U NA (FURTHER EXPLANATION ATTACHED NO).
 DETAILS:

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

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES. Y N X NA

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

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

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

6. SAMPLE COLLECTION PROCEDURES ADEQUATE Y N X NA

a) SAMPLES REFRIGERATED DURING COMPOSITING. Y N X NA

b) PROPER PRESERVATION TECHNIQUES USED. Y N X NA

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

SECTION E - FLOW MEASUREMENT

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

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N X NA
 TYPE OF DEVICE

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. Y N X NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. Y N X NA

4. CALIBRATION FREQUENCY ADEQUATE. Y N X NA
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES. Y N X NA
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. No records maintained of calibration checks Y N X 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 X 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 X NA

SECTION F - LABORATORY (CONT'D)

- 2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED Y N X NA
- 3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. S M U X NA
- 4. QUALITY CONTROL PROCEDURES ADEQUATE. S M U X NA
- 5. DUPLICATE SAMPLES ARE ANALYZED. 0 % OF THE TIME. Y N X NA
- 6. SPIKED SAMPLES ARE ANALYZED. % OF THE TIME. Y N X NA
- 7. COMMERCIAL LABORATORY USED. Y N X NA

LAB NAME
 LAB ADDRESS
 PARAMETERS PERFORMED

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. S M U X NA (FURTHER EXPLANATION ATTACHED NO).

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER

RECEIVING WATER OBSERVATIONS

SECTION H - SLUDGE DISPOSAL

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

- 1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. S M U X NA
- 2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. S M U X 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 X 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 Springer Wastewater Treatment Plant
NPDES Permit No. NM0030295
Compliance Evaluation Inspection
April 18, 2013

Introduction:

On April 18, 2013, Sandra Gabaldón and Daniel Valenta of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a compliance evaluation inspection (CEI) at the Town of Springer Wastewater Treatment Plant (WWTP). The Town of Springer WWTP has a design flow capacity of 0.30 million gallons per day (MGD) and is classified as a minor 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 NM0030295. This permit regulates the WWTP discharge to the Cimarron River in Segment 20.6.4.306 *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC)*. This segment includes the designated uses of irrigation, 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 representative, observations made by NMED staff, and records and reports kept by the permittee and/or NMED.

The inspector made introductions, stated the purpose of the inspection and presented credentials to Mr. Hurtgen, Certified Operator I, at the Town of Springer's Water Treatment Plant at approximately 0950 hours. The inspectors and Mr. Hurtgen toured the WWTP starting at approximately 1320 hours. Preliminary findings were discussed with Mr. Hurtgen during the inspection and at an exit interview at the end of the inspection. Mr. Cruz, Mayor, was not available on the day of the inspection to discuss preliminary findings.

There has been no reported discharge into the Cimarron River from this facility. Cimarron River from Canadian River to Cimarron Village does not fully support warmwater aquatic life. Probable causes of impairment are nutrient/eutrophication biological indicators. The Cimarron River Watershed Total Maximum Daily Load (TMDL) dated September 3, 2010 establishes Phase I and Target nutrient wasteload allocations for total phosphorus and total nitrogen. The Town of Springer WWTP is not designed to treat effluent for the removal of nitrogen and phosphorus. The Town of Springer submitted an application to the NMED Groundwater Quality Bureau (GWQB) on April 25, 2011 for activated sludge treatment with UV disinfection and effluent storage in evaporation lagoons. The Town of Springer has not applied for a renewal of the NPDES Permit with Region VI United States Environmental Protection Agency (USEPA).

Treatment Scheme:

The Town of Springer has a population of approximately 1,047 (2010 Census). The Springer Correctional Facility has an inmate population of 296. The Town of Springer WWTP has not been fully or consistently operational since initial construction of a new package plant was completed in January of 2007. The

following is a description of the intended proposed hydraulic flow pattern for the WWTP and solids management (some elements are functional while other elements are not):

Influent passes through a 6-inch Parshall flume with an ultrasonic flow meter connected to the plant's Programmable Logic Controller (PLC). Flow continues through an automatic mechanical bar screen with a manually-cleaned bypass bar screen in channel then enters an influent wet/equalization (EQ) basin. The wet well contains a vertical turbine mixer and two submersible pumps. The wet well overflows to a one million gallon PVC lined lagoon.

After the EQ basin, flow would be pumped to a Wes Tec hybrid activated sludge plant that includes a STM-aerotator aeration mixing unit. The plant was designed to accommodate an average daily flow of 150,000 gallons per day (GPD) with a peak hourly flow of 300,000 gpd. The STM-Aerotator mechanism would rate in the aeration basin providing air and mixing for the fixed and suspended growth bacteria. The activated sludge fixed film system has an aeration basin volume of 56,540 gallons with a maximum water depth of 15.5 feet. The STM aerator would capture atmospheric air and slowly release it as coarse bubble aeration. The amount of aeration would be controlled using a variable speed drive connected to a rotor causing it to rotate faster or slower based on the actual oxygen demand. During the rotation, cascade aeration would elevate the dissolved oxygen in the upper layer of the basin. The combination of the slow rotation of the STM-Aerotator, coarse bubbler release and additional peripheral mixing from the paddle would insure a thoroughly mixed system. The STM-Aerotator includes a large surface area for fixed film growth. The polypropylene discs provide an environment for attached growth organisms. The fixed film component would increase the effective sludge age and improve the sludge settling characteristics.

After the aeration basin, the influent would flow into a rectangular chain drive secondary clarifier with polychem chain and flight sludge collector assembly. Return activated sludge (RAS) and scum skimming from the clarifier would be returned by gravity flow to the influent wet well/EQ basin and then would be pumped back to the aeration basin.

After the clarifier, flow would enter an Ultra-Violet (UV) unit with two banks of bulbs constructed in series.

A tie in and outfall to the Cimarron River would be constructed.

Waste activated sludge (WAS) would be pumped using a submersible pump from a collection trough at the bottom of the clarifier to the aerobic sludge digester with a Hurricane mixer. WAS would be removed from the digester when needed. During sludge removal, a polymer mixture would be added to the sludge in the plant's UV/Lab building. Decant would be returned to the influent wet well/EQ basin. The sludge would be dewatered by a 190-lbs/hour belt press on site. A screw feeder would place sludge in an on-site dumpster.

Treatment Plant on April 18, 2013:

On the day of this inspection, raw influent was going through the headworks which consisted of an automatic bar screen, the STM-Aerotator and the clarifier. The UV system has never been placed into service. There is no discharge to the Cimarron River occurring at this time. All effluent is stored in three ponds; the fourth pond is no longer functional.

When the inspectors asked to view the ponds, which are behind a locked gate, the operator stated that no key was available. The inspectors proceeded through the fenced area with the operator's permission to view the ponds. In doing so, the inspectors noticed that the ponds had no free board and the west pond was overflowing. A report has since been sent to the GWQB concerning this discharge. The Water Manager, Laura Danielson, estimated that 259,200 gallons of treated sewage was released to an adjacent field because of a faulty valve. This discharge had been occurring for approximately three weeks before it was noticed by the inspectors on April 18, 2013. The report states that the berming was repaired around this pond on April 24, 2013, and the valve would be installed shortly thereafter. There is no indication that this bypass has been reported to EPA.

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 “Unsatisfactory”

The permit requires in Part III.A.4:

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulation promulgated at 40 CFR Part 122.6 and any subsequent amendments.

Findings for Permit Verification:

The permittee has failed to submit an application 180 days before the expiration date of the permit which was February 2013.

The permittee has not submitted a letter of termination for permit #NM0030295 to EPA as of this date.

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

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 systems of treatment and control (and related appurtenances) which are installed or used by the permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup 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.*

Findings for Operation and Maintenance:

The Town of Springer has a lagoon system in dire need of maintenance. This facility has obtained monies from both federal and state funding sources for their wastewater treatment plant, but has not placed the acquired equipment into service. The Town of Springer appears to have an issue with sludge disposal. On this day, the digester is nonfunctional. The STM-aerotator basin along with the clarifier smells and appears to be septic. Because the digester is nonfunctional, all the return activated sludge (RAS) continues to be pumped back to the STM- aerotator basin. There is no timeframe when the digester

may be placed back into service. There was also the appearance of floating sludge on both the STM-aerotor and the clarifier.

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Daniel Valenta	Date: 04-18-2013	Time: 1339 Hours
City/County: Town of Springer / Colfax County		State: New Mexico
Location: Town of Springer WWTP		
Subject: STM – Aerotor – the fixed film on aerotor is black in color.		



**NMED/SWQB
Official Photograph Log
Photo # 2**

Photographer: Daniel Valenta	Date: 04-18-2013	Time: 1340 Hours
City/County: Town of Springer / Colfax County		State: New Mexico
Location: Town of Springer Wastewater Treatment Plant		
Subject: Clarifier – floating sludge, color is black		



NMED/SWQB
Official Photograph Log
Photo # 3

Photographer: Daniel Valenta	Date: 04-13-2013	Time: 1414 Hours
City/County: Town of Springer / Colfax County		State: New Mexico
Location: Town of Springer Wastewater Treatment Plant		
Subject: Lagoon ponds – break in pond. Please note the absence of any free board on either pond.		



NMED/SWQB
Official Photograph Log
Photo # 4

Photographer: Daniel Valenta	Date: 04-18-2013	Time: 1415 Hours
City/County: Town of Springer / Colfax County		State: New Mexico
Location: Town of Springer Wastewater Treatment Plant		
Subject: Close of view of overflow from pond. There is an appearance of algae already growing in the overflow.		



NMED/SWQB
Official Photograph Log
Photo # 5

Photographer: Daniel Valenta	Date: 04-18-2013	Time: 1412 Hours
City/County: Town of Springer / Colfax County		State: New Mexico
Location: Town of Springer Wastewater Treatment Plant		
Subject: Area adjacent to the overflow		

