NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

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DAVE MARTIN
Secretary

RAJ SOLOMON, P.E.
Deputy Secretary

Certified Mail - Return Receipt Requested

May 23, 2011

The Honorable Danny J. Cruz, Mayor
Town of Springer
606 Colbert Avenue
P.O. Box 488
Springer, New Mexico 87747

RE: Minor Non-Municipal, SIC 4941, NPDES Compliance Evaluation Inspection, Town of Springer Water Treatment Plant, NM0030627, May 5, 2011

Dear Mayor 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 checklist and 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 to 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

I appreciate the cooperation of Ms. Laura Danielson, Town of Springer, Water Supervisor during the inspection. If you have any questions about this inspection report, please contact me at 505-827-0418.

Sincerely,

/s/ Erin S. Trujillo

Erin S. Trujillo
Surface Water Quality Bureau

cc: Marcia Gail Adams, USEPA (6EN-AS) by e-mail
Samuel Tates, EPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Larry Giglio, USEPA (6WQ-PP) by e-mail
Robert Italiano, NMED District II, 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 3 0 6 2 7 11	12 1 1 0 5 0 5 17	18 C	19 S 20	2

Remarks: S P R I N G E R W A T E R T R E A T M E N T

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
67 69	70 1	71 N 72	N 73 74	75 M I N 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)*	Entry Time /Date	Permit Effective Date
Town of Springer, Water Treatment Plant, 128 NM Hwy 468, Springer, New Mexico. From I-25, take Exit 412, continue 0.9 miles on Maxwell Ave, then 0.3 Miles on Railroad Ave, turn west on NM 468, travel 1.9 miles, turn north on access road, facility on right. Colfax County	**1000 hours / 05/05/2011**	October 1, 2007
	Exit Time/Date **1230 hours / 05/05/2011**	Permit Expiration Date September 30, 2012

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Laura Danielson / Town of Springer, Water Supervisor / 575-483-2682, tos_water@yahoo.com

Name, Address of Responsible Official/Title/Phone and Fax Number
Danny J. Cruz, Town of Springer, 606 Colbert Avenue, P.O. Box 488, Springer, New Mexico 87747 / Mayor / 575-483-2682 and fax 575-483-2910 / mayorcruz@hotmail.com

Contacted: Yes [ ] No [*]

Other Facility Data
Outfall 001
Latitude N. 36.392030°
Longitude W. -104.615260°

SIC 4941

Section C: Areas Evaluated During Inspection

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

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

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

1. **SEE ATTACHED CHECKLIST REPORT WITH FURTHER EXPLANATIONS AND PHOTO LOG.**

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Erin S. Trujillo ***/s/ Erin S. Trujillo***	**NMED/SWQB/505-827-0418**	**05/23/2011**
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
Richard E. Powell ***/s/ Richard E. Powell***	**NMED/SWQB/505-827-2798**	**05/23/2011**

Town of Springer Water Treatment Plant – May 5, 2011	PERMIT NO. **NM0030627**

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS ☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED* ***Yes***)
DETAILS: **Permittee name is Town of Springer as indicated on their application; not City of Springer as indicated on permit.**

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE **See notes above.**	☐ Y ☒ N ☐ NA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES **See further explanations.**	☐ Y ☒ N ☐ NA
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT	☒ Y ☐ N ☐ NA
4. ALL DISCHARGES ARE PERMITTED**. See further explanations.**	☐ 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. **Al and Ni results not consistent w/DMR.**	☐ 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 **pH and TRC**	☐ Y ☒ N ☐ NA
d) RESULTS OF ANALYSES AND CALIBRATIONS. **No pH and TRC calibration data on day of this inspection.**	☐ 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. **No records on day of inspection**	☐ S ☐ M ☒ U ☐ NA
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR. **No documentation of spills or emergency overflows**	☐ 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: **Pond was shallow and accumulated solids needed to be removed (typically conducted once a year in May according to on-site representative).**

1. TREATMENT UNITS PROPERLY OPERATED. **Backwash pond**	☐ S ☒ M ☐ U ☐ NA
2. TREATMENT UNITS PROPERLY MAINTAINED. **See notes above.**	☐ S ☒ M ☐ U ☐ NA
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED .	☒ S ☐ M ☐ U ☐ NA
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.	☒ S ☐ M ☐ U ☐ NA
5. ALL NEEDED TREATMENT UNITS IN SERVICE	☒ S ☐ M ☐ U ☐ NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. **Two certified water operators (Level 3 & 4)**	☒ S ☐ M ☐ U ☐ NA
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. **No written lab supply inventory.**	☐ S ☒ M ☐ U ☐ NA
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. **O&M manuals and written backwash instructions**	☒ Y ☐ N ☐ NA
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. **Repeat finding.**	☐ Y ☒ N ☐ NA
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. **Repeat finding.**	☐ Y ☒ N ☐ NA

Town of Springer Water Treatment Plant – May 5, 2011	PERMIT NO. **NM0030627**

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. **No documentation that WET 24-hr composite flow weighted samples were obtain.** ☐ Y ☒ N ☐ NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT. **WET** ☐ Y ☒ N ☐ NA

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

6. SAMPLE COLLECTION PROCEDURES ADEQUATE. **No written procedures.** ☐ Y ☒ N ☐ NA

a) SAMPLES REFRIGERATED DURING COMPOSITING. **No documentation of WET samples cooled 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? **pH monitored more frequently** ☒ Y ☐ N ☐ NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. ☐ S ☒ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED* ***Yes*** *)*
DETAILS**: "Estimate" flow measurements not subject to accuracy provisions in Part III.C.6. Meter attached to inflow backwash flush line. Emergency overflow volume to backwash pond not recorded.**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. ☒ Y ☐ N ☐ NA
TYPE OF DEVICE **Sparling Tigermag (Magnetic Flow Meter)**

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. **See above notes.** ☐ 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. **Emergency overflows = No Equipment/No Recorded Estimate Backwash = Y** ☐ Y ☐ N ☐ NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. ☐ S ☐ M ☒ U ☐ NA *(FURTHER EXPLANATION ATTACHED* ***Yes*** *)*
DETAILS**: pH and TRC conducted on-site. Commercial laboratories not inspected.**
Only 1 buffer used for instrument check.

1. EPA APPROVED ANALYTICAL PROCEDURES USED. *(40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)* **pH** ☐ Y ☒ N ☐ NA

Town of Springer Water Treatment Plant – May 5, 2011	PERMIT NO. **NM0030627**

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED. **pH** ☐ Y ☒ N ☐ NA

3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. **pH & TRC not documented** ☐ S ☐ M ☒ U ☐ NA

4. QUALITY CONTROL PROCEDURES ADEQUATE. **No written procedures—Repeat finding.** ☐ S ☐ M ☒ U ☐ NA

5. DUPLICATE SAMPLES ARE ANALYZED. **Lab duplicates for TSS = 100%. Field duplicates for pH, TRC, TSS = 0 %** % OF THE TIME. ☐ Y ☒ N ☐ NA

6. SPIKED SAMPLES ARE ANALYZED. **TRC = 0** % OF THE TIME. **Repeat finding. Commercial labs not inspected.** ☐ Y ☒ N ☐ NA

7. COMMERCIAL LABORATORY USED. ☒ Y ☐ N ☐ NA

LAB NAME **1) Hall Environmental Analysis Laboratory, Inc. / 4901 Hawkins NE, Ste D, Albuq, NM 87109 / Metals**
LAB ADDRESS **2) City of Raton WWTP / P.O. Box 99, Raton, NM 87740 / TSS**
PARAMETERS PERFORMED **3) Bio-Aquatic Testing, Inc. / 2501 Mayes Rd. Ste. 100, Carrollton, TX 75006 / WET**

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	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**No discharge**

RECEIVING WATER OBSERVATIONS: **Unnamed tributary and Cimarron River (off-site) not inspected. See further explanations for exceedances of permit effluent limits.**

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☐ S ☐ M ☐ U ☒ NA *(FURTHER EXPLANATION ATTACHED **No**).*
DETAILS: **No sewage sludge—See Section C (O&M) for notes on accumulated solids in backwash.**

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 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 Water Treatment Plant
NPDES Permit No. NM0030627
Compliance Evaluation Inspection
May 5, 2011

Further Explanations

Introduction

On May 5, 2011, Erin Trujillo, accompanied by Daniel Valenta, both of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Town of Springer Water Treatment Plant (WTP) at 128 NM Hwy 468, Springer, New Mexico in Colfax County, New Mexico. The WTP has a design flow of 0.280 million gallons per day (MGD) and is classified as a minor industrial 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 NM0030627, which regulates discharge of treated backwash water from outfall 001 to an unnamed tributary, thence 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 each year for the U.S. Environmental Protection Agency (USEPA), Region VI. The purpose of this inspection is to provide the USEPA with information to evaluate the Permittee's compliance with the NPDES permit. This inspection report is based on information provided by the Permittee's representative, observations made by the NMED inspectors, and records and reports kept by the Permittee and/or NMED.

Upon arrival at the WTP at approximately 1000 hours, the inspector made introductions and stated the purpose of the inspection to Ms. Laura Danielson, Town of Springer, Water Supervisor who was leaving the facility. Upon Ms. Danielson's return from the Town's office at approximately 1030 hours, the inspector presented credentials and further explained the purpose of the inspection. The inspectors toured the facility with Ms. Danielson. Preliminary findings were discussed with Ms. Danielson during the inspection. The inspection at the WTP ended at approximately 1230 hours on May 5, 2011. Additional information was obtained from Ms. Danielson on May 11, 2011 by telephone. Mr. Danny J. Cruz, Mayor, Town of Springer was not available on the day of the inspection.

Treatment Scheme

The Town of Springer WTP treats surface water from two reservoirs. The facility serves a population of approximately 1,285 (2000 Census) and the Springer Correctional Facility (inmate population of 300). Overflows from the upper reservoir drain via a spillway into the lower reservoir from which raw water is drawn for treatment. The lower reservoir also has a spill way and associated drainage ditch leading toward the unnamed tributary south of the facility. The dams are currently subject to a New Mexico Office of the State Engineer order limiting storage in the reservoirs. Re-construction of the reservoirs and lower spill way is planned in 2012 depending upon funding.

Copper sulfate to control algae for taste and odor control is used in the reservoirs in the warmer months (June, July, August and sometimes September). Approximately 75 pounds of Copper sulfate per month (3-4 months a year) is broadcast into each reservoir according to the Permittee's on-site representative.

Raw water from the lower reservoir flows via gravity to a pump station and sent to the enclosed treatment plant. Raw water is treated by two Tonka package plants rated at 525,600 gallons per day each. Treatment processes are conventional and include coagulation, flocculation, sedimentation, filtration, and

disinfection. The treatment scheme primarily consists of chemical injection followed by two parallel package units, each compartmentalized into two flocculation chambers, sedimentation basin, and multi-media filter. Depending on water demand or maintenance schedule, one or both of the package units may be placed into service at any time. Following filtration through the multi-media unit, water is disinfected with a mixed oxidant (MIOX) disinfecting solution before distribution to the municipal drinking water supply system.

At the head of the plant, aluminum sulfate and cationic polymer (Poly Diallyldimethylammonium Chloride or pDADMAC) are injected into the raw water within the intake pipes and then flashed mixed. Iron sulfate is no longer used for drinking water treatment. Water flows into the flocculation chamber where horizontal paddle wheel mixers enhance the coagulation-flocculation process. Following the flocculation chamber, flow enters the sedimentation basin and is thrust up through tube settlers. The upward movement of water through the tube settlers allows each tube to function as a small settling basin. From the sedimentation basin, water enters a multi-media filtration unit for removal of remaining suspended solids. Filter backwashing begins automatically at pre-set intervals based on continuously monitored effluent turbidity levels. The operator may also manually backwash the filter media. Finished (potable water) is used to backwash the filters. Backwash water is flushed to a detention pond (backwash pond) located adjacent to the treatment building.

Prior to disinfection, emergency overflows from the package plant also flow to the backwash pond. The Permittee's on-site representative estimated that overflows were approximately 5,000 gallons per year. Floor drains inside the treatment plant also flow to the backwash pond. Based on information from the Permittee's on-site representative, there have been spills inside the plant, but the operator did not believe that chemical spills entered the backwash pond.

The dimensions of the backwash pond are approximately 60 feet by 40 feet. The backwash pond is excavated yearly according to the Permittee's on-site representative. Solids are allowed to dry on the banks of the backwash pond, then placed in a drum for storage on site. An outlet pipe installed near the top of the detention pond decants and conveys wastewater to Outfall 001 located approximately 400 feet down gradient from the pond. There was no discharge from Outfall 001 during this inspection. The flow path from the outfall continued toward an off-site stock pond and irrigation ditch above the unnamed tributary to the Cimarron River approximately 1 mile south of the facility.

Section A - Permit Verification – Overall Rating of "M = Marginal"

Permit Requirements for Permit Verification

Part III.D.9 (Standard Conditions, Reporting Requirements, Other Information) of the permit states:

> *Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.*

Findings for Permit Verification

The facility's permit applications in NMED SWQB files did not list all possible sources of pollutants or flow (Copper sulfate, overflows prior to disinfection, and the potential for chemical spills to enter floor drains) to the backwash pond then Outfall 001. It is unknown if these additional sources would significantly change the nature or increase the quantity of pollutants discharged. The Permittee would need to contact USEPA Region 6 Permit Branch to submit additional information not on the permit application.

Section B - Recordkeeping and Reporting Evaluation – Overall Rating of "U = Unsatisfactory" and Section G – Effluent – Overall Rating of "U = Unsatisfactory"

Permit Requirements for Effluent Limitations, Recordkeeping and Reporting

Effluent limitations for pH, total residual chlorine (TRC), total suspended solids (TSS), total Aluminum, total Nickel and total Zinc are in Part I.A of the permit.

Part III.C.3 (Standard Conditions, Retention of Records) of the permit states:

> *The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.*

Part III.C.4 (Standard Conditions, Record Contents) of the permit states:

> *Records of monitoring information shall include:*
> *a. The date, exact place, and time of sampling or measurements;*
> *b. The individual(s) who performed the sampling or 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; and*
> *f. The results of such analyses.*

Part III.C.5.b (Standard Conditions, Monitoring Procedures) of the permit states:

> *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.*

Part II.A (Other Conditions, Minimum Quantification Level (MQL)) of the permit states:

> *If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.*

	MQL (µg/L)
Aluminum	*100*
Nickel (Total)	*5*
Zinc (Total)	*20*

Part II.C (24-Hour Oral Reporting: Daily Maximum Limitation Violations) of the permit states:

> *Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, and concurrently to NMED within 24 hours from the time the permittee becomes aware of the violation followed by a written report in five days.*

Aluminum *Nickel (Total)* *Zinc (Total)*

Part III.D.4 (Standard Conditions, Discharge Monitoring Reports) of the permit states:

> *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.… Duplicate copies of DMR's and all other reports shall be submitted to the appropriate State agency…*

Part III.D.7.a (Standard Conditions, Twenty-Four Hour Reporting) of the permit states:

> *…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 its cause; (2) The period of noncompliance 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.*

Part III.D.8 (Standard Conditions, Other Noncompliance) of the permit states:

> *The permittee shall report all instances of noncompliance not reported under Parts III.D.4 and D.7 and Part I.B (for industrial permits only) at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.7.*

Findings for Recordkeeping and Reporting

Incorrect and unreadable data was reported on DMRs (see Table 1 and 2). For example, Aluminum analytical test results reported on the DMRs in micrograms per liter (µg/L) were incorrect. Aluminum analytical test reports reported on DMRs in mg/L were correct, but the number of exceedances of effluent limitations was often not correctly reported. Nickel analytical test results were incorrectly reported as zero (0) on the May and June 2009 DMRs. For samples collected in May, June and July 2010, the analytical test results for Nickel were non-detect at a Practical Quantitation Level or detection limit of 0.010 mg/L. The detection limit for Nickel was not less than the MQL for Nickel (i.e., 5 µg/L or 0.005 mg/L).

USEPA Region 6 has sent letters dated January 3, 2007; April 3, 2007; February 9, 2009; and May 1, 2009 to the Permittee for not submitting data or DMRs. For the May and June 2010 DMRs, the monitoring period was incorrect as discussed in USEPA Region 6 letter dated August 24, 2010 which stated, "*Please submit revised May and June 2010 DMRs with an original signature within (5) days of receipt of this letter.*" NMED SWQB files do not contain documentation that these DMRs were corrected and resubmitted. NMED SWQB has still not received a May 2006 DMR under the previous permit. USEPA Region 6 received a DMR, but did not received the TRC data for May 2006 (USEPA Region 6 letter dated April 3, 2007).

Given mistakes in converting units of measurement, detection limits would need to be checked by the Permittee prior to reporting zero (0) on corrected DMRs. Units of measurement should also be confimed. Revised or corrected paper DMRs require an original authorized signature, date of signature on each page, and the word **REVISED** should be clearly visible on each page of the form.

For the four (4) TSS exceedances reported on DMRs, NMED SWQB files do not contain documentation of the Permittee's non-compliance reports. For the three (3) Aluminum exceedances reported on DMRs, NMED SWQB files do not contain documentation of the Permittee's 24-hour oral reporting of daily maximum limitation violations or required written reports. Pollutant concentrations and/or the number of Aluminum exceedances of effluent limitations have been under reported on DMRs (see Table 2).

Table 1: Summary of Reported pH, TSS, Nickel and Zinc Data on DMRs since Permit Effective Date

	pH	pH	TSS	TSS	Ni	Ni	Zn	Zn	Comments
	Min	Max	30 Day Ave	Daily Max	30 Day Ave	Daily Max	30 Day Ave	Daily Max	
Limit	6.60	9.00	20	30	3.07	4.60	1.30	2.00	
Units	s.u.	s.u.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Mar-11	8.0	8.1	8.9	17.2	0	0	0	0	
Feb-11	8.0	8.0	4.0	4.6	0	0	0.024	0.024	
Jan-11	7.8	8.0	12.3	21.6	0	0	0.023	0.023	
Dec-10	7.8	7.9	7.3	18.5	0	0	0	0	
Nov-10	7.8	7.9	3.3	3.4	0	0	0	0	
Oct-10	7.9	8.0	3.7	5.1	0	0	0	0	
Sep-10	7.8	7.9	3.7	4.4	0	0	0.02	0.02	
Aug-10	7.7	7.8	5.5	6.1	0	0	0.03	0.03	
Jul-10	7.7	7.8	7.9	2.7					Footnote 1
Jun-10	7.9	8.0	4.7	8.0	0	0	0	0	Footnote 2
May-10	7.9	8.0	15.2	**34***	0	0	0	0	Footnote 2
Apr-10	7.9	8.0	8.4	15.2	0	0	0	0	
Mar-10	7.8	8.0	4.7	9.3	0	0	0	0	
Feb-10	7.9	7.9	4.8	6.5	0.0014	0.0014	0.012	0.012	
Jan-10	7.9	7.9	9.5	20.0	0	0	0	0	
Dec-09	7.9	7.9	4.1	5.9	0	0	0	0	
Nov-09	7.8	7.9	4.8	7.2	0	0	0	0	
Oct-09	7.9	8.0	4.6	**?**	0	0	0	0	Footnote 3
Sep-09	7.9	8.0	4.9	8.5	0	0	0.065	0.065	
Aug-09	7.8	7.9	6.9	15.1	0	0	0	0	
Jul-09	7.9	7.9	4.9	6.4	0	0	0	0	
Jun-09	7.8	7.9	13.9	**54.0***	0	0	0	0	
May-09	7.8	7.8	5.9	10.8	0	0	0	0	
Apr-09	7.8	7.8	13.6	**37.6***	0	0	0.011	0.011	
Mar-09	7.8	7.8	10.4	27.4	0	0	0	0	
Feb-09	7.8	7.8	10.4	12.4	0	0	0	0	
Jan-09	7.8	7.8			0	0	0	0	Footnote 1
Dec-08	7.8	7.8	9.8	13.6	0	0	0	0	
Nov-08	7.8	7.8	7.9	24.5	0	0	0.023	0.023	
Oct-08	7.8	7.9	1.2	33.3	0	0	0.17	0.17	
Sep-08	7.8	7.9	12.6	**30.7***	0.00597	0.00597	0.00296	0.00290	
Aug-08	7.8	7.9	7.6	16.9	0.017	0.017	0.356	0.036	
Jul-08	7.7	7.8	8.8	12.4	0.00555	0.00555	0.0266	0.0266	Footnote 4
Jun-08	7.7	7.8	8.8	12.4	0.00555	0.00555	0.0266	0.0266	Footnote 4
May-08	7.8	7.9	11.6	17.5	0	0	0	0	
Apr-08	7.7	7.8	10.0	11.8	0.00254	0.00254	0	0	
Mar-08	7.8	7.8	6.1	6.5	0.00581	0.00587	<0.005	<0.005	
Feb-08	7.8	7.8	4.7	9.0	0.00399	0.00399	MQL	MQL	
Jan-08	7.8	7.8	10.9	13.7	MQL	MQL	MQL	MQL	
Dec-07	7.7	7.8	9.74	18.3	0	0	0	0	
Nov-07	7.7	7.9	13.6	21.3	0	0	0	0	
Oct-07	7.0	7.8	11.5	27.4	0	0	0	0	

* Exceedance of Effluent Limitation

Table 1 Footnotes:

1) Missing data on DMR.
2) Nickel analytical test results were incorrectly reported as zero (0). Monitoring period was incorrect as discussed in USEPA Region 6 letter dated August 24, 2010.
3) TSS Daily Max was not legible (either 7.95 or 6.95 mg/L) on the DMR.
4) Data reported were identical indicating a possible error in reporting for one of the months.

Table 2: Summary of Aluminum data reported on DMRs, Actual Lab Results (Spot Checks), Corrected Conversions, and Possible Concentration since Permit Effective Date

	Reported			Actual Lab Result	Correct Conversion **	Possible Concentration based on reporting practices described by on-site representative and Comments	
	30 Day Ave	Daily Max	Units***	mg/L	µg/L	µg/L	
Limit	58	87	µg/L				
Mar-11	0	0		<0.020	<20 or Zero		
Feb-11	45	45	µg/L	0.45	**450***		Footnote 1 and 6
Jan-11	42	42	µg/L	0.42	**420***		Footnote 1 and 6
Dec-10	**110***	**110***	µg/L	1.1	**1,100***		Footnote 1
Nov-10	14	14	µg/L			140?	Footnote 2 and 7
Oct-10	0	0				?	Footnote 3
Sep-10	0	0				?	Footnote 3
Aug-10	0.1	0.1	mg/L	0.1	**100***		Footnote 6
Jul-10				1.1	**1,100***		Footnote 4 and 6
Jun-10	**70***	70	µg/L	0.70	**700***		Footnote 1
May-10	42	42	µg/L	0.42	**420***		Footnote 1 and 6
Apr-10	26	26	µg/L	0.26	**260***		Footnote 1 and 6
Mar-10	37	37	µg/L			370?	Footnote 2 and 7
Feb-10	0.15	0.15	mg/L		**150***		Footnote 6
Jan-10	0.02	0.02	mg/L		20		
Dec-09	8.3	8.3	µg/L			830?	Footnote 2 and 7
Nov-09	0.07	0.07	mg/L		**70***		Footnote 6
Oct-09	13	13	µg/L	0.13	**130***		Footnote 1 and 6
Sep-09	0.78	0.78	mg/L		**780***		Footnote 6
Aug-09	0	0				?	Footnote 3
Jul-09	0	0				?	Footnote 3
Jun-09	19	19	µg/L			190?	Footnote 2 and 7
May-09	37	37	µg/L			370?	Footnote 2 and 7
Apr-09	10.0	10.0	µg/L			100?	Footnote 2 and 7
Mar-09	0.082	0.082	mg/L		**82***		Footnote 6
Feb-09	0.069	0.069	mg/L		**69***		Footnote 6
Jan-09	0.28	0.28	mg/L		**280***		Footnote 6
Dec-08	0.29	0.29				290?	Footnote 5 and 8
Nov-08	0.044	0.044	mg/L		44		
Oct-08	10	10	µg/L			100?	Footnote 2 and 7
Sep-08	**84.8***	84.8	µg/L			848?	Footnote 1
Aug-08	0.128	0.128	mg/L		**128***		Footnote 6
Jul-08	1.08	1.08	mg/L			1080?	Footnote 5, 6 and 9

Jun-08	1.08	1.08	mg/L			1080?	Footnote 5, 6 and 9
May-08	1.08	1.08	mg/L			1080?	Footnote 5, 6 and 9
Apr-08	0.292	0.292				292?	Footnote 7 and 8
Mar-08	1.17	1.17	mg/L		**1170***		Footnote 6
Feb-08	21.2	21.2	µg/L			212?	Footnote 2 and 7
Jan-08	12.3	12.3	µg/L			123?	Footnote 2 and 7
Dec-07	6	6				?	Footnote 5 and 8
Nov-07	0	0				?	Footnote 3
Oct-07	1.98	1.98				1980?	Footnote 2 and 7

* Exceedance of Effluent Limitation (30 DA AVE and/or Daily Max)

** The correct conversion for laboratory results in mg/L to µg/L is 1 mg/L equals 1,000 µg/L. Based on verbal information from the Permittee's on-site representative, analytical results in mg/L were incorrectly multiplied by 100 for reporting purposes.

*** Reported units of measurement in Table 2 is based on information on the Permittee's DMRs that was often not clearly legible.

Table 2 Footnotes:

1) Reported data incorrect.
2) Reported data suspected to be incorrect.
3) Permittee should confirm detection limit.
4) Data not reported.
5) Permittee needs to confirm data.
6) Exceedance not reported, No. of Exceedances left blank, or not correctly reported.
7) Exceedance likely, but Permittee should confirm.
8) Units of measurement not reported.
9) Data reported were identical indicating a possible error in reporting for one of the months.

Monitoring Records

Sampling and analyses data reported were inadequate and did not include analytical techniques or methods used. Results of initial standardization (testing of a known pH buffer prior to monitoring) was not recorded on bench sheets.

Laboratory equipment calibration and maintenance records for pH and TRC did not exist on the day of this inspection. Three years of calibration and maintenance records contained in log book were accidently destroyed (dropped in MIOX tank) four days before this inspection according to the Permittee's on-site representative. No back up or other operator records for this information was provided during this inspection. Bottles with expired pH buffers were on the facility's laboratory bench. The Permittee's on-site representative stated that expired buffers were not used for effluent testing. There was no written documentation or other indication on the label that the expired buffers were not intended for compliance monitoring.

Plant Records

Plant records did not include schedules, dates of equipment maintenance and repair. In this case, there was no written documentation of overflows (e.g., actual dates, estimated flow amounts), spills (e.g., dates, spill material, estimated amount, clean-up activities, likelihood of spills entering backwash ponds), or pond maintenance according to the Permittee's on-site representative.

Section C - Operations and Maintenance – Overall Rating of "M = Marginal"

Permit Requirements for Operations and Maintenance

Part III.B.3.b (Standard Conditions, Proper Operation and Maintenance) of the permit states:

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

Part III.B.6 (Standard Conditions, Removed Substances) of the permit states:

> *Unless otherwise authorized, solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.*

Findings for Operation and Maintenance

The facility still did not have written standard operating procedures and emergency treatment controls. There were still no written Best Management practices (BMPs) for cleaning out the pond to prevent solids from being carried by stormwater away from the pond and entering the Canadian River watershed as discussed in the previous inspection report.

More frequent maintenance of the treatment sedimentation backwash pond (cleaning out accumulated solids and proper disposal) appeared needed on the day of this inspection (see photo log). Because of the exceedances of TSS and Aluminum effluent limitations previously discussed, a review of the treatment system (e.g., maintenance schedules, drying solids on the banks, backwash pond dimensions, emergency overflow influences, etc.) appears needed.

It does not appear that there is sufficient staffing to allow the certified operators to document the operation, maintenance and testing functions as discussed in Sections B, D, G and L of this report to insure compliance with the conditions of this permit.

Section D - Self-Monitoring – Overall Rating of "U = Unsatisfactory" and
Section F – Laboratory – Overall Rating of "U = Unsatisfactory"

Permit Requirements for Self-Monitoring

Monitoring requirements are in Part I.A (Requirements for NPDES Permits, Limitations and Monitoring Requirements) and Part II.D (Whole Effluent Toxicity Testing) of the permit.

Permit Requirements for Laboratory

Part III.C.5 (Standard Conditions, Monitoring Procedures) of the permit states:

> *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.

Findings for Self-Monitoring and Laboratory

The facility did not have written sample collection procedures. There was no documentation that a WET 24-hour composite flow portioned sample was obtained. There was no documentation that samples collected for WET monitoring were refrigerated during compositing.

There were no written quality control procedures. No spiked samples were analyzed to determine analytical precision and accuracy of on-site TRC testing according to the Permittee's on-site representative. Duplicate samples (two samples taken at the same time from one location) was not documented for pH, TRC or TSS monitoring. The Permittee's on-site representative stated that duplicates of metals had been collected and submitted for analysis in the past. EPA's NPDES Inspection Manual states, "10 percent of the samples should be duplicated."

The facility did not have a copy of USEPA approved analytical procedures for on-site pH and TRC monitoring.

Effluent analytical monitoring for pH was not in accordance with approved USEPA procedures. Proper approval for alternative analytical procedures was not obtained. The Permittee's on-site representative stated that a three buffer calibration was conducted once a week, but only one buffer (pH 7) was used for instrument standardization prior to sample analysis. Standard Methods 4500-H+ B requires a three buffer standardization to adjust the response of the glass electrode prior to sample analysis. The three buffer standardization includes an initial buffer solution; second buffer within 2 pH units of sample pH; and third buffer below pH 10, approximately 3 pH units different from the second. SM 4500-H+ B states, *"When only occasional pH measurements are made standardize instrument before each measurement."*

There was no written documentation of the expiration date of the reagent in the facility's DPD Total Chlorine SwifTest™ Dispenser. The Permittee's on-site representative stated that the dispenser with a label indicating that the reagent had expired in December of 2009 had been re-filled with reagent from another dispenser that had broken. There was no written documentation provided (e.g., billing statement, log entry, bench sheet annotation, handwritten expiration date on bottle, broken dispenser with expiration date on the label) to confirm or record the expiration date of the reagent being used for analytical testing.

It was noted that laboratory techniques used for blanks and prepared samples for TRC described by the Permittee's on-site representative did not follow instrument instructions. Excerpts from instructions for using the facility's Hach Pocket Colorimeter II, Chlorine mg/L CL_2 available at http://www.hach.com/fmmimghach?/CODE%3A5957088_ED520969%7C1 indicate that separate cells are to be used for the sample blank and the prepared sample. The Permittee's on-site representative described practices where the same cell is used for both the sample blank and prepared sample cell.

WET testing was not conducted for the critical dilution or dilution series required in the permit. Part II.D of the permit requires a critical dilution of 100% and the effluent dilution series is 32%, 42%, 56%, 75% and 100%. A review of the Bio-Aquatic Testing WET reported dated April 28, 2009 indicates a critical dilution of 75% was used for reporting purposes and that *"[f]ive effluent concentrations of 31%, 42%, 56%, 74% and 99% were prepared"* for the test species.

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Erin S. Trujillo	Date: 05/05/2011	Time: 1035 hours
City/County: Springer / Colfax County		State: New Mexico
Location: Town of Springer Water Treatment Plant (NPDES Permit #NM0030627)		
Subject: Backwash pond		

NMED/SWQB
Official Photograph Log
Photo # 2

Photographer: Erin S. Trujillo	Date: 05/05/2011	Time: 1040 hours
City/County: Springer / Colfax County		State: New Mexico
Location: Town of Springer Water Treatment Plant (NPDES Permit #NM0030627)		
Subject: Accumulated sediments in backwash bond. Arrow points to inflow pipe below the shallow water level.		

NMED/SWQB
Official Photograph Log
Photo # 3

Photographer: Erin S. Trujillo	Date: 05/05/2011	Time: 1040 hours
City/County: Springer / Colfax County		State: New Mexico
Location: Town of Springer Water Treatment Plant (NPDES Permit #NM0030627)		
Subject: Accumulated sediments in backwash bond. Arrow points to pond outflow pipe above shallow water level.		