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Surface Water Quality Bureau

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DAVE MARTIN
Secretary

BUTCH TONGATE
Acting Deputy
Secretary

Certified Mail - Return Receipt Requested

October 21, 2011

Reeves McGuire, General Manager
CDS Rainmakers Utilities, LLC
P.O. Box 1128
Alto, New Mexico 88312

RE: Minor Non-Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, Property Owners' Committee Of Rancho Ruidoso Valley Estates, Inc. (CDS Rainmakers Utilities, LLC) / Rancho Ruidoso Valley Estates WWTP, NM0029238, September 20, 2011

Dear Mr. McGuire:

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 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 Weston (Wes) Laymon, Operator, CDS Rainmakers Utilities, LLC, 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 Bates, EPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Sonia Hall, USEPA (6EN-WC) and Hannah Branning, USEPA (6EN-WC) by e-mail
Larry Giglio, USEPA (6WQ-PP) by e-mail
Mike Kessler, NMED District III Acting Manager by e-mail



Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
1 N 2 5 3 N M 0 0 2 9 2 3 8 11 12 1 1 0 9 2 0 17 18 C 19 S 20 2					
Remarks					
W A S T E W A T E R T R E A T M E N T P L A N T					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 2	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) Rancho Ruidoso Valley Estates Waste Water Treatment Plant (WWTP) at intersection of Custer's Last Stand Road and Little Creek Road, approx. 8 mi N of Ruidoso, NM. From NM 48, turn east on NM 222, travel 4 miles, turn south on CR D003, turn south on Little Creek Road, pass condos, travel 2.5 mi to facility on left. Lincoln County	Entry Time /Date 0815 hours / 09/20/2011	Permit Effective Date April 1, 2007
	Exit Time/Date 1130 hours / 09/20/2011	Permit Expiration Date March 31, 2012
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Weston (Wes) Laymon, Operator, CDS Rainmakers Utilities, LLC / 575-336-4488, cell 937-6362	Other Facility Data Outfall 001 Latitude N. 33.422890° Longitude W. -105.574261° SIC 4952	
Name, Address of Responsible Official/Title/Phone and Fax Number Reeves McGuire, CDS Rainmakers Utilities, LLC*, P.O. Box 1128, Alto, New Mexico 88312-1231 / General Manager / 575-336-7500 and fax 575-336-4486	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Section C: Areas Evaluated During Inspection

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

M	Permit	M	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
U	Records/Reports	U	Self-Monitoring Program	S	Sludge Handling/Disposal	N	Pollution Prevention
S	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.

* As of the writing of this report, the permittee has not changed from Property Owners' Committee Of Rancho Ruidoso Valley Estates, Inc. to CDS Rainmakers Utilities, LLLC. The permit authorizes the former owners, Property Owners Committee of Rancho Ruidoso Valley Estates, Inc. to discharge treated sanitary wastewater to outfall 001. CDS Rainmakers Utilities, LLC (CDS's), a Utah Limited Liability Company incorporated in the State of New Mexico since June 20, 2001, operates the WWTP. "[O]n April 1, 2011 CDS Rainmakers Utilities, LLC acquired the RRVE WWTP" according to CDS's transfer request letter received by USEPA 6EN-W on April 27, 2011. USEPA Region 6 mailed the Administrative Order CWA-06-2011-1811 dated June 21, 2011 and Notice of Proposed Assessment of Class I Civil Penalty dated June 20, 2011 issued to Property Owners' Committee Of Rancho Ruidoso Valley Estates, Inc to CDS.

Name(s) and Signature(s) of Inspector(s) Erin S. Trujillo /s/ Erin S. Trujillo	Agency/Office/Telephone/Fax NMED/SWQB/505-827-0418	Date 10/21/2011
Signature of Management QA Reviewer Richard E. Powell /s/ Richard E. Powell	Agency/Office/Phone and Fax Numbers NMED/SWQB/505-827-2798	Date 10/21/2011

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS S M U NA (FURTHER EXPLANATION ATTACHED Yes)DETAILS: **Renewal application will be due 180 days (10/03/2011) prior to permit expiration date.**1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE **CDS acquired RRVE WWTP.** Y N NA2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES **Chlorine used for algal control.** Y N NA3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT Y N NA4. 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: **Reviewed DMRs after November 2008 (received after previous inspection on 03/12/2009).**1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs. **See Table 1** Y N NA2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE. S M U NAa) DATES, TIME(S) AND LOCATION(S) OF SAMPLING Y N NAb) NAME OF INDIVIDUAL PERFORMING SAMPLING Y N NAc) ANALYTICAL METHODS AND TECHNIQUES. Y N NAd) RESULTS OF ANALYSES AND CALIBRATIONS. Y N NAe) DATES AND TIMES OF ANALYSES. Y N NAf) NAME OF PERSON(S) PERFORMING ANALYSES. Y N NA3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE. **pH Not Documented** S M U NA4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR. **Daily Operational Logs** S M U NA5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA. **BOD5 and TSS** Y N NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. S M U NA (FURTHER EXPLANATION ATTACHED Yes)DETAILS: **WAS removal/disposal was to be scheduled according to on-site representative. No written backup disinfection procedures. Back up flow meter not working according to on-site representative.**1. TREATMENT UNITS PROPERLY OPERATED. S M U NA2. TREATMENT UNITS PROPERLY MAINTAINED. S M U NA3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED. **Generator rented when needed, but on-site generator was not operational** S M U NA4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. S M U NA5. ALL NEEDED TREATMENT UNITS IN SERVICE S M U NA6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. **One operator w/contact backup as needed** S M U NA7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. **But, no written inventory. See above (flow meter).** S M U NA8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. Y N NASTANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. **Specifications/Some Written Procedures** Y N NAPROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. **No written emergency procedures** 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 Yes).
 DETAILS: **WET testing (1/permit term) had not been conducted as of the date of this inspection.**

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. **Composite samples for WET not conducted.** 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. **Composite samples for WET not conducted.** Y N NA

b) PROPER PRESERVATION TECHNIQUES USED. **Not documented/records not readily available 04, 05, 06/2011.** Y N NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3. **Not documented.** 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? **Reviewed April 2011 (E.coli)** Y N NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED Yes)
 DETAILS: **No factory or other calibration records available.**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE **Invensys 1-1/2" to 2" PMM Series Totalizing Meter**

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

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

4. CALIBRATION FREQUENCY ADEQUATE. Y N NA
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES . Y N NA
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE. . Y N NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. Y N NA

6. HEAD MEASURED AT PROPER LOCATION. Y N NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES. Y N NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED Yes)
 DETAILS: **Contract laboratory not inspected. pH monitored on-site. TRC required if chlorine used for disinfection.**

BOD not approved method

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES) **pH (2, not required 3 buffers)** 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. **pH (expired buffers)** S M U NA
4. QUALITY CONTROL PROCEDURES ADEQUATE. **No copies of approved methods. See further explanations.** S M U NA
Duplicate pH samples are occasionally analyzed
5. DUPLICATE SAMPLES ARE ANALYZED. _____% OF THE TIME. **by different operators.** Y N NA
6. SPIKED SAMPLES ARE ANALYZED. _____% OF THE TIME. **Not documented** Y N NA
7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME **1) Aqua Environmental Testing Laboratory** **2) Not Contracted Yet**
 LAB ADDRESS **HC 71 Box 1178, Angus, New Mexico, 575-336-1107**
 PARAMETERS PERFORMED **BOD, TSS and E.coli Bacteria** **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	No	No	No	No	Clear	No

RECEIVING WATER OBSERVATIONS: **Above the outfall, Little Creek was not flowing on the day of this inspection. Effluent flow in Little Creek was clear. Effluent limit exceedances in Table 1.**

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED **No**).

DETAILS: **Contracted sewage sludge facility not inspected.**

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

**Rancho Ruidoso Valley Estates WWTP
NPDES Permit No NM0029238
Compliance Evaluation Inspection
September 20, 2011**

Further Explanations

Introduction

On September 20, 2011, Erin Trujillo of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Rancho Ruidoso Valley Estates Waste Water Treatment Plant (WWTP) northeast of Alto in Lincoln County, New Mexico. The facility treats domestic sewage from a housing development and has a design flow capacity of 0.04 MGD (million gallons per day). The facility 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 NM0029238 which regulates discharge of treated effluent from outfall 001 to Little Creek, thence to Eagle Creek, thence to the Rio Ruidoso (Rio Bonito to US Hwy 70 Bridge) in Segment 20.6.4.208 State of New Mexico Standards for Interstate and Intrastate Surface Waters, New Mexico Administrative Code (NMAC).

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 representatives, observations made by the NMED inspectors, and records and reports kept by the Permittee and/or NMED.

Upon the inspector's arrival at the WWTP at approximately 0815 hours on the day of this inspection, Reeves McGuire, General Manager, CDS Rainmakers Utilities, LLC was contacted by telephone to explain the purpose of the inspection. The inspector made introductions, presented credentials and explained the purpose of the inspection to Weston (Wes) Laymon, Operator, CDS Rainmakers Utilities, LLC upon his arrival. The inspector and Mr. Laymon toured the plant. Following the inspection, an exit interview to discuss preliminary findings was conducted with Mr. Laymon at CDS Rainmakers Utilities, LLC offices. The inspector left the facility at approximately 1130 hours on the day of this inspection.

Treatment Scheme

Rancho Ruidoso Valley Estates WWTP, constructed 1983, serves approximately 250 connections from Rancho Ruidoso Valley Estates Subdivision, including condominiums, and Rainmakers Golf Community. The Golf Club includes one small restaurant (snack bar).

The treatment process consists of an extended aeration activated sludge system with de-nitrification. Raw sewage gravity flows through the collection system and enters a single lift station that pumps influent into the plant headworks. The lift station is equipped with a high level alarm and Sensaphone call-back system. A magnetic flow meter is installed at the headworks. A wire basket and aluminum bar screen (1-inch gaps) collects solids at the headworks. The headworks includes a drying deck for debris. Collected grit and solids are placed in lined trash container, transported to a dumpster at the Rainmakers offices for disposal by Lincoln County Solid Waste Authority.

After the headworks, wastewater flows sequentially through seven aeration basins before entering a de-nitrification tank followed by an aeration tank. The facility has two blowers (one on duty, one on standby). The facility has a back up generator, but it is not operational. During recent fires in 2011 when the power went out, a back up generator was rented to run the plant.

Following the aeration tank, wastewater is sent through a splitter box into two separate clarifiers. Sludge collected in the clarifiers is routed to aeration basin #1 at the headworks, where it either remains in the system as Return Activated Sludge (RAS) or goes to the aerobic sludge digester as Waste Activated Sludge (WAS). Following the clarifiers, partially treated wastewater is recombined, then flows to a single cell, synthetically-lined lagoon (approximately 5 million gallons). The aerated lagoon serves as an evaporation pond for polishing and holding.

A float system is used in the lagoon to control flow. At a certain level, flow is pumped out of the lagoon to three polishing bag filters (200 micron each) then ultraviolet (UV) disinfection system. Flow can be diverted to one of the two UV light banks (one 6 and one 8 bulb units) during maintenance. In the past, muriatic acid or hydrogen peroxide would be injected into the flow from the lagoon to clean the UV lights. UV lights are now manually cleaned--use of muriatic acid had stopped over 3 years ago and use of hydrogen peroxide stopped in February 2011 according to the Permittee's on-site representative.

Flow is measured with a totalizing meter before discharge to Little Creek. Samples for effluent compliance monitoring is taken from a sampling port in the effluent line before discharge to outfall 001. The facility also has a NMED Ground Water Quality Bureau (GWQB) Discharge Permit (DP-313) that allows discharge into Little Creek. Land application of treated effluent is no longer allowed.

Solids Management

Solids are pumped from the clarifiers and digester by Ruidoso Septic Service-Cannon Industries, LLC, P.O. Box 1910, Alto, New Mexico 88312. Solids from the lagoon have also been pumped and temporarily stored in a tank on site prior to disposal. According to Rose Bernard, Office Manager, Ruidoso Septic Service, Cannon Industries, LLC, solids from RRVE WWTP are taken to their Rosa Mora Septage Disposal Facility which has a State of New Mexico GWQB Discharge Permit (DP-1732) that allows land application of septage, sludge and grease trap waste.

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

Permit Requirements for Permit Verification

Part III.D.9 (Standard Conditions, 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

Chlorine tablets are placed in the flow at the clarifier to control algal growth in the lagoon. Footnote 6 of Part I.A of the permit states, *“Prior to final disposal, the effluent shall contain NO Measureable Total Residual Chlorine (TRC) at any time....The maximum TRC shall be monitored 5 times per week by grab samples whenever chlorine is used for disinfection.”*

Chlorine is used in the treatment system. The effluent is not periodically monitored for TRC to determine if this addition of chlorine in the treatment system would change the quantity or quality of pollutants in the discharge or if de-chlorination may be needed prior to discharging into Little Creek. The Permittee would need to contact USEPA Region 6 Permit Branch to submit additional information after the previous permit application. See below for further explanations on proper preservation for E.coli bacteria samples.

Section B - Recordkeeping and Reporting Evaluation – Overall Rating of “U = Unsatisfactory”

Permit Requirements for Recordkeeping and Reporting

Part II.A (Other Conditions, 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.

TRC *E. coli bacteria*

Part I.C (Monitoring and Reporting) of the permit states:

Monitoring information shall be on Discharge Monitoring Report Form(s) EPA 3320-1 as specified in Part III.D.4 of this permit and shall be submitted quarterly. Each quarterly submittal shall include separate forms for each month of the reporting period. 1. Reporting periods shall end on the last day of the months March, June, September, and December. 2. The permittee is required to submit regular quarterly reports as described above postmarked no later than the 28th day of the month following each reporting period.

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 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.D.4 (Standard Conditions, Discharge Monitoring Reports and Other 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. The permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D to the EPA at the address below. Duplicate copies of DMRs and all other reports shall be submitted to the appropriate State agency(ies)...

Part III.D.5 (Standard Conditions, Additional Monitoring by the Permittee) of the permit states:

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR). Such increased monitoring frequency shall also be indicated on the DMR.

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

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 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. b. The following shall be included as information which must be reported within 24 hours: (1) Any unanticipated bypass which exceeds any effluent limitation in the permit; (2) Any upset which exceeds any effluent limitation in the permit; and, (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part II (industrial permits only) of the permit to be reported within 24 hours. c. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

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

Records generated by the previous operator(s) were not well maintained to be readily available during this inspection. Better organization, filing and storage labeling system appeared to be needed.

Available sampling and analyses data reviewed for April, May and June of 2011 was inadequate. Chain of custody forms with some of the required information had been used by previous operators of the site. Chain of custody forms were not filed with the reviewed 2nd Qtr analytical reports. For example:

-pH data on daily operational logs and pH logs did not include time of sampling, time of analysis, analytical methods and results of calibrations. Calibration logs only had date and analytical results--did not document instrument calibration or pH buffer checks prior to sample analysis.

-BOD5 analytical reports did not include name of individual performing sampling. It was also noted that a range of collection times were reported on BOD5 analytical reports. The required sample type for BOD5, TSS and E.coli bacteria is grab, not composite in Part I.A.

-TSS analytical reports did not include the time of sampling or the time of analyses.

Reporting

CDS received an Administrative Order CWA-06-2011-1811 dated June 21, 2011 and Notice of Proposed Assessment of Class I Civil Penalty dated June 20, 2011. On March 15, 2011 corrected DMRs for June

2008 through November 2008 (due to sampling errors) were submitted to USEPA. In the event a revised or corrected DMR is necessary, the word **REVISED** should be clearly visible on each page of the form.

DMRs were submitted later than the 28th day of the month following reporting periods. For example:

-December 2008 to December 2010 DMRs were not received by USEPA Region 6 until March 15, 2011. NMED SWQB obtained the late DMRs from USEPA. The Permittee's on-site representative was reminded to send DMRs to NMED SWQB offices in Santa Fe. The following is the correct address:

Program Manager
Surface Water Quality Bureau, N2050
New Mexico Environment Department
P.O. Box 5469
Santa Fe, New Mexico, 87502

-First Quarter 2011 DMRs were not submitted to USEPA or NMED SWQB as the writing of this report. Available data (see further explanations in Self-Monitoring) and non-compliance reports still need to be submitted to USEPA and NMED SWQB for this time period. An example of a non-compliance report form with the required certification language is contained in USEPA Region 6 NPDES Reporting Requirements Handbook.

No samples are collected for Total Residual Chlorine monitoring according to the Permittee's on-site representative. There is no analytical data to support the reporting of zero "0" for TRC on DMRs. It is noted that "0/30" was correctly reported as the frequency of analysis on DMRs.

NMED SWQB files do not have records of 24-hour oral reporting for E.coli bacteria exceedances (see Table 1).

7-Day Average Calculations

Flow 7-Day Averages were not correctly calculated and reported on DMRs. Based on information from the Permittee's on-site representative, the reported 30-Day Average was reported as the 7-Day Average. USEPA Region 6 NPDES Reporting Requirements Handbook states:

***How do I calculate and report 7-day averages?** We recognize that calendar weeks and calendar months rarely coincide. Therefore, for the purpose of calculating and reporting 7-day averages, you should follow the process below: a. Define your week (SUN-SAT, MON-SUN, etc.). b. Calculate the averages of all sample data obtained for each week. c. The highest calculated weekly average will be reported on the DMR for the month in which (1) the week ends or (2) the week begins, or (3) the month which contains the greatest number of days. It is the choice of the facility. However, the choice should be consistent month to month, year to year. SET A RULE AND STICK WITH IT.*

BOD5 and TSS Mass Loading Calculations

BOD5 and TSS mass loading (pounds per day or lbs/day) was not correctly calculated using the flow measurement determined on the day when sampling was done and reported on DMRs. Based on information from the Permittee's on-site representative and DMRs, the reported 30-Day Average flow was used. Record keeping of the time of flow measurement readings and the time of sampling is important to verify that the correct daily flow is used in BOD5 and TSS loading calculations.

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

Permit Requirements for Operations and Maintenance

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

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.

Findings for Operation and Maintenance

The on-site generator to operate the plant during a power outage was not operational and needed maintenance--sludge was in fuel tank according to the Permittee's on-site representative.

A back-up flow meter was not working (needed maintenance, factory recalibration and/or replacement) according to information from the Permittee's on-site representative.

Written specifications, plant diagram and some procedures were posted. However, there were no written emergency procedures (e.g., no spill or backup disinfection (chlorination/de-chlorination) procedures). There was no written spare parts and supplies inventory.

**Section D - Self-Monitoring – Overall Rating of “U = Unsatisfactory”; and
Section F – Laboratory – Overall Rating of “U = Unsatisfactory”**

Permit Requirements for Self-Monitoring and Laboratory

Part III.B.3.a (Standard Conditions, Proper Operation and Maintenance) of the permit states, “*Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures.*”

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

Sampling and analyses were not performed at frequency specified in permit during the 1st Qtr of 2011. Based on non-compliance and remediation reports submitted to NMED GWQB dated 03/08/2011, samples for BOD5 and TSS were not collected in January and February 2011 because there was confusion over the NMED GWQB and NPDES permit requirements. BOD, TSS and E.coli bacteria samples were to be collected starting March 2011. Analytical reports for this time period were not readily available on the day of this inspection.

pH

USEPA approved analytical procedures in 40 CFR 136.3 were not used for required pH effluent monitoring as described below:

-It could not be verified that the on-site pH monitoring was conducted within the maximum holding time, in this case analyzed within 15 minutes, in 40 CFR 136.3. As previously discussed, time of collection and time of analysis for pH monitoring was not recorded.

-Three buffers were not used to standardize the pH instrument before each measurement for required effluent monitoring based on information from the Permittee's on-site representative and reviewed record keeping. USEPA approved Standard Method 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 20th edition states, "*When only occasional pH measurements are made standardize instrument before each measurement.*"

-Buffers used to standardize the instrument were expired since June of 2011.

BOD5

USEPA approved analytical procedures in 40 CFR 136.3 were not used for required BOD5 effluent monitoring. Reviewed Aqua Environmental Testing Laboratory analytical reports for June, May and April 2011 indicate that withdrawn EPA Method 405.1 was still being used to analyze BOD5 for samples collected in June of 2011. This method was withdrawn in March of 2007 (Federal Register/Vol. 72, No. 47/Monday, March 12, 2007/Rules and Regulations). Approval for alternative analytical procedures was not documented.

E.coli Bacteria

E.coli bacteria monitoring and analyses were performed more often than required by permit following effluent exceedances, but the 30-day average calculation and frequency of analysis was not reported on DMRs. For example the 30-day average of two E.coli results in April 2011 (18.5 CFU/100 ml for sample collected on 04/18/2011 and 1986.3 CFU/100 ml for sample collected 04/11/2011) was incorrectly reported on the April 2011 DMR as 1986.3 CFU/100 ml. In this case, the frequency of analysis was incorrectly reported as 1/30, instead of 2/30.

It is not documented that sample collection procedures are adequate for bacteria monitoring. As previously discussed, there is a potential for chlorine to be in the effluent. Preservation requirements in Table IA-Bacterial Tests of 40 CFR 136.3 states, "*Add a reducing agent only if an oxidant (e.g., chlorine) is present.*" Proper preservation techniques, in this case 0.0008% Na₂S₂O₃ to de-chlorinate the sample, were not documented on reviewed records.

Quality Control

The facility did not have a copy of USEPA approved analytical procedures for on-site pH monitoring. There were no written site-specific quality control procedures (e.g., required container type, preservation, and maximum holding time; field duplicates; spikes; composite sample requirements). Quality control reports from the contract laboratory were not kept with the reviewed records.

Duplicate pH samples are occasionally analyzed by different operators according to the Permittee's on-site representative. EPA's NPDES Inspection Manual states, "10 percent of the samples should be duplicated."

Section E - Flow Measurement – Overall Rating of “U = Unsatisfactory”

Permit Requirements for Flow Measurement

Part III, Section C.5.b 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 III, Section C.6 of the permit states:

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

Findings for Flow Measurement

There were no flow measurement calibration records from the factory or other measurements to verify accuracy and reliability readily available. Flow measurement accuracy is important because this information is used to calculate BOD5 and TSS mass loading calculations. 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.”

Section G - Effluent/Receiving Waters Observations – Overall Rating of “U = Unsatisfactory”

Permit Requirements for Effluent/Receiving Waters

Findings for Effluent/Receiving Waters

Exceedances of effluent limits reported on DMRs are indicated in Table 1.

Table 1: Summary of Monitoring Reported on DMRs since last CEI

DMR	BOD	BOD	pH	pH	TSS	TSS	Q	E.coli	E.coli
	30 DA	7-DAY	MIN	MAX	30 DA	7-DAY	30 DA	30 DA	Daily Max
	AVG	AVG			AVG	AVG	AVG	AVG	
Frequency	1/mo	1/mo	1/mo	1/mo	1/mo	1/mo	2/wk	1/mo	1/mo
Limit	30	45	6.60	8.80	30	45		126	410
Units	mg/l	mg/l	su	su	mg/l	mg/l	MGD	cfu/100 ml	cfu/100 ml
09/2011	4.70	4.70	6.75	7.93	11.20	11.20	0.021	31.5	31.5
08/2011	5.28	5.28	6.67	7.0	5.2	5.2	0.028	12.1	12.1
07/2011	11.2	11.2	6.62	8.42	5.6	5.6	0.025	23.8	23.8
06/2011	10.6	10.6	6.69	8.21	6.80	6.80	0.019	56.3	56.3
05/2011	12.4	12.4	7.22	8.60	9.60	9.60	0.20	**	268.2*
04/2011	21.9	21.9	7.27	7.62	5.6	5.6	0.026	**	1986.3*
03/2011	No DMR								
02/2011	No DMR								
01/2011	No DMR								
12/2010	6.85	6.85	7.54	8.66	4.0	4.0	0.026	1901*	2419*
11/2010			7.0	8.32			0.022		
10/2010			6.69	7.44			0.023		
09/2010	15.30	15.30	7.0	7.98	9.2	9.2	0.022	101	197
08/2010			6.52*	8.8			0.018		
07/2010			7.0	8.68			0.023		
06/2010	18.40	18.40	7.0	8.21	7.25	7.20	0.012	168*	261
05/2010	10.04	10.7	6.87	8.46	7.0	8.30	0.019	9	13
04/2010	7.56	8.98	6.65	8.21	6.0	6.0	0.014	27	49
03/2010	13.93	18.10	7.0	7.92	5.8	7.2	0.026	6	8
02/2010	14.45	14.90	6.6	7.87	8.2	10.8	0.032	54	91
01/2010	13.95	14.80	6.92	7.44	5.8	6.8	0.029	322*	1120*
12/2009	9.17	9.29	7.0	8.13	5.95	7.20	0.032	7	9
11/2009	10.72	13.50	7.15	8.46	5.4	6.4	0.026	5	5
10/2009	12.33	16.90	6.92	8.56	8.4	8.8	0.028	57	58
09/2009	11.9	13.7	7.0	7.87	10.8	12.4	0.026	37	38
08/2009	9.60	10.50	6.86	8.35	10.0	12.80	0.030	8	9
07/2009	18.63	25.00	7.14	8.21	17.20	28.00	0.032	12	16
06/2009	18.80	23.90	6.97	8.31	40.65*	60*	0.028	5	5
05/2009	16.25	19.70	7.32	7.97	24.75	25.50	0.029	65	108
04/2009	15.85	17.60	7.0	8.0	20.5	20.5	0.026	55	86
03/2009	13.15	17.50	7.21	8.41	22.8	25.6	0.026	133*	308
02/2009	11.90	14.30	7.01	7.68	17.70	21.00	0.027	103	137
01/2009	13.75	19.00	7.0	8.66	11.70	15.00	0.028	183*	214
12/2008	15.55	15.70	6.92	7.87	14.65	14.80	0.031	194*	261

Table 1: Continued

Revised DMRs submitted since last CEI									
DMR	BOD	BOD	pH	pH	TSS	TSS	Q	E.coli	E.coli
11/2008	10.0	10.6	7.00	8.21	11.85	12.50	0.029	237*	613*
10/2008	10.35	13.00	7.00	8.57	11.06	14.40	0.026	21	21
09/2008	8.10	8.90	6.96	8.21	9.2	12.0	0.027	33	46
08/2008	7.65	8.20	7.21	7.97	13.80	18.40	0.029	2	2
07/2008	8.7	8.9	7.11	8.37	13.90	15.00	0.031	4	5
06/2008	8.2	8.9	6.97	8.41			0.240	9	11
Notes:									
* Excursion/Exceedance of Permit Effluent Limit									
**Average not correctly reported on DMR									
12/2010 DMR - No. of Exceedances and Frequency of Analysis not Reported on DMR.									
08/2010 DMR - Analytical results on facility daily logs were inconsistent with pH data reported on DMRs.									