NEW MEXICO
ENVIRONMENT DEPARTMENT

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JOHN A. SANCHEZ
Lieutenant Governor

RYAN FLYNN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

Certified Mail - Return Receipt Requested

March 13, 2015

Mr. Alan Briley, City Manager
Sierra County Regional WWTP-North Area
P.O. Box 1080
Elephant Butte, NM 87935

Re: Minor Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, Sierra County Regional Wastewater Treatment Plant – North Area, NM0030864, February 25, 2015

Dear Mr. Briley,

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

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Racquel Douglas
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

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

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

Sincerely,

/s/ Bruce Yurdin

Bruce J. Yurdin
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Raquel Douglas, USEPA (6EN-WM) by e-mail
Gladys Gooden-Jackson, USEPA (6EN) by e-mail
Michael Kesler, NMED District III, by e-mail

EPA

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

NPDES Compliance Inspection Report

Section A: National Data System Coding

1	Transaction Code	2	NPDES	11	yr/mo/day	17	Inspec. Type	18	Inspector	19	Fac Type	20
	N	5	NM0003086	12	150225		C		S		1	

Remarks: WASTEWATER TREATMENT PLANT

67	Inspection Work Days	69	70	Facility Evaluation Rating	71	BI	72	QA	73	74	75	Reserved	80
	001			3		N		N					

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*

Exit I-25 at North end of T or C (Exit 79 east). Proceed south into town. Just past the Motel 6 turn left (north) onto Hwy 181. Proceed down the hill and cross Cuchillo Negro Creek. Turn right (east) onto road toward Elephant Butte. Turn right at entry to Golf Course community and follow road down small canyon to "T". Turn right and follow road – it turns to dirt past maintenance yard (and orange cones). Veer left to WWTP. Sierra County

Entry Time /Date
1:30 pm
February 25, 2015

Permit Effective Date
October 1, 2013

Exit Time/Date
2:55 pm
February 25, 2015

Permit Expiration Date
September 30, 2018

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Jesse Cole, Wastewater Utility Operator III, City of Elephant Butte, cell 575-740-8791

Other Facility Data

GPS:
N 33.154444
W --107.231161

SIC 4952

Name, Address of Responsible Official/Title/Phone and Fax Number
Alan Briley, P.E., City Manager, City of Elephant Butte, P.O. Box 1080, Elephant Butte, New Mexico 87935 / 575-744-4892 and fax 575-744-4493

Contacted
Yes [ ] No [X]

Section C: Areas Evaluated During Inspection

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

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

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

1. SEE REPORT AND FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
MICHELLE LEMON */s/ Michelle Lemon*	NMED/SWQB 505-827-2819	3-13-2015
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
BRUCE YURDIN */s/ Bruce Yurdin*	NMED/SWQB 505-827-2795	3-13-2015

Sierra County Regional WWTP-North Area	PERMIT NO. NM0030864

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS DETAILS:	☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED NO*)
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	☒ Y ☐ N ☐ NA
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES	☐ Y ☐ N ☒ NA
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT	☒ Y ☐ N ☐ NA
4. ALL DISCHARGES ARE PERMITTED	☒ Y ☐ N ☐ NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. DETAILS:	☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED YES*)
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs. **See "Further Explanations" in report**	☒ Y ☐ N ☐ NA
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:	☒ S ☐ M ☐ U ☐ NA
a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING	☒ Y ☐ N ☐ NA
b) NAME OF INDIVIDUAL PERFORMING SAMPLING	☒ Y ☐ N ☐ NA
c) ANALYTICAL METHODS AND TECHNIQUES.	☒ Y ☐ N ☐ NA
d) RESULTS OF ANALYSES AND CALIBRATIONS.	☒ Y ☐ N ☐ NA
e) DATES AND TIMES OF ANALYSES.	☒ Y ☐ N ☐ NA
f) NAME OF PERSON(S) PERFORMING ANALYSES.	☒ Y ☐ N ☐ NA
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.	☒ S ☐ M ☐ U ☐ NA
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.	☒ S ☐ M ☐ U ☐ NA
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.	☒ Y ☐ N ☐ NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. DETAILS:	☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED YES*)
1. TREATMENT UNITS PROPERLY OPERATED.	☒ S ☐ M ☐ U ☐ NA
2. TREATMENT UNITS PROPERLY MAINTAINED.	☒ S ☐ M ☐ U ☐ NA
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.	☒ S ☐ M ☐ U ☐ NA
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.	☒ S ☐ M ☐ U ☐ NA
5. ALL NEEDED TREATMENT UNITS IN SERVICE.	☒ S ☐ M ☐ U ☐ NA
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.	☐ S ☒ M ☐ U ☐ NA
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.	☒ S ☐ M ☐ U ☐ NA
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.	☒ Y ☐ N ☐ NA
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.	☒ Y ☐ N ☐ NA
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.	☒ Y ☐ N ☐ NA

Sierra County Regional WWTP-North Area	PERMIT NO. NM0030864

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?	☐ Y ☒ N ☐ NA
IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?	☐ Y ☐ N ☒ NA
HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?	☐ Y ☐ N ☒ NA
10.HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?	☐ Y ☒ N ☐ NA
IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?	☐ Y ☐ N ☒ NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED NO).*
DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.	☒ Y ☐ N ☐ NA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.	☒ Y ☐ N ☐ NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE	☒ Y ☐ N ☐ NA
a) SAMPLES REFRIGERATED DURING COMPOSITING.	☐ Y ☐ N ☐ NA
b) PROPER PRESERVATION TECHNIQUES USED. **But, temperatures of samples not documented on lab submittal forms.**	☒ Y ☐ N ☐ NA
c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.	☒ Y ☐ N ☐ NA
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?	☐ Y ☐ N ☒ NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED NO)*
DETAILS: **Flow is batch discharge.**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.	☒ Y ☐ N ☐ NA
TYPE OF DEVICE: **3" insert nested in 9" Parshall flume with ultrasonic flow 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. *(DATE OF LAST CALIBRATION* August 8, 2014)	☒ 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: **pH analyzed on-site. When required, TRC is also analyzed on-site. Contract laboratories were not inspected.**

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

Sierra County Regional WWTP-North Area	PERMIT NO. NM0030864

SECTION F - LABORATORY (CONT'D)

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

3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☐ S ☒ M ☐ U ☐ NA

4. QUALITY CONTROL PROCEDURES ADEQUATE. ☒ S ☐ M ☐ U ☐ NA

5. DUPLICATE SAMPLES ARE ANALYZED. 10 % OF THE TIME. ☒ Y ☐ N ☐ NA

6. SPIKED SAMPLES ARE ANALYZED. ___ % OF THE TIME. ☐ Y ☐ N ☒ NA

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

LAB NAME	WILKINS ENVIRONMENTAL	AQUA ENVIRONMENTAL TESTING LAB
LAB ADDRESS	832 NW 67TH STREET, OKLAHOMA CITY, OK 73116	12695 LEASBURG ST PARK RD, LAS CRUCES, NM 88007
PARAMETERS PERFORMED	WHOLE EFFLUENT TOXICITY	BOD5, TSS, AND E coli

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

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	None	None	None	None	None	Greenish	

RECEIVING WATER OBSERVATIONS: **The facility batch discharges – discharge to Cuchillo Negro was occurring at the time of this inspection.**

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☒ S ☐ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED NO).*
DETAILS: **Sludge sent to Socorro Landfill**

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 NATURE OF DISCHARGE. ☐ Y ☐ N ☒ NA

7. SAMPLE SPLIT WITH PERMITTEE. ☐ Y ☐ N ☒ NA

8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. ☐ Y ☐ N ☒ NA

9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. ☐ Y ☐ N ☒ NA

City of Elephant Butte –
Sierra County Regional WWTP North Area
NPDES Permit No NM0030864
Compliance Evaluation Inspection
February 25, 2015

Introduction

On February 25, 2015, Shelly Lemon of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Sierra County Regional Waste Water Treatment Plant (WWTP) – North Area near Elephant Butte, New Mexico. The WWTP has a design flow of 0.6 million gallons a day (MGD), and is classified as a minor municipal discharger under the federal Clean Water Act (CWA), Section 402 National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned permit number NM0030864, which regulates discharge of treated effluent from outfall 001 to Cuchillo Negro Creek, thence to the Rio Grande in Segment 20.6.4.103 NMAC of the Rio Grande Basin. The Rio Grande in this water quality segment includes designated uses of irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, secondary contact and warmwater aquatic life. In addition, flow in this reach of the Rio Grande mainstem is dependent upon releases from Elephant Butte Dam.

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 inspector, and records and reports kept by the Permittee and/or NMED.

Upon arrival at the WWTP at approximately 1330 hours on the day of this inspection, the inspector called Mr. Jesse Cole, Wastewater Utility Operator for the City of Elephant Butte, to inform him of the inspection. Mr. Cole said that unfortunately he was out of town on vacation, but Mr. Hayden Arthur, laborer, was monitoring the plant while he was away and was available to tour the facility and provide any documents or required records. Upon Mr. Arthur's arrival, the inspector made introductions, presented her credentials and explained the purpose of the inspection. The inspector and Mr. Arthur toured the plant until approximately 1440 hours and then went to the City's offices to photocopy some documents for a records review. The inspector left at approximately 1455 hours.

Treatment Scheme

Raw sewage flows through a collection system via six (6) lift stations to the plant. The final station is approximately one quarter mile north of the plant. Influent flow is measured with a magnetic flow meter. An additional lift station is located at the treatment plant to direct decant from the digester and the drying beds back to the headworks.

At the headworks, raw sewage passes through a manual bar screen and grit chamber. Screenings are sent down a chute to a container at ground level. The main treatment units for this facility are two sequencing batch reactor (SBR) basins and a digester which allow for aeration, mixing, anoxic and decanting of influent. Currently, about four and half cycles occur per day according to the on-site permittee representative.

Following the SBR treatment units, flow enters a flow equalization (EQ) basin before entering the disinfection unit. The EQ basin is covered to minimize algal growth in the effluent prior to discharge.

This also increases the bulb life span in the Ultraviolet (UV) disinfection chamber. Effluent flows from the EQ basin past the UV disinfection into a 3" Parshall flume for flow measurement prior to being discharged to Cuchillo Negro Creek.

Cuchillo Negro Creek above the WWTP outfall was not flowing on the day of this inspection. Effluent continued to flow in Cuchillo Negro Creek for approximately 200 feet until the flow infiltrated into the sandy streambed. The City of Elephant Butte, Sierra County Regional WWTP also has a State of New Mexico Groundwater Quality Bureau (GWQB) Discharge Permit (DP- 1594).

Solids Management

Sludge produced at the plant is placed in two divided (four concrete cell) drying beds for dewatering. Screenings removed from the bar screen are also transported and disposed with the dried sewage sludge. Once the sludge passes a paint filter liquid test it is stockpiled on site for further drying and pathogen removal through natural processes. The facility uses a roll off for further storage to prevent moisture from rewetting the material.

The dewatered sludge is transported to the Socorro Landfill by a registered waste hauler for final disposal. A representative sample of dewatered sludge from every load is tested for free liquids, pH, and percent solids; and annually for Toxicity Characteristic Leaching Procedure (TCLP) parameters. The facility representative estimates that two trips per year are needed, hauling approximately 20 cubic yards per trip.

FURTHER EXPLANATIONS

Note: The sections are arranged according to the format of USEPA Form 3560-3 and checklist, attached, rather than being ranked in order of importance.

Section B – Recordkeeping and Reporting – Overall Rating "Satisfactory"

The permit states in Part II.A:

> *For pollutants listed on Appendix A of Part II with MQLs, analyses must be performed to the listed MQL. If any individual analytical test result is less than the MQL listed [on Appendix A of Part II, emphasis added], a value of zero (0) may be used for that pollutant result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.*

Findings for Section B – Recordkeeping and Reporting*:*

Data reported for June 2014 and October 2014 were evaluated. For the records reviewed, analytical results were consistent with data reported on the DMRs, except for TSS. For both of these months, TSS values were reported as zero (0) because the analytical results were below the detection limit. However, unless otherwise stated in the permit, values below the detection limit are to be reported with a less than symbol ("<") and the numeric value for the detection limit using the EPA approved method. Where the permit contains a listing of MQLs and the permittee is granted authority in the permit to report zero in lieu of the <MQL for the specified parameters (e.g., Appendix A of Part II), then zero may be reported for those listed parameters. The permittee may request authorization from its regulatory agency to report zero when the permit does not contain this language.

EPA Region 6 discusses this situation in the Most Commonly Asked Questions section of its NPDES Reporting Requirements Handbook:

> ***How do I report effluent data below detection limit?***
> *Where authority has not been granted to report zero, the less than MQL values are to be averaged with the numbers greater than the MQL and report the calculated average using the less than symbol.*
>
> *For Example: MQL is 3 mg/L, 4 sample results in a month: <3, 5, <3, 7.*
> *The Monthly Average = (3 + 5 + 3 +7)/4 = 4.5*
> *Report on the DMR for Monthly Average as "<4.5"*
>
> *Some permittees have complained that the MQL concentration for a parameter results in a loading calculation they believe is higher than they actually have. Unless one of the provisions discussed above applies, allowing you to use "0" for your calculation, you are to use the MQL concentration for calculating the loadings for results that are below the MQL. The only way to improve the loadings calculation is to switch to another approved method that has a lower MQL.*

Data should have been reported on the DMRs as (see lab results on following page):

		30 DAY AVG (lbs/day)	7 DAY AVG (lbs/day)	30 DAY AVG (mg/L)	7 DAY AVG (mg/L)	% Removal
6/30/2014	TSS	<0.323	<0.437	<0.628	<0.800	99.7
10/31/2014	TSS	<1.01	<1.20	<1.82	<1.88	98.6

Here are the results that were below detect:

TSS Results					
	Influent	**Effluent**	**% removal**	**FLOW**	**LOAD**
6/3/2014	212	<0.455	-	0.05522	<0.210
6/10/2014	-	<0.800	-	0.06543	<0.437
AVERAGE	212	<0.628	99.7	-	<0.323
10/7/2014	134	<1.75	-	0.08219	<1.200
10/14/2014	-	<1.88	-	0.05248	<0.823
AVERAGE	134	<1.82	98.6	-	<1.011

It was also noted during the records review that some flow reporting was suspect, but without the flow logs the inspector was unable to double-check the reported values. On several occasions the 30-day average flow was greater than the 7-day average flow, which seems questionable. On two of those months (March 2012 and August 2013) it appears that a "0" is missing from the 30-day average value (…should be 0.05470 and 0.05973, respectively?). The inspector would remind the permittee to double check data entry as part of their QA/QC program and to ensure the appropriate and correct values are being reported.

Reporting Month	**parameter**	**30 DAY AVG**	**7 DAY AVG**	**Units**	**Permit begin date**	**Permit end date**
3/31/2012	Flow	0.54704	0.05645	MGD	8/1/2007	7/31/2012
5/31/2012	Flow	0.06041	0.05864	MGD	8/1/2007	7/31/2012
5/31/2013	Flow	0.05179	0.05118	MGD	8/1/2007	7/31/2012
8/31/2013	Flow	0.59727	0.06240	MGD	8/1/2007	7/31/2012
12/31/2014	Flow	0.05140	0.05090	MGD	10/1/2013	9/30/2018

Section C – Operations and Maintenance: Overall rating of "Marginal"

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.

Findings for Section C – Operation and Maintenance:

Mr. Cole, Wastewater Operator III, is the only certified operator available to do operation, maintenance and testing at this facility. There is one other man, Mr. Hayden Arthur, currently working at the WWTP but he is not certified yet. Mr. Arthur intends to take his Level I certification exam for the first time in October 2015. It is highly recommended that a backup certified operator is available in the event that Mr. Cole is sick or takes a vacation.

The permittee is also reminded that written procedures for emergency treatment control (e.g., alternative disinfection in case the UV system goes down, spills, lift station and sanitary sewer overflows) should be readily available if an emergency were to occur, and in the event that the lead operator is on leave and otherwise unable to respond.

Section F – Laboratory: Overall rating of "Marginal"

The permit requires in Part III.C.5:

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.*

Findings for Laboratory:

Proper preservation of compliance samples includes keeping the samples at or below 6°C for BOD and TSS and below 10°C for *E. coli*. The sample temperatures at receipt in the lab are not recorded on the Sample Submittal Forms. In addition, if chlorine is used in the treatment process, the permittee is reminded that Table IA-Bacterial Tests of 40 CFR 136.3 states, *"Add a reducing agent if an oxidant (e.g., chlorine) is present."* Proper preservation techniques for *E. coli* (in the presence of chlorine) would include the addition of 0.0008% sodium thiosulfate to the sample bottle to dechlorinate.

40 CFR PART 136.3 TABLE II

Parameter number/name	Preservation	Maximum holding time
1-5. Coliform, total, fecal, and *E. coli*	Cool, <10 °C, 0.0008% $Na_2S_2O_3$ [5]	8 hours.
9. Biochemical oxygen demand (BOD)	Cool, ≤6 °C	48 hours.
55. Residue, Nonfilterable (TSS)	Cool, ≤6 °C	7 days.

5 ASTM D7365-09a specifies treatment options for samples containing oxidants (e.g., chlorine). Also, Section 9060A of Standard Methods for the Examination of Water and Wastewater (20th and 21st editions) addresses dechlorination procedures.

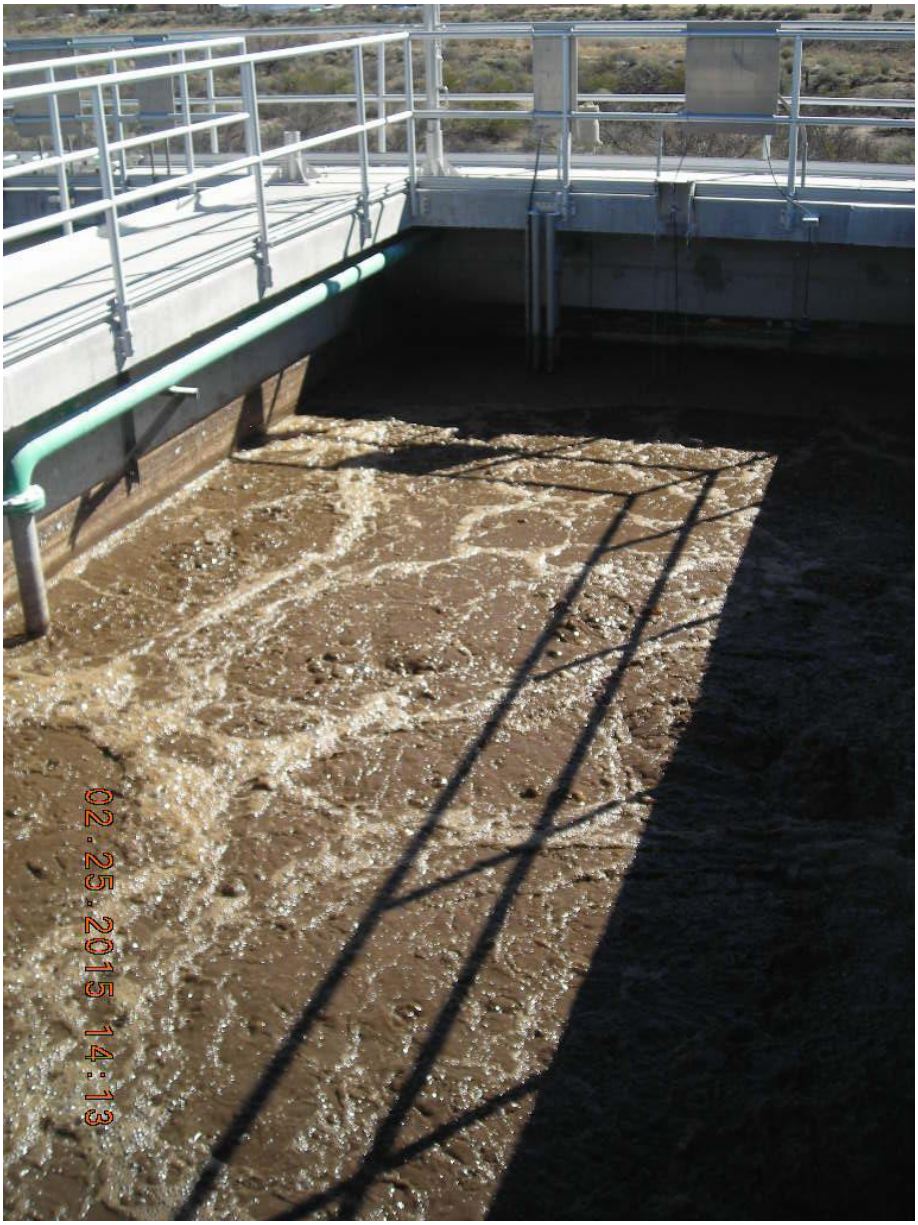
According to the permittee's representative, the only analytical procedure for compliance conducted on site in the laboratory is pH. During the inspection, the permittee's representative indicated that calibrations are performed once a week. Standard Method 4500-H+ states that when only occasional pH measurements are made, the instrument should be calibrated before each measurement. It is recommended that the pH probe be calibrated each day prior to an actual measurement.

NMED/SWQB

Official Photograph Log

Photo #1

Photographer: Shelly Lemon	Date: 02-25-2015	Time: 14:13 hours
City/County: Elephant Butte/Sierra County		
Location: Sierra County Regional WWTP – North Area (City of Elephant Butte)		
Subject: Aerobic Digester		



NMED/SWQB

Official Photograph Log

Photo #2

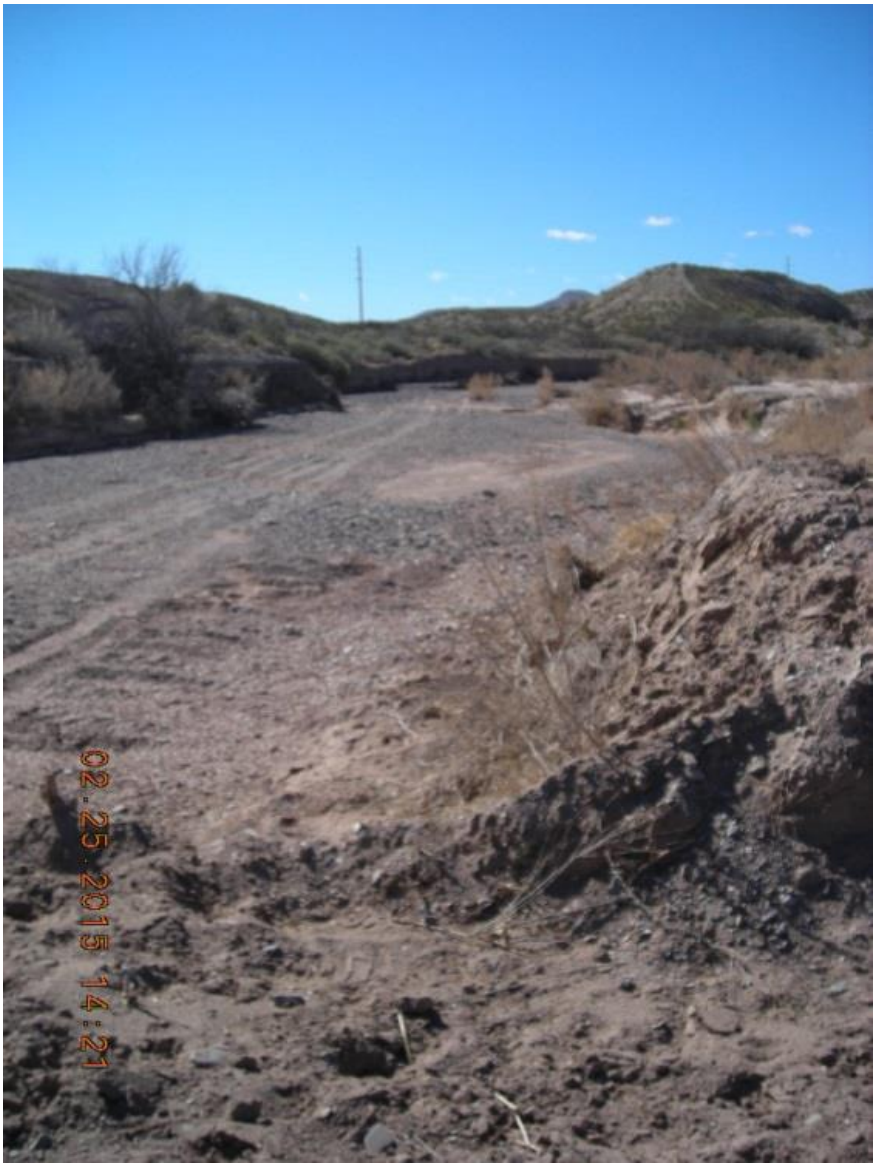
Photographer: Shelly Lemon	Date: 02-25-2015	Time: 14:17 hours
City/County: Elephant Butte/Sierra County		
Location: Sierra County Regional WWTP – North Area (City of Elephant Butte)		
Subject: Parshall Flume		

NMED/SWQB

Official Photograph Log

Photo #3

Photographer: Shelly Lemon	Date: 02-25-2015	Time: 14:21 hours
City/County: Elephant Butte/Sierra County		
Location: Sierra County Regional WWTP – North Area (City of Elephant Butte)		
Subject: Cuchillo Negro – Upstream		

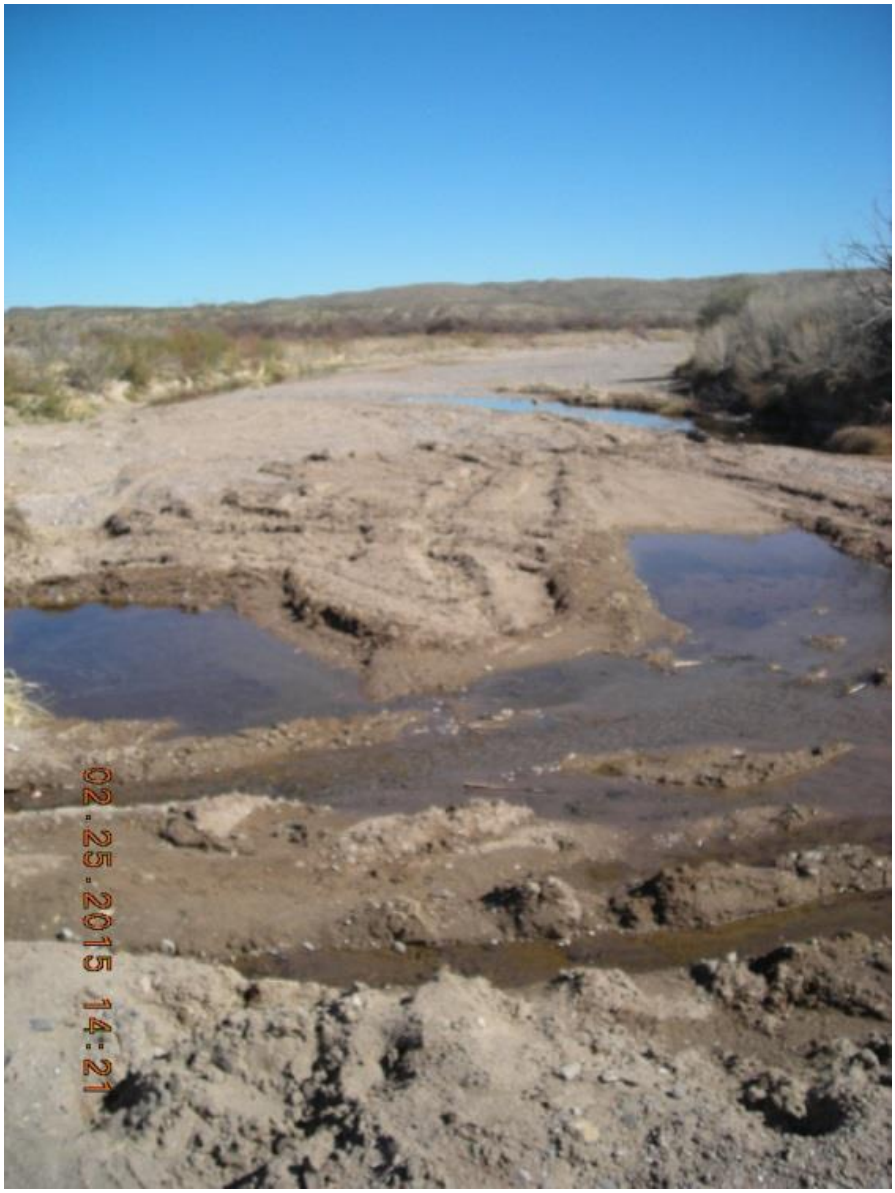


NMED/SWQB

Official Photograph Log

Photo #4

Photographer: Shelly Lemon	Date: 02-25-2015	Time: 14:21 hours
City/County: Elephant Butte/Sierra County		
Location: Sierra County Regional WWTP – North Area (City of Elephant Butte)		
Subject: Cuchillo Negro – Downstream of outfall		



PERMITTEE RESPONSE

CITY OF ELEPHANT BUTTE
P. O. Box 1080
Elephant Butte, New Mexico 87935
(575) 744-4892
FAX (575) 744-4493
"New Mexico's Diamond in the Desert"

5-5-2015

To:

Shelly Lemon
NMED-SWQB
Compliance Evaluation Inspection

This letter is in response to the CEI inspection performed on February 25, 2015 at the Sierra County Regional Wastewater Treatment Plant-North Area, NPDES #NM 0030864.

In the findings for ñSection B- Record Keeping and Reportingò there was a question about our MQLôs being reported as zeros on the DMR. This was a question brought up by one of my lab specialists who does visits. She noticed that we were going to report a number that was below the MQL and we called and spoke with Barbara Cooney with NMED on the topic and also Jan Walker with EPA. Jan Walker put me in touch with our new facility oversight, Gladys Gooden-Jackson with EPA. We explained the situation to her and she did give me the ok to report ñ0ò for any contaminant that was below the MQL.

I had previously stated to you that there was a mistake made on the DMR in regards to the 30 day average flows, but that is actually not the case. I am including a photograph of the DMRôs that I sent into EPA and the flows were correct on the DMRôs when I sent them. There must have been an error in the communications between the DMR and your desk. Note also that one of the DMR photos was labeled ñREVISEDò in red pen; I also included the original one for March 2012. The one in August is reported properly on my DMR copy so I donôt know where the mistake was made. That being the case I didnôt call Gladys Gooden-Jackson in regards to whether I needed to have them corrected.

In the finding for ñSection C- Operations and Maintenanceò I will be generating an emergency protocol for very particular instances that may affect the quality of the effluent, including UV failure, during this year. It will cover a much broader spectrum than just disinfection though.

I have been attempting to get certified operators for the facility but have not been successful thus far in having people taking the exams. We are confident though that Mr. Hayden Arthur will be more than capable of taking and passing his exam this upcoming fall.

And just for your records I am currently a level IV wastewater operator in the State of New Mexico as well as a level III water system operator in the State of New Mexico.

In the finding for ñSection F- laboratoryò there is a question of temperatures on our samples. I did call and give an explanation in regards to this topic. The laboratory that we use is very close and considering that our samples are all done on a grab sample basis, if the lab takes temps upon arrival they have not been on ice long enough to be cooled to appropriate temperatures. Therefore the laboratory dates and times them upon arrival and then continues to chill them in their refrigerator until the procedures are performed. If temps were taken upon immediate arrival they would not have time to cool to the temperatures stated in the requirements, not because of lack of effort but due to the times being held being so short.

There is also a question on our calibration procedure for pH measurement. Method 4500-H+ B Electrometric Method, step #4a ñinstrument calibrationò on page 4-94 of the 22nd edition of the Standards and Methods for the Examination of Water and Wastewater clearly states in the first sentence ñIn each case follow manufacturerôs instructions for pH meter and for storage and preparation of electrodes for use.ò. I have contacted Hach in regards to our calibration procedures and frequency, and they have, on multiple occasions informed me that the meter we are using, a once a week calibration is more than enough as long as the accuracy check of the millivolts (mV) slope is within a 58± 3 mV per pH unit. These values are recorded on our calibration records every Monday and since it is a manufacturerôs instruction will supersede any other directions beyond in the 4500-H+ B Electrometric Method. There has yet to be an instance where we were out of the acceptable range based on our manufacturerôs instructions for the slope mV check.

Also, we do utilize sodium thiosulfate in all of our e-coli bottles which is premeasured by IDEXX and is inside of a sealed bottle with a safety band until it is opened and samples are added. Though we do not use chlorine for disinfection purposes, we do keep a small amount of calcium hypochlorite for the following items, Algae control, filament control and emergency disinfection purposes.

Thanks for your time on the above mentioned matters. Iôm sorry that I was not able to be in attendance during your inspection in February. I look forward to continuing a working relationship with NMED and all of its constituents. Please call me in regards to anything in the body of this letter if clarification is needed or other questions arise. I can be reached at:

Cell: 575-740-8791
Office: 575-744-9163
Email: wastewater@cityofelephantbutte.com

Sincerely,

Jesse Cole
City of Elephant Butte
Wastewater Supervisor

CITY OF ELEPHANT BUTTE
P. O. Box 1080
Elephant Butte, New Mexico 87935
(575) 744-4892
FAX (575) 744-4493
"New Mexico's Diamond in the Desert"

February 19, 2013

Hannah Branning (6 EN-WC)
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Discharge Permit (NM0030864) 1594

Dear Ms.Hannah Branning:

Enclosed is the revised DMR's from March 2012 thru December 2012. As previously stated there was some miscalculations in regards to 7 day flow averages that have since been fixed and E.coli geometric averages. Revisions were made on all parts of the DMR's so don't limit changes to only those categories. There were no exceedences on any of the reports. If you have any questions please feel free to call me at 575-740-8791.
Thank you,

Sincerely,

Jesse Cole

Jesse Cole
Wastewater Operator III

ELEPHANT BUTTE, NM 87935

FACILITY: SIERRA COUNTY REGIONAL WWTP

LOCATION: SECTION 27 T13S R04W
TRUTH OR CONSEQUENCES, NM 87935

ATTN: Eunice Kent

NM0030864	001A
PERMIT NUMBER	DISCHARGE NUMBER

DMR Mailing ZIP CODE: 87

MINOR

TOTAL FACILITY DISCHARGE
External Outfall

No Discharge

MONITORING PERIOD			
	MM/DD/YYYY		MM/DD/YYYY
FROM	3-1-2012	TO	3-31-2012

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
BOD, 5-day, 20 deg. C	SAMPLE MEASUREMENT	2.88	3.06	lb/d	******	7.0	7.0	mg/L	0	3/Mon	Comp-2
00310 1 0 Effluent Gross	PERMIT REQUIREMENT	150.1 30DA AVG	225.2 7 DA AVG	lb/d	******	30 30DA AVG	45 7 DA AVG	mg/L		Three Per Month	COMP-3
pH	SAMPLE MEASUREMENT	******	******	******	7.36	******	7.63	SU	0	3/Mon	Grab
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	6.6 MINIMUM	******	9 MAXIMUM	SU		Three Per Month	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	1.2	3.18	lb/d	******	3.3	1.0	mg/L	0	3/Mon	Comp-2
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	150.1 30DA AVG	225.2 7 DA AVG	lb/d	******	30 30DA AVG	45 7 DA AVG	mg/L		Three Per Month	COMP-3
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.06878	.0561	MGD	******	******	******	******	0	Continuous	total/2
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. 30DA AVG	Req. Mon. 7 DA AVG	Mgal/d	******	******	******	******		Continuous	TOTALZ
Chlorine, total residual	SAMPLE MEASUREMENT	******	******	******	******	******	NA	NA	0	NA	NA
50060 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	******	******	11 INST MAX	ug/L		Daily	GRAB
E. coli	SAMPLE MEASUREMENT	******	******	******	******	1.0	1.0	CFU/100ml	0	3/Mon	Grab
51040 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	******	548 30DAVGEO	2507 DAILY MX	CFU/100ml		Three Per Month	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE
Alan Briley, City Manager	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Alan Briley	575	7444892	04/09/2012
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

ADDRESS: P.O. BOX 1080
ELEPHANT BUTTE, NM 87935

FACILITY: SIERRA COUNTY REGIONAL WWTP

LOCATION: SECTION 27 T13S R04W
TRUTH OR CONSEQUENCES, NM 87935

ATTN: Eunice Kent

PERMIT NUMBER | DISCHARGE NUMBER

MONITORING PERIOD

	MM/DD/YYYY		MM/DD/YYYY
FROM	03/01/2012	TO	03/31/2012

TOTAL FACILITY DISCHARGE
External Outfall

No Discharge ☐

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
BOD, 5-day, 20 deg. C	SAMPLE MEASUREMENT	2.79	2.83	lb/d	******	7.0	7.0	mg/L	0	3XMO	Comp-2
00310 1 0 Effluent Gross	PERMIT REQUIREMENT	150.1 30DA AVG	225.2 7 DA AVG	lb/d	******	30 30DA AVG	45 7 DA AVG	mg/L		Three Per Month	COMP-3
pH	SAMPLE MEASUREMENT	******	******	******	7.36	******	7.63	SU	0	3XMO	Grab
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	6.6 MINIMUM	******	9 MAXIMUM	SU		Three Per Month	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	1.33	3.19	lb/d	******	3.33	8.00	mg/L	0	3XMO	Comp-2
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	150.1 30DA AVG	225.2 7 DA AVG	lb/d	******	30 30DA AVG	45 7 DA AVG	mg/L		Three Per Month	COMP-3
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.054703971	.056446	Mgal/d	******	******	******	******	0	Cont	TOTAL2
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. 30DA AVG	Req. Mon. 7 DA AVG	Mgal/d	******	******	******	******		Continuous	TOTALZ
Chlorine, total residual	SAMPLE MEASUREMENT	******	******	******	******	******	NA	NA	NA	NA	NA
50060 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	******	******	11 INST MAX	ug/L		Daily	GRAB
E. coli	SAMPLE MEASUREMENT	******	******	******	******	<1	<1	CFU/100mL	0	3XMO	Grab
51040 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	******	548 30DAVGEO	2507 DAILY MX	CFU/100mL		Three Per Month	GRAB

Revised

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE
			AREA Code	NUMBER	MM/DD/YYYY
TYPED OR PRINTED					

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

ADDRESS: P.O. BOX 1080
ELEPHANT BUTTE, NM 87935

FACILITY: SIERRA COUNTY REGIONAL WWTP

LOCATION: SECTION 27 T13S R04W
TRUTH OR CONSEQUENCES, NM 87935

ATTN: Eunice Kent

PERMIT NUMBER	DISCHARGE NUMBER

MINOR

TOTAL FACILITY DISCHARGE
External Outfall

No Discharge ☐

MONITORING PERIOD	MM/DD/YYYY		MM/DD/YYYY
FROM	08/01/2013	TO	08/31/2013

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
BOD, 5-day, 20 deg. C	SAMPLE MEASUREMENT	1.4	1.65	lb/d	******	2.96	3.26	mg/L	0	3XMO	Comp-3
00310 1 0 Effluent Gross	PERMIT REQUIREMENT	150.1 30DA AVG	225.2 7 DA AVG	lb/d	******	30 30DA AVG	45 7 DA AVG	mg/L		Three Per Month	COMP-3
pH	SAMPLE MEASUREMENT	******	******	******	7.18	******	7.58	SU	0	3xMO	GRAB
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	6.6 MINIMUM	******	9 MAXIMUM	SU		Three Per Month	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	0.34	0.63	lb/d	******	0.75	1.42	mg/L		3XMO	Comp-3
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	150.1 30DA AVG	225.2 7 DA AVG	lb/d	******	30 30DA AVG	45 7 DA AVG	mg/L		Three Per Month	COMP-3
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.059726774	.024029	MGD	******	******	******	******		Continuous	TOTALZ
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. 30DA AVG	Req. Mon. 7 DA AVG	Mgal/d	******	******	******	******		Continuous	TOTALZ
Chlorine, total residual	SAMPLE MEASUREMENT	******	******	******	******	******	N/A	N/A		N/A	N/A
50060 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	******	******	11 INST MAX	ug/L		Daily	GRAB
E. coli	SAMPLE MEASUREMENT	******	******	******	******	<1	<1	CFU/100 ML		3XMO	GRAB
51040 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	******	******	548 30DAVGEO	2507 DAILY MX	CFU/100ml		Three Per Month	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE
Alan Bibey, City Manager	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Alan Bibey	5757444892		09/03/2013
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NO CL2 USED