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Director  
Resource Protection Division

**Certified Mail - Return Receipt Requested**

June 21, 2012

New Mexico State Park and Recreation  
Elephant Butte State Park  
Kay Dunlap, Park Superintendent  
101 Highway 195  
P.O. Box 13  
Elephant Butte, New Mexico 87935

Re: **Minor Non-Municipal; SIC 4952; NPDES Compliance Evaluation Inspection; Elephant Butte State Park; NM0024937; June 13, 2012**

Dear Kay Dunlap,

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.

Introduction, treatment scheme, and 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, Region VI  
Enforcement Branch (6EN-WM)  
Allied Bank Tower  
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 wish to thank you for the cooperation extended to the NMED personnel by Gary Sullivan while at the Elephant Butte State Park. If you have any questions about this inspection report, please contact me at (505) 827-2575 or [daniel.valenta@state.nm.us](mailto:daniel.valenta@state.nm.us).

Sincerely,

*/s/Daniel Valenta*

Daniel Valenta  
Environmental Scientist/Specialist  
Surface Water Quality Bureau

Cc: Marcia Gail Adams, USEPA (6EN-AS) by e-mail  
Samuel Tate, USEPA (6EN-AS) by e-mail  
Carol Peters, USEPA (6EN-WM) by e-mail  
Diana McDonald, USEPA (6EN-WM) by e-mail  
Larry Giglio, USEPA (6WQ-PP) by e-mail  
Hannah Branning, USEPA (6EN-WC) by e-mail  
NMED District III by e-mail



**SECTION A - PERMIT VERIFICATION**

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS  S  M  U  NA (FURTHER EXPLANATION ATTACHED No.)  
 DETAILS:

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 **Plant does not discharge under the present conditions.**  Y  N  NA

**SECTION B - RECORDKEEPING AND REPORTING EVALUATION**

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.  S  M  U  NA (FURTHER EXPLANATION ATTACHED No.)  
 DETAILS: **NO DISCHARGES REPORTED**

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

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

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

b) NAME OF INDIVIDUAL PERFORMING SAMPLING  Y  N  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.  S  M  U  NA (FURTHER EXPLANATION ATTACHED No.)  
 DETAILS:

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. **Backup power will be brought in if needed with mobile generator.**  S  M  U  N

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.  S  M  U  NA  
**Light will flash if problems occur, large capacity lift station, little effluent.**

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

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.  S  M  U  NA  
**Facility requires an operator with a Small Waste Water Advanced certification, at present two level two operators are present. Parks Dept. looking to fill empty operator position. Retired plant operator helps with facility until position filled.**

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. **Two motors in place only one used at a time.**  S  M  U  NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.  Y  N  NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.  Y  N  NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.  Y  N  NA

**SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)**

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?

 Y  N  NA

IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?

 Y  N  NA

HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?

 Y  N  NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?

 Y  N  NA

IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?

 Y  N  NA**SECTION D - SELF-MONITORING**

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS.

 S  M  U  NA (FURTHER EXPLANATION ATTACHED No.)

DETAILS:

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

 Y  N  NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.

 Y  N  NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.

 Y  N  NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.

 Y  N  NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.

 Y  N  NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE

 Y  N  NA

a) SAMPLES REFRIGERATED DURING COMPOSITING.

 Y  N  NA

b) PROPER PRESERVATION TECHNIQUES USED.

 Y  N  NA

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

 Y  N  NA

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

 Y  N  NA**SECTION E - FLOW MEASUREMENT**

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS.

 S  M  U  NA (FURTHER EXPLANATION ATTACHED No.)

DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.

 Y  N  NA

TYPE OF DEVICE

**V-Notch weir**

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.

**No Flow** Y  N  NA

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

 Y  N  NA

4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION \_\_\_\_\_)

 Y  N  NA

RECORDS MAINTAINED OF CALIBRATION PROCEDURES.

 Y  N  NA

CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.

 Y  N  NA

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

 Y  N  NA

6. HEAD MEASURED AT PROPER LOCATION.

 Y  N  NA

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

 Y  N  NA**SECTION F - LABORATORY**

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS.

 S  M  U  NA (FURTHER EXPLANATION ATTACHED No.)

DETAILS:

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)

 Y  N  NA

**SECTION F - LABORATORY (CONT'D)**

- 2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED  Y  N  NA
- 3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. **No samples taken, no discharge.**  S  M  U  NA
- 4. QUALITY CONTROL PROCEDURES ADEQUATE.  S  M  U  NA
- 5. DUPLICATE SAMPLES ARE ANALYZED. \_\_\_\_ % OF THE TIME.  Y  N  NA
- 6. SPIKED SAMPLES ARE ANALYZED. \_\_ % OF THE TIME.  Y  N  NA
- 7. COMMERCIAL LABORATORY USED.  Y  N  NA

LAB NAME \_\_\_\_

LAB ADDRESS\_\_

PARAMETERS PERFORMED

**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	N/A	N/A	N/A	N/A	N/A	N/A	

RECEIVING WATER OBSERVATIONS: **No discharge observed.**

**SECTION H - SLUDGE DISPOSAL**

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS.  
DETAILS:

S  M  U  NA (FURTHER EXPLANATION ATTACHED No.)

**Sludge taken to on site lagoon, groundwater permit in place.**

- 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

**Compliance Evaluation Inspection**  
**Elephant Butte State Park Wastewater Treatment Facility**  
**NPDES Permit No. NM0024937**  
**June 13, 2012**

**Introduction**

On June 13, 2012 a Compliance Evaluation Inspection (CEI) was conducted at the Elephant Butte State Park Wastewater Treatment Plant (WWTP) located on Elephant Butte Lake by Mr. Daniel Valenta of the State of New Mexico Environment Department (NMED). This facility is classified as a minor industrial discharger under the federal Clean Water Act (CWA), Section 402 National Pollutant Discharge Elimination System (NPDES) permit program and is assigned permit number NM0024937. The facility has a design capacity of 0.03 million gallons per day (MGD).

The Elephant Butte WWTP discharges into Elephant Butte Lake in Segment 20.6.4.104 of the Rio Grande Basin NMAC (*State of New Mexico Standards for Interstate and Intrastate Surface Water*). Designated uses of this segment are irrigation storage, warmwater aquatic life, livestock watering, wildlife habitat, and primary contact.

The inspector arrived at the Elephant Butte State Park office at 1150 where he contacted Ms. Kay Dunlap, Park Superintendent. The inspector showed his credentials and explained the purpose of the inspection. After the pre-inspection interview, the inspector took a tour of the Lift Station and the WWTP with Mr. Gary Sullivan, Maintenance Supervisor/Manager. A closing interview took place at the Park Supervisor Office with Ms. Kay Dunlap and Mr. Gary Sullivan at approximately 1325.

The NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the Federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the permittee's representatives, observations made by the NMED inspectors, and records and reports kept by the permittee and/or NMED. Findings of the inspection are detailed on the attached EPA form 3560-3 and in the narrative Further Explanations section of the report.

**Treatment Units**

The design flow for the Elephant Butte State park WWTP is approximately 30,000 gallons per day (GPD). The flow varies substantially during the year due to variations in recreational use. The influent flow is higher in the peak season of the summer months, with an average daily flow of less than 7,000 GPD. The influent flow in the winter months averages a daily flow of less than 2,000 GPD. During the off-season or times of low visitation the plant is placed on standby or shut down.

At the time of this inspection 06/13/2012 was such a low visitation period. The plant was processing and evaporating the effluent from the Memorial Day Holiday and preparing for the 4<sup>th</sup> of July holiday. At the WWTP the aeration, clarifier, digester and evaporator lagoon were in operation.

The WWTP services a small trailer park, cabins, restaurant and the Damsite Marina. The marina on the lake pumps its wastewater up to the lift station when needed. The WWTP is an extended aeration package plant. Influent flow was designed to be lifted to the WWTP by a lift station located along the road from the Damsite Marina to the WWTP.

**Compliance Evaluation Inspection**  
**Elephant Butte State Park Wastewater Treatment Facility**  
**NPDES Permit No. NM0024937**  
**June 13, 2012**

The lift station has been rebuilt with new pumps, level meters and alarm system put in place. Influent flow enters the aeration chamber through a manually cleaned bar screen with 1 inch gaps between the bars.

The aeration basin is continuously aerated using fixed surface aerators. The aerators force air down a cone shaped injection port. The air flow can be regulated manually depending on the depth of wastewater in the aeration basin. The volume of influent varies due to the time of year visitor's use the park. When flow is very low dog food is added to the aeration basin in order to keep the biological elements of the process viable. Return activated sludge (RAS) is brought back to the aeration basin from the clarifier via two lines which are suspended above the aeration basin contents. The secondary clarifier is rectangular in configuration. The effluent weirs from this unit are on the end of the tank next to what was the chlorine contact chamber. The effluent then enters a cement evaporation lagoon.

The facility does not have in place a method of final disinfection or of measuring the discharge, the facility has not discharged since 2003. No changes have occurred at the site that would increase the volume of raw effluent flowing to the facility. The facility appeared well managed with needed units on line and functioning as needed.

**Solids Management**

A silo type tank is in place over one corner of the cement lagoon to act as a sludge digester. An air injection aerator is in place in the silo tank to aerate the sludge. Before removal of sludge the contents are allowed to settle and water is decanted off the top to be pumped back into the aeration basin. Settled solids are then removed and trucked to the reed lagoon beds at another location at the State Park. Due to the limited amount of influent entering the WWTP only a small amount of sludge is produced yearly.

NMED/SWQB

Official Photograph Log

Photo # 1

Photographer: Daniel Valenta	Date: 6/13/2012	Time: 1139
City/County: Elephant Butte State Park/Sierra County		
Location: Elephant Butte State Park, New Mexico, lift station at the trailer park, facing northwest.		
Subject: Lift station		



NMED/SWQB

Official Photograph Log

Photo # 2

Photographer: Daniel Valenta	Date: 6/13/2012	Time: 1148
City/County: Elephant Butte State Park/Sierra County		
Location: Elephant Butte State Park, New Mexico, waste water treatment facility, facing south.		
Subject: Waste water treatment facility, aeration unit.		



NMED/SWQB

Official Photograph Log

Photo # 3

Photographer: Daniel Valenta	Date: 6/13/2012	Time: 1153
City/County: Elephant Butte State Park/Sierra County		
Location: Elephant Butte State Park, New Mexico, waste water treatment facility, facing west.		
Subject: Waste water treatment facility, clarifier unit.		



NMED/SWQB

Official Photograph Log

Photo # 4

Photographer: Daniel Valenta	Date: 6/13/2012	Time: 1155
City/County: Elephant Butte State Park/Sierra County		
Location: Elephant Butte State Park, New Mexico, waste water treatment facility, facing south.		
Subject: Waste water treatment facility, evaporation unit.		



NMED/SWQB

Official Photograph Log

Photo # 5

Photographer: Daniel Valenta	Date: 6/13/2012	Time: 1203
City/County: Elephant Butte State Park/Sierra County		
Location: Elephant Butte State Park, New Mexico, waste water treatment facility, facing south.		
Subject: Waste water treatment facility, discharge outfall.		

