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ENVIRONMENT DEPARTMENT

*Surface Water Quality Bureau*

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DAVE MARTIN  
Secretary

RAJ SOLOMON, P.E.  
Deputy Secretary

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**Certified Mail - Return Receipt Requested**

May 26, 2011

Mr. Dale W. Janway, Mayor  
City of Carlsbad  
P.O. Box 1569  
Carlsbad, NM 88221

**Re: Major-Municipal; SIC 4952; NPDES Compliance Evaluation; City of Carlsbad Waste Water Treatment Plant; NM0026395; April 27, 2011**

Dear Mr. Janway,

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. The main problems were found in the area Section A-Permit Verification. 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

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 Adams, EPA, Enforcement Section (6EN-AS) by e-mail  
Samuel Tates, EPA (6SF) by e-mail  
Carol Peters-Wagnon, EPA (6EN-WM) by e-mail  
Diana McDonald, EPA (6EN-WM) by e-mail  
Larry Giglio, EPA (6WQ-PP) by e-mail  
NMED District IV, by e-mail  
Art Sena, [asena@cityofcarlsbadnm.com](mailto:asena@cityofcarlsbadnm.com)



**SECTION A - PERMIT VERIFICATION**

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS  S  M  U  NA (FURTHER EXPLANATION ATTACHED **YES**)  
 DETAILS: **Permit Renewal application not submitted in required timeframe.**

- 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.  S  M  U  NA (FURTHER EXPLANATION ATTACHED **Yes**)

- 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. **pH meter**  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. **The WWTP is undergoing a complete rebuild one unit at a time.**  S  M  U  NA
- 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.  S  M  U  N
- 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

**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 **18 inch Parshall Flume**
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.  Y  N  NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED  Y  N  NA  
**Drexelbrook USonic-R by Ametek in use.**
4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION Daily)  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:

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.  S  M  U  NA
- 4. QUALITY CONTROL PROCEDURES ADEQUATE.  S  M  U  NA
- 5. DUPLICATE SAMPLES ARE ANALYZED. 100 % OF THE TIME. ( Not for pH)  Y  N  NA
- 6. SPIKED SAMPLES ARE ANALYZED.    % OF THE TIME.  Y  N  NA
- 7. COMMERCIAL LABORATORY USED.  Y  N  NA

LAB NAME            **BioAquatic Laboratories**  
 LAB ADDRESS            **2501 Mayes Rd # 100, Carrollton, TX 75006-1378**  
 PARAMETERS PERFORMED    **Biomonitoring**

**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
<b>001</b>	<b>N0</b>	<b>N0</b>	<b>NO</b>	<b>N0</b>	<b>NO</b>	<b>CLEAR</b>	

RECEIVING WATER OBSERVATIONS: **Discharge pipe is high above receiving water, effluent cascades down to river.**

**SECTION H - SLUDGE DISPOSAL**

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

- 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  
Carlsbad Waste Water Treatment Plant  
NPDES Permit No. NM0026395  
April 27, 2011**

**Introduction**

On April 27, 2011 a Compliance Evaluation Inspection (CEI) was conducted at the City of Carlsbad Wastewater Treatment Plant (WWTP) by Mr. Daniel Valenta of the State of New Mexico Environment Department (NMED). This facility is classified as a Major Municipal under the federal Clean Water Act (CWA), Section 402 National Pollutant Discharge Elimination System (NPDES) permit program and is assigned permit number NM0026395. The WWTP has a design flow capacity of 5.0 Million Gallons per Day (MGD). This facility discharges to the Pecos River in Segment 20.6.4.202 (*State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC)*) of the Pecos River Basin. This segment has designed uses of industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, and warm water aquatic life.

The NMED performs a certain number of CEI's for the U.S. Environmental Protection Agency (USEPA) each year. The purpose of this inspection is to provide USEPA with information to evaluate the permittee's compliance with the NPDES permit. This report is based on review of files maintained by the permittee and NMED, on-site observation by NMED personnel, and verbal information provided by the permittee's representative. Finding of the inspection are detailed on the attached EPA form 3560-3 and in the narrative Further Explanations section of the report.

At 0845 hours on April 27, 2011, the inspector made introductions, presented credentials and explained the purpose of this inspection to Mr. Sena, Wastewater & Collections Superintendent. The Inspector and Mr. Sena toured the facility. An exit interview to discuss preliminary findings was conducted with Mr. Sena at the WWTP office, the inspection ended at 1010 hours on April 27, 2011.

In previous inspections the foremost finding concerned the aging facility as systems began to break down and the effects cascaded through the system. In January 2010 the City Council approved Ordinance #2010-02 authorizing a loan with NMED for renovation of the Municipal Wastewater Treatment Plant. Bids were submitted, RMC Inc. bid was accepted, the construction has begun. The plant will continue to operate throughout this rebuild. The plant design capacity is 5 MGD but only receives and treats around 2.5 MGD.

The construction will include:

Administration/ Laboratory Building	Primary Clarifiers
Entrance Works	Aeration Basins
Blower Building	Electrical Building
Secondary Clarifiers	UV Disinfection
RAS/WAS Pump Stations	Anaerobic Digesters
Dilute WAS Storage Tank	Sludge Drying Bed
Septage Receiving	

**Compliance Evaluation Inspection  
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**Treatment Scheme**

There are approximately 10 to 11 lift stations within the entire collection system. Seven of these lift stations feed directly to the primary lift station located at the west side of the Pecos River. All raw sewage from the City is lifted by this primary lift station to the WWTP on east side of the Pecos River. The primary lift station is at the City's former WWTP. It has two lift pumps and backup power. The WWTP has an entrance that consists of an automatic bar screen, with an automatic overflow bypass to either of the two primary clarifiers, an 18 inch Parshall flume, and an aerated grit chamber. Grit and screening are hauled to the landfill after being dried on the drying beds.

The flow is divided into the two primary clarifiers; one clarifier is larger and newer than the other clarifier. The flow then combines and is treated through a total of twenty aeration basins, connected in series. The flow passes through both anoxic and aeration zones for nitrogen removal. The wastewater flows into two secondary clarifiers, then into a junction box, where chlorine is added. The chlorine contact chamber is converted from the old secondary clarifier. As the wastewater exits the chlorine contact chamber, sulfur dioxide is added for dechlorination. Both the chlorine and the sulfur dioxide feed are flow weighted.

The effluent flow is measured using an 18-inch Parshall flume with a secondary Drexelbrook flow totalizing meter. The final effluent is discharged to the Pecos River through an effluent pipeline that is located just upstream of the old, deteriorated effluent pipe.

**Sludge**

The sludge from the two primary clarifiers is pumped to the primary sludge digesters for anaerobic treatment. The Return activated Sludge (RAS) from the secondary clarifiers is pumped up to the head of the activated sludge basins. When wasting is necessary, the Waste Activity Sludge (WAS) can be directed to the belt thickener, or can be pumped back to the entrance works for resettling in the primary clarifiers. A polymer is added prior to the belt thickener for enhanced dewatering. The primary digester, which is heated and mixed constantly, and then the secondary anaerobic sludge digester, which is heated and is mixed intermittently, is located next to the drying beds. Gas collected during primary digestion can be used to fuel one of the two new recirculation water boilers. The second boiler is fueled by natural gas only; the first can be fueled by natural gas or digester gas.

The facility has solid bottom sludge beds equipped with micro screens for decanting liquid. The decant water from the sludge beds enter a former trickling filter unit now covered which acts as a large storage tank. It is then slowly pumped back to the head of the WWTP, along with the decant water from the belt press.

**Compliance Evaluation Inspection  
Carlsbad Waste Water Treatment Plant  
NPDES Permit No. NM0026395  
April 27, 2011**

The sludge on the solids beds is mixed and turned to enhance drying using a front end loader. It is then stockpiled and composted to meet Class A pathogen reduction requirements. The composted sludge is used by the City golf course, where it is stockpiled. This is "Exceptional Quality" according to the permittee's testing results and records.

**Further Explanations**

**Section A-Permit Verification-Overall Rating of "Unsatisfactory"**

Permit Requirements Per Part III-A-4, *DUTY TO REAPPLY*; *If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR Part 122.6 and any subsequent amendments.*

The permit renewal application was dated October 6, 2010 and received by NMED on October 12, 2010. The permit requires the application be submitted at least 180 days before it expires, it was sent 117 days before expiration.

Permit Requirements Per Part III-D-1-b, *MUNICIPAL PERMITS* *Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.*

In the permit renewal application the change to UV as final disinfection is not included. The facility will keep the chlorine contact chamber available but not in daily use. The facility can discharge treated effluent to the city golf course when needed, thus the continuation of the chlorine disinfection chamber and supplies. EPA should be notified of this change in process so the permit renewal application can be updated.

**Section B-Recording and Reporting Evaluation – Overall Rating of "Satisfactory"**

**Section F-Laboratory-Overall Rating of "Satisfactory"**

**Compliance Evaluation Inspection  
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To review accuracy of reported data and procedures, bench sheets for the month of June 2010 was selected. Reported information was reviewed against actual lab results and sample collection worksheets:

A DMR calculation check was conducted for the **Total Suspended Solids (TSS)** parameter. Concentration values are mg/l. Loading values are in pounds per day. The permit requires a 12 hour composite sample of effluent collected once a week. However samples are collected 3 times a week and reported. All values reported for TSS have been calculated and reported correctly.

<b>Date</b>	<b>TSS Conc.</b>	<b>Weekly Ave. Flow,</b>	<b>MGD</b>	<b>Loading</b>	<b>Weekly Ave.</b>
<b>6/2</b>	4.20		1.34	46.94	
<b>6/3</b>	6.50		1.55	84.02	
<b>6/4</b>	3.45	4.72	1.42	40.86	57.27
<b>6/9</b>	1.15		1.31	12.56	
<b>6/10</b>	1.50		1.38	17.26	
<b>6/11</b>	1.05	1.23	1.33	11.65	13.82
<b>6/16</b>	1.65		1.40	19.27	
<b>6/17</b>	2.05		1.38	23.59	
<b>6/18</b>	1.35	1.68	1.55	17.45	20.10
<b>6/23</b>	1.60		1.46	19.48	
<b>6/24</b>	1.65		1.38	18.99	
<b>6/25</b>	1.30	1.52	1.43	15.50	17.99
<b>6/30</b>	1.05	1.05	2.26	19.79	19.97
	<b>2.19</b>	<b>4.72</b>		<b>26.72</b>	<b>57.27</b>

**Compliance Evaluation Inspection  
 Carlsbad Waste Water Treatment Plant  
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A DMR calculation check was conducted for the **Biochemical Oxygen Demand 5-day (BOD5)** parameter. Concentration values are in (mg/l) and loading (lbs/day). The permit requires a 24 hour composite sample of effluent collected once a week. However samples are collected 3 times a week and reported.

On 6/11/2010 the lab result for BOD was 1.72; the data entered into the spread sheet was 2.00. This will slightly change the 30 day averages, corrected values are in red, reported vales in black. All other values reported for BOD5 have been calculated and reported correctly.

<b>Date</b>	<b>BOD mg/l</b>	<b>Weekly Ave.</b>	<b>Flow, MGD</b>	<b>Loading</b>	<b>Weekly Ave.</b>
	30-day ave			30-day ave	
<b>6/2</b>	5.56		1.34	62.14	
<b>6/3</b>	13.02		1.55	168.31	
<b>6/4</b>	8.91	9.16	1.42	105.52	111.99
<b>6/9</b>	2.47		1.31	26.99	
<b>6/10</b>	2.00		1.38	23.02	
<b>6/11</b>	<b>1.72/2.00</b>	<b>2.06/2.16</b>	1.33	<b>19.08/22.18</b>	<b>23.03/24.06</b>
<b>6/16</b>	2.07		1.40	24.17	
<b>6/17</b>	2.05		1.38	23.59	
<b>6/18</b>	2.00	2.04	1.55	25.85	24.54
<b>6/23</b>	2.00		1.46	24.35	
<b>6/24</b>	2.91		1.38	33.49	
<b>6/25</b>	2.45	2.45	1.43	29.22	29.02
<b>6/30</b>	2.00	2.00	2.26	37.70	37.70
	<b>3.78/3.80</b>	<b>9.16</b>		<b>46.42/46.66</b>	<b>111.99</b>

# Carlsbad WWTP NM0026395

Date	pH	pH	Q	Q	BOD	BOD	BOD	BOD	BOD	BOD	TSS	TSS	TSS	TSS	TSS	TSS	TCR	E coli	E-Coli	
																				Mo. Ave
	6.60	9.00	MGD	MGD	1251 lbs/day	1877 lbs/day														
2/1/11	7.23	7.75	1.9	2.2	69.01	102.16	4.31	5.88	86.87	125.69	5.36	7.22	0.000	6	9					
1/1/11	7.28	7.66	1.9	2.1	66.16	96.89	4.19	6.04	87.99	177.37	5.57	11.09	0.000	21	37					
12/1/10	7.26	7.84	1.9	8.0	63.98	80.00	4.10	5.05	95.61	143.22	6.08	9.12	0.000	20	39					
11/1/10	7.27	7.78	2.1	2.2	57.41	71.66	3.40	4.08	86.20	116.90	5.15	6.65	0.000	22	24					
10/1/10	7.34	7.63	2.0	2.2	48.58	94.62	3.09	4.89	113.15	237.99	7.51	17.31	0.000	16	29					
9/1/10	7.32	7.70	2.1	2.2	46.92	59.53	2.56	3.03	58.14	81.19	3.17	4.35	0.000	23	115					
8/1/10	7.46	7.74	1.8	2.3	40.41	55.13	2.87	3.52	36.77	51.07	2.56	3.07	0.000	20	39					
7/1/10	7.47	7.70	2.3	2.6	64.67	86.39	3.35	4.65	71.05	120.66	3.79	6.73	0.000	40	58					
6/1/10	7.38	7.78	1.5	1.7	46.66	111.99	3.80	9.16	26.72	57.27	2.19	4.72	0.000	29	59					
5/1/10	7.30	7.74	1.4	1.6	34.92	48.12	3.18	4.22	32.11	50.79	2.90	4.48	0.000	12	14					
4/1/10	7.51	7.76	1.7	2.0	32.23	37.64	2.30	2.73	24.32	35.89	1.73	2.57	0.000	20	148					
3/1/10	7.22	7.78	1.8	1.9	42.34	62.35	2.87	4.09	27.82	36.33	1.90	2.37	0.000	39	76					
2/1/10	7.36	7.69	1.9	2.1	77.09	91.49	4.91	5.59	66.51	87.18	4.29	5.94	0.000	29	67					
1/1/10	7.32	7.59	1.9	2.2	55.91	68.72	3.78	4.75	75.82	119.87	5.06	8.25	0.000	5	7					
12/1/09	7.45	7.61	2.0	2.1	40.99	46.94	2.42	2.70	53.67	86.58	3.15	5.05	0.000	8	11					
11/1/09	7.40	7.63	1.8	2.1	28.39	30.84	2.20	2.63	19.44	25.21	1.45	1.70	0.000	9	16					
10/1/09	7.47	7.91	2.4	1.8	32.27	47.52	2.28	2.92	36.66	86.32	2.53	5.37	0.000	15	43					
9/1/09	7.49	7.77	1.6	1.8	23.63	25.72	2.16	2.62	27.85	44.66	2.62	4.17	0.000	27	64					
8/1/09	7.43	7.79	1.7	2.3	28.37	30.68	2.18	2.63	47.98	59.92	3.57	5.03	0.000	29	76					
7/1/09	7.22	7.57	1.8	2.0	32.32	44.54	2.05	2.13	34.62	55.05	2.13	2.52	0.000	25	71					
6/1/09	7.33	7.50	2.3	2.8	45.35	48.37	2.37	2.84	44.86	63.19	2.38	3.53	0.000	11	13					
5/1/09	7.41	7.57	2.1	2.4	40.77	43.21	2.72	3.14	65.83	97.88	4.40	7.02	0.000	18	32					
4/1/09	7.36	7.61	1.9	2.3	37.24	58.17	2.56	3.56	48.55	93.04	3.29	18.78	0.000	8	9					
3/1/09	7.31	7.56	2.0	2.3	34.92	43.61	2.31	2.67	39.81	58.54	3.68	2.65	0.000	11	14					
2/1/09	7.35	7.58	2.7	3.0	65.99	92.50	2.96	3.85	58.74	75.76	2.59	3.33	0.000	21	27					
1/1/09	7.37	7.580	2.8	2.9	71.55	80.86	3.09	3.57	59.29	66.65	2.55	2.82	0	18	24					
12/1/08	7.33	7.62	2.8	2.9	70	77	3.0	3.4	68.07	76.39	2.98	3.40	0.000	20	28					

DMR BENCH SHEET - NPDES NM0026395

CITY OF CARLSBAD WWTP

FINAL EFFLUENT

2010

MONTH **JUNE**

WEEK NO.	DATE	FLOW MGD	BOD mg/L	BOD mg/L wk-avg (7-day)	BOD LBS	BOD LBS wk-avg (7-day)	TSS mg/L	TSS mg/L wk-avg (7-day)	TSS lbs	TSS LBS wk-avg (7-day)	E-COLI MPN/100ml	GEOMETRIC	GEOMETRIC wk-avg (7-day)	pH
1	06/02/10	1.34	5.56	9.16	62.14	111.99	4.20	4.72	46.94	57.27	190	2.28	1.770	7.54
	06/03/10	1.55	13.02		168.31		6.50		84.03		59	1.77		7.51
2	06/04/10	1.42	8.91		105.52		3.45		40.86		18	1.26		7.54
	06/09/10	1.31	2.47	2.16	26.99	24.06	1.15	1.23	12.56	13.82	16	1.20	1.163	7.75
3	06/10/10	1.38	2.00		23.02		1.50		17.26		15	1.18		7.52
	06/11/10	1.33	2.00		22.18		1.05		11.65		13	1.11		7.78
4	06/16/10	1.40	2.07	2.04	24.17	24.54	1.65	1.68	19.27	20.10	21	1.32	1.227	7.55
	06/17/10	1.38	2.05		23.59		2.05		23.59		15	1.18		7.38
5	06/18/10	1.55	2.00		25.85		1.35		17.45		15	1.18		7.63
	06/23/10	1.46	2.00	2.45	24.35	29.02	1.60	1.52	19.48	17.99	19	1.28	1.607	7.68
TOTAL	06/24/10	1.38	2.91		33.49		1.65		18.99		38	1.58		7.71
	06/25/10	1.43	2.45		29.22		1.30		15.50		92	1.96		7.71
AVERAGE	06/30/10	2.26	2.00	2.00	37.70	37.70	1.05	1.05	19.79	19.79	49	1.69	1.690	7.71
			49.44	WEEKLY MAX	606.53	WEEKLY MAX	28.50		347.37	WEEKLY MAX		30 DAY AVG.	WEEKLY MAX	
			<b>3.80</b>	<b>9.16</b>	<b>46.66</b>	<b>111.99</b>	<b>2.19</b>	<b>4.72</b>	<b>26.72</b>	<b>57.27</b>		<b>1.46</b>	<b>1.77</b>	
											<b>29</b>		<b>59</b>	

30DA AVG Max = 30  
7 DA AVG Max = 45

30DA AVG Max = 30  
7 DA AVG Max = 45

E. COLI Max = 126 Max = 410

	HIGH	LOW	AVERAGE	WEEKLY MAX.
FLOW	2.26	1.31	1.50	1.71
pH	7.78	7.38		

MAXIMUM TOTAL CL2 RESIDUAL	0.009
EFFLUENT CL2 RESIDUAL AVERAGE	0.003

DAILY AVG Max = 0.011

NOTES: During the first week of June, as per HDR Engineering request, the plant was half shutdown, in order to experiment with flows for construction purposes. This resulted in higher than normal numbers for the week.