

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	09/29/2021	
Media Program:	Water	
Regulatory Program(s)	CWA	
Company Name:	City of Carlsbad	
Facility Name:	Carlsbad Wastewater Treatment Plant	
Facility Physical Location:	45 Blackfoot Road	
(city, state, zip code)	Carlsbad, New Mexico	
Mailing address:	Post Office Box 1569	
(city, state, zip code)	Carlsbad, New Mexico 88221-1569	
County/Parish:	Eddy	
Facility Phone Number	575-887-5412	
Facility Contact:	Joe Harvey	Wastewater Superintendent
	wastewater@cityofcarlsbadnm.com	
FRS Number:	110014410262	
Identification/Permit Number:	NM00226395	
Media Identifier Number:	N/A	
NAICS:	221320	
SIC:	4952	
Personnel participating in inspection:		
Joe Harvey	City of Carlsbad	Wastewater Superintendent
Elias Lara	City of Carlsbad	Wastewater Operator
Kelly Smyer	City of Carlsbad	Wastewater Operator
Daniel Chasse	City of Carlsbad	Wastewater Operator
Susan A. Lucas Kamat	NMED	Program Manager, Point Source Regulation Section-Surface Water Quality Bureau
David A Esparza, P.E.	USEPA/ECDWM	Environmental Engineer
EPA Lead Inspector Signature/Date		
	David Esparza	Date
Supervisor Signature/Date		
	Roberto Bernier	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

United States Environmental Protection Agency (EPA) Region 6 inspector David Esparza, P.E., and Ms. Susan A. Lucas-Kamat, Program Manager, Point Source Regulation Section, Surface Water Quality Bureau, New Mexico Environment Department (NMED) arrived at the City of Carlsbad (Carlsbad) Wastewater Treatment Plant (WWTP) at approximately 1:00 PM on September 29, 2021 for an unannounced inspection. I presented my credentials to Mr. Harvey, Wastewater Superintendent, and informed him that this was an EPA inspection to determine the facility's compliance under the Clean Water Act (CWA) and the requirements of the National Pollutant Discharge Elimination System (NPDES) permit program. This Compliance Evaluation Inspection (CEI) was conducted under the authority of §308 of the CWA. The generation of this report is based on information supplied by Carlsbad representatives, observations made by the EPA inspector, NMED, and records and reports maintained by the permittee (Carlsbad) and the EPA. Before leaving the facility on September 29, 2021, an exit briefing was held with Mr. Harvey, and Ms. Lucas-Kamat to explain areas of concern noted at the time of the inspection.

FACILITY DESCRIPTION

The WWTP (constructed after the abandonment of the original WWTP circa 1960 and rehabilitated in approximately 2014) is a major discharger with a design flow of 5.0 million gallons per day (MGD), with an average daily flow of 2.5 MGD. The facility is located at 45 Blackfoot Road, Carlsbad, Eddy County New Mexico (depicted in Aerial Image #1 below). The WWTP serves a population of approximately 29,000 residents. The WWTP is operated by staff within the Public Works Department and consists of 8 full-time equivalent (FTE) positions, inclusive of administrative support during the hours of 6:00 AM to 3:00 PM seven (7) days a week. On-call staff is available on an as needed basis.

The city maintains 26 lift stations (Identified in **Table 1** below). These include 9 onsite lift stations within the WWTP, of which 6 are operational and 3 are on stand-by. All influent flows are lifted by the primary lift station comprised of two (2) main pumps, one (1) stand-by pump, automatic back-up power and an alarm and callout system (identified as Lift Stations #1 and #2 in **Table 1** below). The city previously rehabilitated numerous manholes and various lift stations and auxiliary appurtenances or equipment, while awaiting additional State/Federal or private funding to address proposed upgrades. The previous upgrades have significantly cut down on backups and inflow/infiltration (I/I) in the collection system. Upgrades to the current WWTP were completed a couple of years ago, including an expansion of the reuse (disinfected effluent) storage system (totaling approximately 2-million gallons). This reuse storage system utilizes the former chlorine contact chamber, clarifier, and a newly constructed concrete tank.

The WWTP headworks is comprised of an automatic bar screen, fine screen compactor, and aerated grit chamber. To prevent overflows, an automatic bypass is incorporated too. The flow traverses from the headworks to a splitter box, then divided between two primary clarifiers which operate in parallel. Residual grit and screenings are removed and transported to the regional landfill. The flow, then re-combines into four (4) aeration basins, operating in parallel. The basins have both anoxic and aeration

zones for nitrogen removal. From the aeration basins, the wastewater is then divided between two secondary clarifiers. After solids are settled out in the secondary clarifiers, effluent flows through a dual bank UV system for final disinfection. These two (2) UV banks were reworked in 2014. A portion (approximately 1-million gallons) of the disinfected effluent flow is stored for reuse on the city golf course and other municipal facilities. 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 above the river.

Septage and domestic wastewater (primarily shower and other water from oil and gas maintenance facilities in the area) are received at a structure situated next to the sludge beds. This facility is equipped with a bar screen and large solids removal then wastewater enters a converted sludge bed and gradually piped into the WWTP. The facility staff monitors incoming registered septage haulers for pH and grease to determine compatibility with the WWTP for acceptance or rejection.



Aerial Image #1- Overall view of the City of Carlsbad Wastewater Treatment Plant. Aerial from Google Earth.

Carlsbad currently does not have Industries that would be classified as Industrial Users.

Table 1: City of Carlsbad Lift Stations

	Lift Station	Address
1	Primary North	304 E. Plaza
2	Primary South	304 E. Plaza
3	Sunnyview	3300 Sunnyview Avenue
4	Hall Street	1003 North Avenue
5	Bataan	315 E. Greene Street
6	Stevens Street	109 E. Stevens
7	Hagerman	107 E. Hagerman
8	Church Street	107 E. Church Street
9	La Huerta	1280 N. Canal Street
10	Belve	2502 Camp Avenue
11	Pate Street	2207 Mountain View Drive
12	River Bend	300 Cimarron Trail
13	Ridgecrest	605 Ridgecrest Drive
14	Convention Center	705 Riverwalk Drive
15	Quail Hallow	2015 Quail Hollow Run
16	Cascades	699 Park Drive
17	Farmview	3901L Jesse James Court
18	Copperstone	1216 Mahogany Avenue
19	Comfort Suites	2530 W. Pierce
20	Oasis	3800 S. Sunnyview
21	Arrowstone	4023 National Parks Hwy
22	Chapman	3012 Chapmen Road
23	Sky Ridge	W. Pierce and Skyline Road
24	Sports Complex	3101 W Lea Street
25	Golf Shed	120 Mission Avenue
26	City Park	914 E. Riverside Avenue

Additionally, Carlsbad has implemented written policies and procedures to address any potential sanitary sewer overflow events (SSOs), and standard operating procedures (SOPs) pertaining to facility operations and maintenance (O&M).

Section II - OBSERVATIONS

I observed the following and the following information was provided and/or stated:

- The WWTP has completed, or is in the process of completing, scheduled maintenance and/or upgrades/rehabilitation with respect to existing infrastructure i.e., retrofitting the aeration basins and holding basin for the reuse water.
- The WWTP has secure perimeter fencing, limiting access.

- The overall WWTP's operations and maintenance (O&M), and general facility housekeeping, appeared to be in good order
- It was suggested a visual observation of the WWTP's effluent flow at Outfall 001 into the Pecos River not occur due to the typical infestation of venomous vermin now.
- The WWTP on-site laboratory maintains and updates its written SOP's as necessary, inclusive of appropriate annual equipment certifications and/or calibrations.

Section III – SUMMARY/AREAS OF CONCERN

A review of the Integrated Compliance Information System (ICIS) database for the period from August 13, 2018 to September 29, 2021 indicates the following areas of concern (AOCs):

- NPDES permit excursion- Biological Oxygen Demand-5 day (BOD₅) – March 31, 2020

EPA Region 6 inspector David Esparza conducted a closing conference at the City of Carlsbad on September 29, 2021 for the inspection. During the closing conference, Mr. Esparza reviewed and discussed Areas of Concern noted during the inspection.

Section IV – RECOMMENDATIONS

- Review and update the Sanitary Sewer Overflow (SSO) Protocol points of contact (POC).
- Completion and implementation of a written Fats, Oils and Grease (FOG) program.
- Preparation of a Sewer Use Ordinance to address the existing and/or future Industrial Users.

Section V – LIST OF APPENDICES

Appendix 1 – A Review of the Integrated Compliance Information System (ICIS) Database for the period from August 13, 2018 to September 29, 2021

Appendix 2 – Opening and closing conference sign-in sheet

Appendix 1

A Review of the Integrated Compliance Information
System (ICIS) Database
for
the period from August 13, 2018 to September 29, 2021



Search Permits

Related NPDES Violations

ADD SINGLE EVENT VIOLATION

List of Violations Related to the Permit

Record 1 to 1

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 00310 BOD, 5-day, 20 deg. C Effluent Gross Season ID:0 C2	E90	03/31/2020			

Record 1 to 1

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U.S. Environmental Protection Agency

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Appendix 2

Opening and Closing Conference Sign-in Sheet



United States Environmental Protection Agency
Region 6 – Water Enforcement Branch
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733



DATE: _____
TIME: _____
SUBJECT: City of Carlsbad WWTP (NM0026395)

MEETING ATTENDEES

NAME	COMPANY	PHONE NO.	EMAIL
ELIAS A. LARA <i>nm# 8022</i>	<i>city of Carlsbad</i>	<i>(575) 644-7858</i>	<i>ELIASLARA177@GMAIL</i>
<i>Kelly D Smyler</i>	<i>city of Carlsbad</i>	<i>(575) 202-8545</i>	<i>nerosdeal@yahoo.com</i>
<i>Susan A Lucas Kamat</i>	<i>hmed</i>	<i>505 946 8924</i>	<i>susan.lucas.kamat@state.nm.us</i>
<i>DANIEL P. CHASSE</i> <i>CARLSBAD</i>	<i>CITY OF</i>	<i>575 650-4263</i>	