

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	09/29/2022	
Media Program:	Water	
Regulatory Program(s)	NPDES	
Company Name:	City of Tucumcari	
Facility Name:	Tucumcari Wastewater Treatment Plant	
Facility Physical Location:	1700 North Rock Island Street	
(city, state, zip code)	Tucumcari, New Mexico	
Mailing address:	Post Office Box 1188	
(city, state, zip code)	Tucumcari, New Mexico 87321	
County/Parish:	Quay	
Facility Phone Number	575-402-4542	
Facility Contact:	Calvin Henson	Wastewater Superintendent
	wastewater@cityoftucumcari.com	
FRS Number:	110000762354	
Identification/Permit Number:	NM0020711	
Media Identifier Number:	NA	
NAICS:	221320	
SIC:	4952	
Personnel participating in inspection:		
Calvin Henson	City of Tucumcari	Wastewater Superintendent
David Esparza	R6-ECDWM	Environmental Engineer
EPA Lead Inspector Signature/Date	DAVID ESPARZA Digitally signed by DAVID ESPARZA Date: 2022.11.21 13:34:59 -07'00'	
	David Esparza	Date
Supervisor Signature/Date	ROBERTO BERNIER Digitally signed by ROBERTO BERNIER Date: 2022.11.22 08:14:37 -06'00'	
	Roberto Bernier	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector David Esparza, PE arrived at the City of Tucumcari Wastewater Treatment Plant (WWTP) (Tucumcari) at approximately 8:00 AM on September 29, 2022, for an unannounced inspection. I met with Mr. Calvin Henson, Wastewater Superintendent, presented my credentials and informed him that this was an EPA inspection to determine the Tucumcari WWTP's (Tucumcari) compliance under the Clean Water Act (CWA). This compliance evaluation inspection (CEI) was conducted under the authority of the National Pollutant Discharge Elimination System (NPDES) permit program, in accordance with the CWA. The generation of this report is based on information supplied by Tucumcari representatives, observations made by the United States Environmental Protection Agency (US EPA) inspector, and records and reports maintained by the permittee (Tucumcari), and the US EPA. Before leaving the facility, an exit briefing was held at 11:30 AM with City of Tucumcari representative Mr. Calvin Henson to explain areas of concern noted at the time of the inspection.

FACILITY DESCRIPTION

The WWTP is a major discharger with a design flow capacity of 1.2 MGD (million gallons per day) and an average influent flow of 0.4 MGD. The facility is located at 1700 North Rock Island Street, Tucumcari, Quay County, New Mexico (depicted in **Aerial Site Image #1** below). The WWTP also accepts approximately 3,500-gallons per day of septage from permitted waste haulers. The facility serves a population of approximately 5,000 residents and is operated by staff within the Public Works Department consisting of 5 full-time equivalent (FTE) positions, during the hours of 7:00 AM to 4:00 PM five (5) days during the regular work week and 1 FTE on weekends. On-call staff is available on an as needed basis.



Aerial Site Image #1: Overall view of the City of Tucumcari Wastewater Treatment Plant

The WWTP discharges its disinfected effluent through a closed conduit pipe to a point within Breen Pond located approximately 2-miles from the WWTP (located approximately at a point described as

Latitude/Longitude 35° 13' 09.18" N, 103° 42' 16.69"W), overflow from the pond traverses to No Name Creek, thence travels approximately one-mile to Pajarito Creek, a tributary to the Canadian River.

Construction of the new WWTP Medium Rate Activated Sludge facility (MRAS) was completed in 2011 and was a replacement for the original WWTP built in 1982. These upgrades included construction of a water reuse storage pond, pump station, and a pipeline for a water conservation and reuse projects. This upgraded system is a conventional activated sludge process that also incorporates biological nutrient removal. The previous improvements also included upgrades to the headworks, new splitter boxes, rehabilitation of the primary clarifiers, new MRAS basins, secondary clarifiers, two (2) banks of Trojan ultraviolet (UV) disinfection units, a blower/pump building, sludge drying and composting pads, and a new laboratory and administration building. Rehabilitation of the anaerobic and aerobic sludge digesters included replacement of the floating roof with a fixed roof over the anaerobic digester and reinforcement/repairs to the concrete structures.

Currently the WWTP is at a 60% design phase of their wastewater Effluent Reuse Project. Upon completion the reuse project will include the installation of new effluent lift pumps to convey Class 1B effluent from the existing facility to two (2) onsite storage ponds, one (1) existing (3 million gallons) and one (1) new (4 million gallons) for a total combined storage of 7 million gallons. The Reuse project also includes installation of Reuse Booster Pumps that will draw from the pond storage and pump via closed conduit pipeline to irrigation pivots at the New Mexico State University (NMSU) property (an existing operation) and the Smith property (new). At the Smith property, three (3) new irrigation pivots will be installed to reuse the Class 1B effluent water the WWTP is producing. Additional electrical upgrades will be installed and power feeds for each irrigation pivot at the Smith property.

The WWTP is a gravity flow system with ten (10) lift stations (LS) (Identified in **Table 1** below). The lift stations are equipped with standby generators and automatic switchovers in the event of power loss. The generators are exercised monthly to verify system readiness. In the event of a local power outage, an emergency generator at the WWTP is available to operate most of the facility treatment processes except for the blowers. This enables the WWTP to continue the treatment process through gravity flow, unabated.

Table 1: City of Tucumcari Lift Stations

Lift Station Name	Comments/Status
54	Operational
66	Operational
KOA	Operational- proposed to be upgraded in 2023
Date Street	Operational
Rock Island	Operational
El Carro	Operational
Ridge Crest	Operational
JW	Operational
Sherwood	Stand-by
Tucumcari Truck Terminal (TTT)	Stand-by

The MRAS is a modified racetrack, having both aerobic and anoxic zones. Flow from the MRAS is sent to the reconditioned secondary clarifiers. The flow from the secondary clarifiers is combined and routed to the ultraviolet (UV) treatment building for disinfection.

To address their sludge management, the WWTP has and/or maintains three (3) concrete sludge drying beds (located approximately at the southeast end of the facility) for composting into Class A sludge for land application and/or local agricultural purposes. These beds were originally constructed with underdrains to collect excess wastewater; thus, creating the ability to pump and/or return excess wastewater to the headworks.

The one (1) previous industrial use (IU) discharger, Tucumcari Mountain Cheese Factory no longer discharges to the facility. It was indicated they currently discharge to a lined pond permitted by the New Mexico Environment Department (NMED) Ground Water Quality Bureau, but no discharge permit could be located. This previously permitted IU facility is in addition to the proximate motels, restaurants, gas stations, and laundromats.

A Supervisory Control and Data Acquisition (SCADA) system provides around the clock monitoring of WWTP operations

Additionally, Tucumcari 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), inclusive of daily (morning and evening) visual checks of the WWTP treatment processes and lift stations. These SOPs also include protocols for new hires, inclusive of testing to ensure that they can perform each step properly before advancing on their own. It is not clear whether the city, has a written protocol or mechanism in place pertaining to a Fats, Oils and Grease (FOG) program.

Section II – OBSERVATIONS

I observed or the following was stated on September 29, 2022.

- Tucumcari 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), inclusive of daily (morning and evening) visual checks of the WWTP treatment processes and lift stations.
- Written protocols or mechanisms are in-place for new hires, inclusive of testing to ensure they can perform each step properly before advancing on their own.
- A Supervisory Control and Data Acquisition (SCADA) system provides around the clock monitoring of WWTP operations.
- A review of facility record shows the permittee is conducting the sampling and monitoring on the effluent as required.
- Adequate staffing. The permittee currently maintains five (5) FTE operator positions
- The overall housekeeping of the WWTP of the grounds and ancillary appurtenances appeared to be well maintained and in operational order.
- The WWTP did have secure perimeter fencing and lighting; thus, limiting access.

Section III – AREAS OF CONCERN

A review of the ICIS database for the period from January 1, 2020, to August 31, 2022 (**Appendix 2**) indicates NPDES permit excursions.

- A review of the Integrated Compliance Information System (ICIS) indicates several NPDES permit single event violations (August and November 2020) and July 2021.

I conducted a closing conference a closing conference at City of Tucumcari WWTP on September 29, 2022, for the inspection.

Section IV – FOLLOW UP

The following information was received by EPA on October 5, 2022, after exiting the Facility on September 29, 2022:

- Electronic copies of the 60% Plan Set drawings for the WWTP re-use lines to the New Mexico State University's Tucumcari Science Center
- Electronic copies of your WWTP's Standard Operating Procedures (SOP) or a Fats, Oils and Grease (FOG) program
- Names and/or addresses of any Industrial Users (IUs) discharging to the WWTP.
- Electronic copies of any applicable Service Agreements with respect to the above IUs.
- Status of your previously identified lift stations (i.e., operational, or on-standby)

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 4 photos taken 9/29/2022

Appendix 2 – Review of the Integrated Compliance Information System (ICIS) Database for the period from January 1, 2020, to September 19, 2022.

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Tucumcari WWTP		
City: Tucumcari	County/Parish: Quay	State: New Mexico



View of the WWTP's Headworks. The WWTP Supervisor stated that locating replacement parts for the existing facility equipment in general was getting extremely difficult. (DSCN2348) Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Tucumcari WWTP		
City: Tucumcari	County/Parish: Quay	State: New Mexico



View of the grit screen removal equipment. (DSCN2349) Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Tucumcari WWTP		
City: Tucumcari	County/Parish: Quay	State: New Mexico



View of one (1) the three (3) sludge drying beds (located approximately at the southeast end of the facility) for composting into Class A sludge for land application and/or local agricultural purposes. These beds were originally constructed with underdrains to collect excess wastewater; thus, creating the ability to pump and/or return excess wastewater to the headworks. (DSCN2346) Photographed D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Tucumcari WWTP		
City: Tucumcari	County/Parish: Quay	State: New Mexico



View of the two (2) banks of Trojan ultraviolet (UV) disinfection units included in the 2011 WWTP upgrades. (DSCN2350) Photographed by D. Esparza

Appendix 2

Review
of the
ICIS database
for
the period
from
January 1, 2020, to September 19, 2022

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Related NPDES Violations

ADD SINGLE EVENT VIOLATION

List of Violations Related to the Permit

					Record Numbers 1 to 4	
Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	08/15/2020			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	11/07/2020			Delete
Single Event Violation	R011S Wet-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R011S	07/02/2021			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	07/03/2021			Delete

Record Numbers 1 to 4

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Back to Top

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U.S. Environmental Protection Agency

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