

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	01/18/2022	
Media Program:	Water	
Regulatory Program(s)	CWA	
Company Name:	Village of Cimarron	
Facility Name:	Cimarron Wastewater Treatment Plant	
Facility Physical Location:	0.3-miles Northeast of New Mexico State Road 58 (SR-58), or 0.6-miles Southeast of US Highway 64	
(City, state, zip code)	Cimarron, New Mexico 87714	
Mailing address:	P.O. Box 654	
(City, state, zip code)	Cimarron, NM 87714	
County/Parish:	Colfax	
Facility Phone Number	Jerrid Turner	Wastewater Operator
Facility Contact:	jtpublicworks@villageofcimarron.net	575-707-0865
FRS Number:	110064621137	
Identification/Permit Number:	NM0031038	
Media Identifier Number:	N/A	
NAICS:	221320	
SIC:	4952	
Personnel participating in inspection:		
Jerrid Turner	Village of Cimarron	Wastewater Operator
Shawn Jeffery	Village of Cimarron	Village Administrator
David Esparza	EPA-R6-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, PE, arrived at the Village of Cimarron (Cimarron) Wastewater Treatment Plant (WWTP) approximately 12:30 AM on January 18, 2022, for an unannounced inspection. I presented my credentials to Mr. Jerrid Turner, Wastewater Operator 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, in accordance with the CWA. The generation of this report is based on information supplied by Cimarron representatives, observations made by the EPA inspector, NMED and records and reports maintained by the permittee (Cimarron), and the EPA. Before leaving the facility on January 18, 2022, an exit briefing was held with Mr. Turner, to explain areas of concern noted at the time of the inspection. It should be noted the WWTP also maintains a discharge permit (DP-1252) issued by the New Mexico Environment Department (NMED), Groundwater Quality Bureau.

FACILITY DESCRIPTION

The WWTP was constructed in circa 1970 with a design flow of 0.0083 MGD and is located approximately 0.3-miles Northeast of New Mexico State Road 58 (SR-58), or 0.6-miles Southeast of US Highway 64 (US-64), Cimarron, Colfax County, New Mexico (depicted in **Aerial Image #1** below). Raw sewage flows by gravity through the collection system and Parshall Flume (Appendix 1 Photograph #1). Though one (1) lift station located on the south side of town (13th and Euclid) contributes to the collection system. According to Preliminary Engineering Report (PER) prepared by Nolte Associates, Inc. in 2007, "The system consists of two concrete-lined facultative lagoons connected in parallel. The influent headworks consist of a Parshall flume without any screening of coarse solids, i.e., a bar screen system. At the discharge end there are two sand filters with a Parshall flume and head gate system, prior to the effluent being discharged into French Lake. In May 1982, both the sand filters were completely flooded and considered unusable".

In May 2004, a SB40000R unit also known as (aka) "Solar Bee" was installed in the east lagoon with the objective to reduce the sludge depth, improve dissolved oxygen levels, reduce/eliminate odors, and improve the effluent water quality (Appendix 1 Photograph #3). These stationary mixing units do not provide any aeration; they simply mix a small section of the solids and water in the lagoons. Visual observation indicated both concrete-lined lagoons which equate to approximately 2-acres in surface area each, exhibit cracking, extensive vegetative overgrowth and slope in easterly direction as minimal free board remained along their perimeters (Appendix 1 Photograph #4 and Photograph #5). During the winter months the evaporation rate is low, and the lagoons tend to fill. In the spring high winds and warmer temperatures lower the pond levels. The head works operate without any trash collecting bar screens therefore all inorganic material and coarse solids enter the lagoons, which in turn sometimes exit into French Lake, thence Ponil Creek, thence to the Cimarron River.

French Lake is currently owned by the Vermejo Ranch for irrigating cropland seeded with alfalfa. It was previously, stated that Vermejo Ranch no longer approves of the Village discharging onto their land.

The WWTP facility serves a population of approximately 900 residents and is operated by staff within the Public Works Department and normally consists of 2 full-time equivalent (FTE) positions on a 24-hour per day, 7 days per week basis.



Aerial Image #1: Overall view of the Village of Cimarron's Wastewater Treatment Plant. Aerial from Google Earth maps

Facility personnel stated that solids have never been wasted. Which agrees with the 2007 PER, wherein it states, "The sludge blanket on the bottom of the lagoons has not been cleaned in many years and the current depth is unknown. Depending on the depth, this may reduce treatment volume in the lagoons".

Furthermore, there are no sludge drying beds at the site and the WWTP does not have a disinfection system in place.

The WWTP does not discharge regularly but is controlled manually by facility personnel based on the levels in the lagoons. There have not been any discharges from the existing lagoons in approximately the previous 5-year period, according to the Village Clerk. It was previously stated if a discharge is necessary, facility personnel open a gate valve for a period up to 6-hours on two (2) separate days and not necessarily consecutive days. Aqueous samples are collected hourly and analyzed for pH and total residual chlorine (TRC). A grab sample is collected at the beginning of each day of discharge and forwarded for analytical analysis which includes 5-day biochemical oxygen demand (BOD5), total suspended solids (TSS), and Escherichia coli (E. coli). Additionally, a grab sample is collected at the

cessation of the discharge for Whole effluent toxicity (WET) testing. Dilution water is also collected in conjunction with this WET testing from the receiving water on the day of the discharge as well as the day after the discharge.

Section II – OBSERVATIONS

I observed the following and/or the following information was provided or stated on January 18, 2022

- The existing SB40000R units also known as (aka) "Solar Bee" installed in the lagoons with the objective to reduce the sludge depth, improve dissolved oxygen levels, reduce/eliminate odors, and improve the effluent water quality, do not provide any aeration; they simply mix a small section of the solids and water in the lagoons.
- Visual observation indicated both concrete-lined lagoons which equate to approximately 2-acres in surface area each, exhibit cracking, extensive vegetative overgrowth and slope in easterly direction as minimal free board remained along the perimeter of both (Appendix 1 Photograph #4 and Photograph #5). The extensive overgrowth could potentially attract rodents and/or vermin; thus, causing undermining of the weakened structures.
- The head works operate without any trash collecting bar screens therefore all inorganic material and coarse solids enter the lagoons, which in turn sometimes exit into French Lake, thence Ponil Creek, thence to the Cimarron River.
- Facility personnel stated that solids have never been wasted. Which agrees with the 2007 PER, wherein it states, "The sludge blanket on the bottom of the lagoons has not been cleaned in many years and the current depth is unknown. Depending on the depth, this may reduce treatment volume in the lagoons".
- There are no sludge drying beds at the site and WWTP does not have a disinfection system in place.
- The Village recently received grant funding and has completed the technical design and bid proposals for planned upgrades and improvements to the WWTP.
- The WWTP no longer has a certified operator on staff.

Section III – AREAS OF CONCERN (AOC)

The following areas of concern (AOCs) were observed and/or discussed:

- The existing SB40000R units also known as (aka) "Solar Bee" installed in the lagoons with the objective to reduce the sludge depth, improve dissolved oxygen levels, reduce/eliminate odors,

and improve the effluent water quality, do not provide any aeration; they simply mix a small section of the solids and water in the lagoons.

- Visual observation indicated both concrete-lined lagoons which equate to approximately 2-acres in surface area each, exhibit cracking, extensive vegetative overgrowth and slope in easterly direction as minimal free board remained along the perimeter of both (Appendix 1 Photograph #4 and Photograph #5). The extensive overgrowth could potentially attract rodents and/or vermin; thus, causing undermining of the weakened structures.
- The head works operate without any trash collecting bar screens therefore all inorganic material and coarse solids enter the lagoons, which in turn sometimes exit into French Lake, thence Ponil Creek, thence to the Cimarron River.
- Facility personnel stated that solids have never been wasted. Which agrees with the 2007 PER, wherein it states, "The sludge blanket on the bottom of the lagoons has not been cleaned in many years and the current depth is unknown. Depending on the depth, this may reduce treatment volume in the lagoons".
- There are no sludge drying beds at the site and WWTP does not have a disinfection system in place.
- The WWTP no longer has a certified operator on staff.

Section V – FOLLOW UP

The following information was received by EPA on January 20, 2022, after exiting the Facility on January 13, 2022:

- A copy of a current Site Map/Plan, delineating the location of the lagoons (east and west)

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 5 photos taken 01/18/2022

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Cimarron Wastewater Treatment Plant		
City: Cimarron	County/Parish: Colfax	State: New Mexico



View of the influent headworks that consist of a Parshall flume without any screening of coarse solids, i.e., a bar screen system. (DSCN2085) Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Cimarron Wastewater Treatment Plant		
City: Cimarron	County/Parish: Colfax	State: New Mexico



View of the flow staff at the entrance of the influent headworks-Parshall flume. (DSCN2086).
Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Cimarron Wastewater Treatment Plant		
City: Cimarron	County/Parish: Colfax	State: New Mexico



View of the SB40000R unit also known as (aka) "Solar Bee" installed in the east lagoon. (DSCN2084). Photographed by D. Esparza

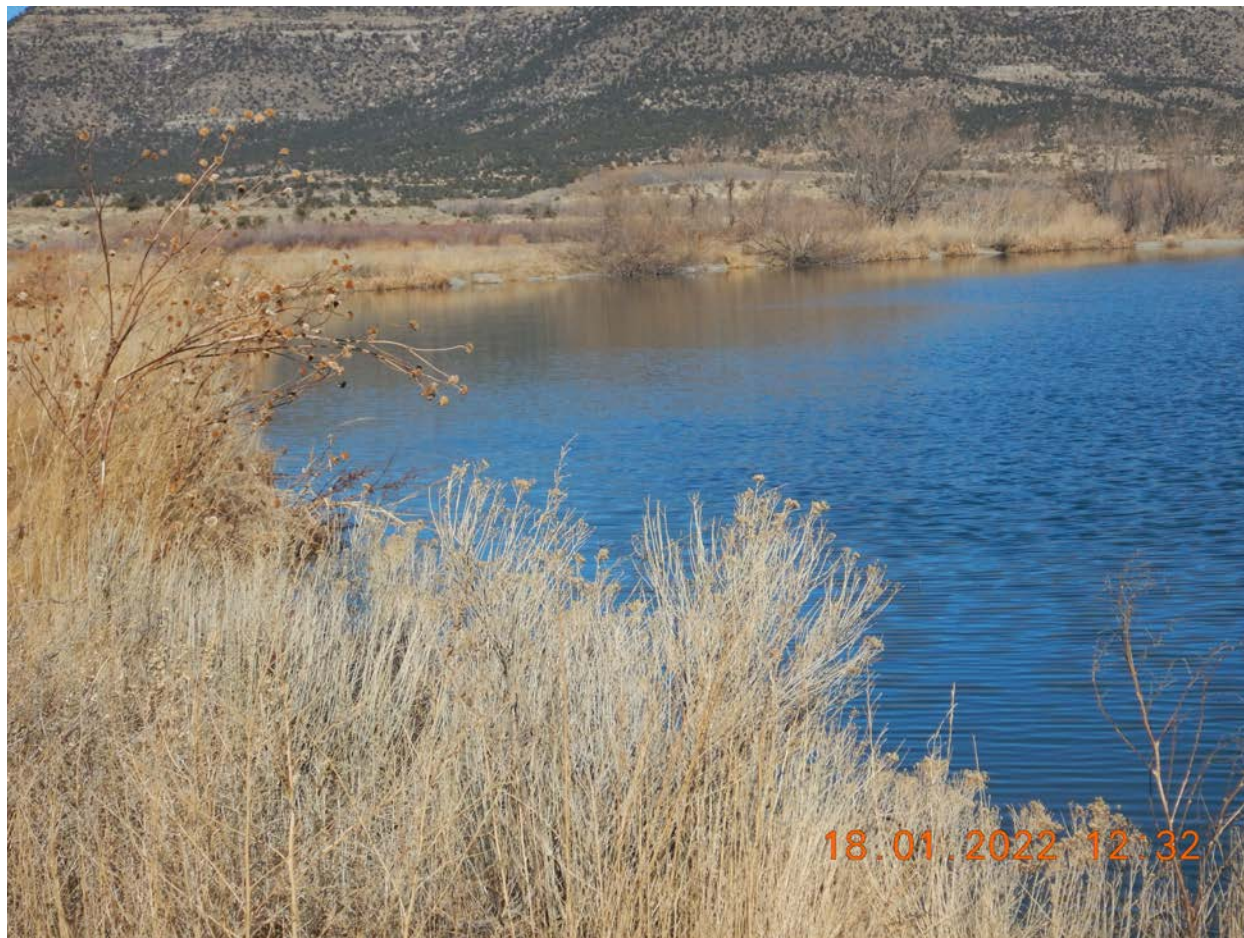


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Cimarron Wastewater Treatment Plant		
City: Cimarron	County/Parish: Colfax	State: New Mexico



View of the perimeter of the West facultative lagoon. Note: the minimal free board and the extensive overgrowth of vegetation. (DSCN 2082). Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Cimarron Wastewater Treatment Plant		
City: Cimarron	County/Parish: Colfax	State: New Mexico



View of the perimeter of the East facultative lagoon. Note: the minimal free board and the extensive overgrowth of vegetation. (DSCN 2083). Photographed by D. Esparza