EPA United States Environmental Protection Agency

Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	2/11/2019		
Media:	Water		
Regulatory Program(s)	NPDES		
Company Name:	**City of Gallup**		
Facility Name:	**City of Gallup Wastewater Treatment Plant**		
Facility Physical Location:	800 Sweetwater Place (Intersection of Sanostee Drive and Sweetwater Place)		
(city, state, zip code)	Gallup, New Mexico 87301		
Mailing address:	230 S. Second Street		
(city, state, zip code)	Gallup, New Mexico 87301		
County/Parish:	McKinley		
Facility Contact:	Dennis Romero	Director	
	dromero@gallupnm.gov		
FRS Number:	110030483732		
Identification/Permit Number:	NM0020672		
Media Number:	N/A		
NAICS:	221320		
SIC:	4952		

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EPA Lead Inspector Signature/Date	DAVID ESPARZA Digitally signed by DAVID ESPARZA DN: c=US, o=U.S. Government, ou=Environmental Protection Agency, cn=DAVID ESPARZA, 0.9.2342.19200300.100.1.1=68001003655879 Date: 2019.03.08 14:43:29 -07'00'	
	David Esparza	Date
Supervisor Signature/Date	CAROL PETERS-WAGNON Digitally signed by CAROL PETERS-WAGNON DN: c=US, o=U.S. Government, ou=Environmental Protection Agency, cn=CAROL PETERS-WAGNON, 0.9.2342.19200300.100.1.1=68001003652679 Date: 2019.03.08 16:43:33 -06'00'	
	Carol Peters	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector David Esparza arrived at the City of Gallup Administrative Office (Public Utilities) at 1:30 PM (MST) on February 11, 2019, for an unannounced inspection. I met with Mr. Dennis Romero, PE; Director of Water/Wastewater & Sanitation. I presented my credentials to Mr. Romero (Romero) and informed him that this was an EPA inspection to determine the waste water treatment plant's (WWTP's) compliance under the Clean Water Act (CWA). During this discussion, I stated to Mr. Romero that this was a follow-up to some of the items identified in my December 2017 inspection regarding the facility's compliance with its National Pollutant Discharge Elimination System (NPDES) permit and would visit the WWTP on February 12, 2019.

FACILITY DESCRIPTION

The WWTP is a major discharger with a design flow of 3.5 million gallons per day. The WWTP is located at 800 Sweetwater Place or approximately 3.4-miles west of the intersection of US Highway 491 (US-491) and US Interstate 40 (I-40), McKinley County, New Mexico. The facility is currently operated under a contract agreement with CH2M, 24-hours per day, 7 days per week and consists of a staff of 6 full-time equivalent (FTE) position.

The influent flow is directed through an 18-inch Parshall flume where a Drexelbrook® ultrasonic level records and measures the flow. An automatic alarm sensor activates the automatic dialer in case of a high-water emergency at the entrance works. Influent flow is then lifted by two of three screw pumps (two online and one for backup) to two Monster separation systems mechanical bandscreens, operated in parallel. Flow can also be diverted through a manual bar screen. The flow enters one of two grit chambers (one traditional basin grit removal system and one vortex grit removal system) where coarse grit can settle out and is collected. The screenings from the automated bar screens and grit from the grit chambers are collected into waiting receptacles that are transported to the city landfill after appropriate testing is conducted.

After the primary clarifiers, the flow is recombined and sent to the aeration basins. The first aeration basin consists of four separate chambers which utilize diffused air to enhance the activated sludge process. This unit is used to further reduce Biochemical Oxygen Demand (BOD) levels and to provide additional control of filamentous bacteria, as appropriate. Thence the flow travels to the oxidation ditch, which contains four mechanical brush aerators to supply air for the activated sludge process. After the oxidation ditch, the flow is split between three (3) secondary clarifiers. The 3 clarifiers are sized accordingly: #1: 75 feet in diameter with a depth of 12 feet, #2: 65 feet in diameter with a depth of 12 feet, and #3: 65 feet in diameter with a depth of 15 feet. The sludge from these units is also sent to the primary aerobic digester if the WWTP is wasting. If not wasting, the sludge is continuously sent to the aeration basins using two (2) Return Activated Sludge (RAS) screw pumps. The flow from the clarifiers is then recombined and directed to a tertiary treatment (cloth filter) building for additional filtering prior to the wastewater being sent to disinfection. These filters are operated in parallel and are backwashed daily. This backwash water is sent to the headworks to be recombined with the influent flow. The flow from the cloth filters then enters the chlorine contact chamber. There are two (2) separate serpentine chlorine contact chambers, which are operated in parallel. Chlorine gas is added to the effluent at the

entrance of the contact basins for disinfection and sulfur dioxide is used as a dechlorinating agent at the exit of the basins to eliminate chlorine after disinfection has taken place.

Some treated and disinfected domestic wastewater is used periodically in the city golf course and the city sports complex for landscape irrigation. The WWTP has four unlined sludge drying beds that are equipped with an under-drainage system. These units are currently not in use, though can be in case of an emergency. After passing through the digestion basins, sludge is sent to the belt press. The dried sludge material from the belt press is fed into lined roll-off containers and transported to the Red Rock Regional Landfill. Sludge may also be hauled from the digestion units by injector truck to a 100-acre parcel of land adjacent to the WWTP for surface disposal in case of an emergency. The practice of utilizing the drying beds and surface disposal was ceased due to aromatics. A non-operational incinerator is also located on-site for emergency situations, though currently not operating the City is proposing to rehabilitate the unit soon.

Image 1: Overall view of the City of Gallup's Wastewater Treatment Plant. Aerial from Google Earth maps.

Section II - OBSERVATIONS

I observed the following on February 11, 2019 and February 12, 2017.

- February 11, 2019- The lift station the City of Gallup (COG) identifies as Indian Hills was observed (through a drive-by) to be operational and the surrounding area had been restored and cleaned with respect the previous events noted in the December 2017 inspection report.

- February 11, 2019- The four (4) identified SSO events (July, October, November and December 2018) were discussed with Mr. Romero. Geographical Information System (GIS) mapping was requested of these event locations (Appendix 2). Mr. Romero did indicate a fifth event had occurred that I was not aware of at the time.
- February 11, 2019- Mr. Romero stated the Fat, Oil and Grease (FOG) program had had been transferred from Code Enforcement to the Water & Sanitation (collections) department in approximately March 2018.
- February 12, 2019- The tertiary treatment (cloth filter) building utilized for additional filtering prior to the wastewater being sent to the chlorine disinfection was currently operational, though excessive foaming was observed.
- February 12, 2019- Visible foam was observed at the outfall to the Rio Puerco (Appendix 1 Photograph #1 and Photograph #2) and approximately 10-15-feet below, however the discharge cleared, and no apparent aromatics, sheen or stressed vegetation was observed. This visible foaming was discussed with WWTP personnel and the cause is in the process of being identified.
- February 12, 2019- The non-operational on-site incinerator previously proposed to assist in drying the sludge material for emergency situations is currently being reevaluated due to estimated rehabilitation costs.
- February 12, 2019- The new Maxwell lift station and associated ancillary equipment (located at the corner of McKinley and J M Montoya) was commissioned approximately 2-months ago (Appendix 1 Photograph #3). This new lift station is a replacement for the I-40 lift station and associated piping which traversed the Rio Puerco and experienced numerous failures. All appurtenant I-40 lift station piping, and equipment was removed, cut/capped and the structure was closed in-place.

Section III – AREAS OF CONCERN

The following areas of concern (AOCs) were observed and/or discussed with the City of Gallup

- The tertiary treatment (cloth filter) building utilized for additional filtering prior to the wastewater being sent to chlorine disinfection was currently operational, though excessive foaming was observed.
- Visible foam was observed at the outfall to the Rio Puerco (Appendix 1 Photograph #1 and Photograph #2) and approximately 10-15-feet below, however the discharge cleared, and no apparent aromatics, sheen or stressed vegetation was observed. This visible foaming was discussed with WWTP personnel and the cause is in the process of being identified.
- The four (4) identified SSO events (July, October, November and December 2018) were discussed with Mr. Romero. Geographical Information System (GIS) mapping was requested of these event locations (Appendix 2 Geographical Information System (GIS) map of the WWTP system's Lift Stations and Four (4) identified sanitary system overflows (SSO's).
- Mr. Romero did indicate a fifth event had occurred. Note: Electronic information provided by the COG (via an Excel spreadsheet) indicates 18 SSO events in calendar year 2018. This spreadsheet does delineate the location and volume of one (1) event, but not the additional 17

SSO events. However, an additional map provided/prepared by the COG delineates Wastewater Work orders (WWW) and Wastewater Spill Reports (WSR) for calendar year 2018 (Appendix 3).

- A review of the Quarterly Non-Compliance Report (QNCR) and the Integrated Compliance Information System (ICIS) indicates several NPDES permit single event violations (July, October and November 2018), schedule violations (January, April, July, October, and November 2018), and effluent violations (March, April, June, July, August, September, October and November 2018). Additionally, numerous Discharge Monitoring Report (DMR) Non-Receipt violations are indicated for the month of June 2018.

Section IV – FOLLOW UP

The following information was provided electronically to the EPA prior to exiting the Facility on February 12, 2019 and was requested during the closing meeting:

- A GIS map of the four (4) sanitary system overflows (SSO's) (July, October, November and December 2018) were discussed with Mr. Romero.
- An Excel spreadsheet prepared by the COG delineates the location and volume of one (1) event, but not the additional 17 SSO events.
- A COG prepared map delineating Wastewater Work orders (WWW) and Wastewater Spill Reports (WSR) for calendar year 2018

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 2 photos taken and 2/12/2019
Appendix 2 – Geographical Information System (GIS) map of the WWTP system's Lift Stations and Four (4) identified sanitary system overflows (SSO's)
Appendix 3– City of Gallup Wastewater Work orders (WWW) and Wastewater Spill Reports (WSR) Map