United States Environmental Protection Agency

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	07/10/2024		
Media Program:	Water		
Regulatory Program(s)	NPDES		
Company Name:	**U.S. Bureau of Reclamation**		
Facility Name:	**Cutter Treatment Plant Lateral (CTPL)**		
Facility Physical Location:	CR 7575, 3 miles east of Highway 550/CR 7575 (Huerfano Turnout)		
(city, state, zip code)	Farmington, NM 87401		
Mailing address:	1235 La Plata HWY		
(city, state, zip code)	Farmington, New Mexico 87401		
County/Parish:	San Juan		
Facility Phone Number	505-729-6277		
Facility Contact:	Kyle Burns	Site Superintendent	
	kyleburns@jacobs.com		
FRS Number:	110070249835		
Identification/Permit Number:	NM0031194		
NAICS:	221310		
SIC:	4941		
Personnel participating in inspection:			
Kyle Burns	Jacobs-Contract Operator	Site Superintendent	
David Esparza	EPA/R6-ECDWM	Environmental Engineer	
EPA Lead Inspector Signature/Date	DAVID ESPARZA Digitally signed by DAVID ESPARZA Date: 2024.09.10 10:06:39 -06'00'		
	David Esparza		Date
Supervisor Signature/Date	ROBERTO BERNIER Digitally signed by ROBERTO BERNIER Date: 2024.09.10 11:48:39 -05'00'		
	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 U.S. Bureau of Reclamation/Cutter Treatment Plant Lateral (CTPL) at approximately 11:45 AM on July 10, 2024, for an unannounced inspection. I presented my credentials to Mr. Kyle Burns, Site Superintendent, Jacobs-contract operator and informed him 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. It should also be noted CTPL maintains a discharge permit (DP-1892) issued by the New Mexico Environment Department (NMED), Groundwater Quality Bureau (GWQB) that allows a permitted discharge to an evaporative lagoon of up to 0.37MGD. The generation of this report is based on information supplied by CTPL representatives, observations made by the EPA inspector, and records and reports maintained by the permittee (CTPL), and the EPA. Before leaving the facility on July 10, 2024, an exit briefing was held with Mr. Burns, to explain areas of concern noted at the time of the inspection.

FACILITY DESCRIPTION

The CTPL has design flow of 3.0 MGD in 2020 (Phase 1). Currently, the plant is producing 10% of Phase 1 design flow and is located approximately 2.75-miles Northwest of the Dzilth-Na-O-Dith-Hle Boarding School (aka DZ School) along County Road 7575 at Huerfano Turnout, San Juan County, New Mexico (denoted in Aerial Image #1 below). CTPL hours of operation are Monday through Friday 8:00 AM to 5:00 PM and consists of a staff of 4 full-time equivalent (FTE) positions.

Aerial Image #1: Overall view of the U.S. Bureau of Reclamation-Cutter Treatment Plant Facility. Note: this Aerial Image is dated April 4, 2024, and illustrates the existing Treatment Plant. Aerial from Google Earth maps.

The CTPL, is part of the Navajo Gallup Water Supply Project (NGWSP), a major infrastructure project that once constructed, will convey a reliable municipal water supply from the Cutter Reservoir to the eastern section of the Navajo Nation and the southwestern portion of the Jicarilla Apache Nation; and from the San Juan River to the western portion of the project to the Navajo Nation Chapters along US 491, the City of Gallup, New Mexico, Window Rock, Arizona, Crownpoint, New Mexico and others via about 280 miles of pipeline.

The CTPL process includes coagulation, flocculation, and filtration processes with added granular activated carbon (GAC) absorption during startup and low flow influent flow rates. The decant flow stream to NPDES discharge is comprised of two flow streams - the backwash waste/off spec ponds and the solids drying beds decant flows. The decant from the backwash waste/off spec ponds and the sludge drying ponds is sent to the decant pump station, which then pumps to the NPDES discharge point passing through a storm water detention pond/evaporative lagoon to Outfall 001. The discharge is to Blanco Wash, a tributary of Canon Largo, thence to San Juan River. Sludge is transported to a landfill for disposal.

Flow metering and sampling occurs prior to entering the storm water detention pond. The storm water drained to the pond is not regulated in this permit because the facility is not required coverage under a Municipal Separate Storm Sewer System (MS4) or multi-sector general permit, and the storm water detention pond is not part of the water treatment process. The plant has been designed with the ability to recycle the backwash waste/off spec ponds and solids drying beds decant flows to the head of the plant.

Additionally, CTPL has implemented written policies and procedures to address any potential sanitary sewer overflow events (SSOs), and standard operating procedures (SOPs) pertaining facility operations and maintenance (O&M). Furthermore, a Supervisory Control and Data Acquisition (SCADA) system provides around the clock monitoring of CTPL operations.

Section II – OBSERVATIONS

I observed the following and/or the following information was provided or stated on July 10, 2024.

- The U.S. Bureau of Reclamation (BoR) was the original owner and NPDES permittee of the Cutter Treatment Plant Lateral (CTPL), circa 2018. In January 2024 a new NPDES permit was issued to the facility in the name of the Navajo Tribal Utility Authority (NTUA). Currently the CTPL is in the process of commissioning and will be operated by the NTUA.

- The CTPL is currently operating at approximately 0.3 MGD or about 10% of the anticipated 3.5 million gallons per day design flow volume and could potentially discharge an average flow of 0.12 MGD. The facility receives raw water from Pumping Plant No. 2 located approximately 1-mile Northeast along Reach 22B of the overall project.

- The CTPL is monitored and controlled with a supervisory control and data acquisition (SCADA) and call-out system.

- The on-site laboratory analytical analysis consists of alkalinity and pH. All additional samples are forwarded to Hall Laboratory (Eurofins) for analysis. Note: the pH-8 and pH-10 buffers were both expired (March 2024). Additionally, a review of the "bench sheet data" appears to indicate the recorded pH values (June 24, 2024) are outside the permitted ranges of 6.43 to 7.21 (S.U.) for the previous NPDES permit (expired in 2023), but within the ranges 6.6 to 9.0 (S.U) in the new permit (issued in January 2024) in some analysis. Note: the recorded values for the sedimentation basins effluent #1 and #2, and the flocculation/sedimentation basins (top) #1 and #2 are outside the ranges for either the old or new NPDES permit. Furthermore a review of the Integrated Computer Information System (ICIS) database indicates no evidence of submission of the required discharge monitoring reports since the 1st quarter of 2021. The changes from the previous permit that expired on December 29, 2023, include:

  - Mass limitation for Total Suspended Solids (TSS) has been removed.
  - Limits for copper have been added.
  - Monitoring for hardness has been added.
  - Monitoring frequency for TSS has been changed to "Daily" from "Weekly".

- The CTPL maintains a backup diesel generator for power that is routinely exercised. However, delivery of raw water relies of Pumping Plant No. 2 located approximately 1-mile Northeast along Reach 22B of the overall project.

- CTPL had secure perimeter fencing; thus, limiting access. The overall operations and maintenance (O&M), and general facility housekeeping appeared to be in good order.

Section III – AREAS OF CONCERN

The following Areas of Concern (AOCs) were identified*:*

1. The on-site laboratory analytical analysis consists of alkalinity and pH. All additional samples are forwarded to Hall Laboratory (Eurofins). Note: the pH-8 and pH-10 were both expired (March 2024). Additionally, a review of the "bench sheet data" appears to indicate the recorded pH values (June 24, 2024) are outside the permitted ranges of 6.43 to 7.21 (S.U.) for the previous NPDES permit (expired in 2023), but within the ranges 6.6 to 9.0 (S.U) in the new permit (issued in January 2024) in some analysis. Note: the recorded values for the sedimentation basins effluent #1 and #2, and the flocculation/sedimentation basins (top) #1 and #2 are outside the ranges for either the old or new NPDES permit.

EPA Region 6 inspector David Esparza conducted a closing conference at the Cutter Treatment Plant Lateral at 2:30 PM on July 10, 2024, for the inspection. During the closing conference, David Esparza reviewed the Areas of Concern noted during the inspection.

Section IV – FOLLOW UP

The following information was received by EPA on July 18, 2024, after exiting the Facility on July 10, 2024:

- A current copy of the CTLP Site Plan- denoting each of the treatment processes.
- An electronic copy of the flow path commencing with the influent flow to discharge point.
- An electronic copy of the onsite CTLP laboratory bench sheet.
- A summary of the facility points of contact (POC) (telephone numbers, email addresses and company name).

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 13 photos taken 7/10/2024.
Appendix 2 – Cutter Treatment Plant Lateral Process Flow Diagram
Appendix 3 – Cutter Treatment Plant Lateral On-site Laboratory Bench Sheet

Appendix 1

Photograph Log

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

Entrance sign to Cutter Lateral Water Treatment Plant. (IMG_0058) (July 10, 2024: 3:40 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

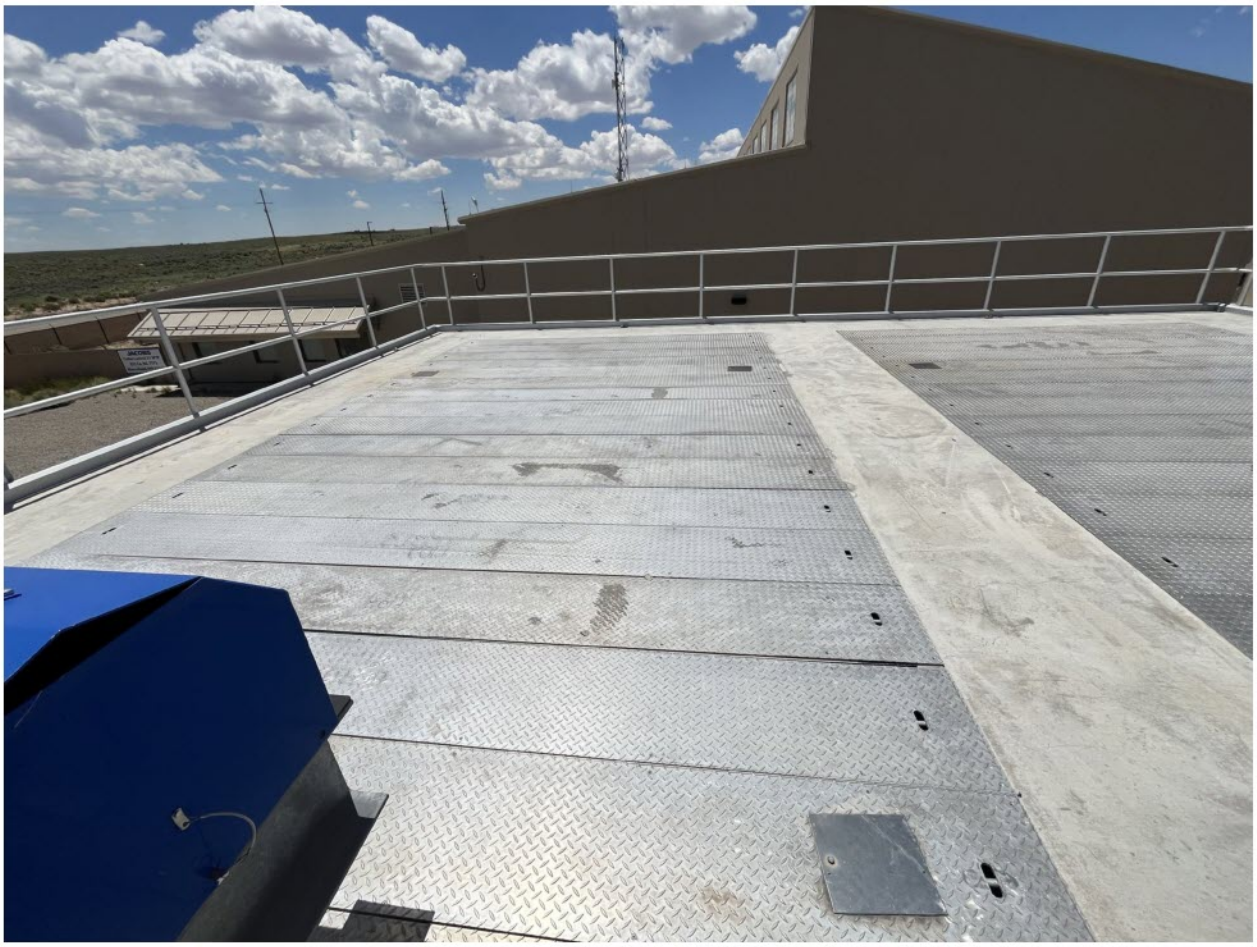
View of the raw water influent lines delivered from Pumping Plant #2 prior to the Rapid Mix process. (IMG_0013) (July 10, 2024: 1:51 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico



View looking approximately Southwest of the Flocculation/Sedimentation basin after the addition of the polymer. (IMG_0018) (July 10, 2024: 1:55 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

View of some of the process sampling equipment. (IMG_0018) (July 10, 2024: 2:01 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

View of the location for future expansion adjacent to the existing flocculation/sedimentation basins. Looking approximately West. (IMG_0023) (July 10, 2024: 2:04 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

View of the filtration basin inside the CTPL facility. (IMG_0029) (July 10, 2024: 2:09 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

View of the granular activated carbon (GAC) filter system inside the CTPL facility. (IMG_0030) (July 10, 2024: 2:12 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

View of a portion of the process piping located inside the CTPL facility. (IMG_0031) (July 10, 2024: 2:17 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

View of the backwash waste piping from the GAC tanks. (IMG_0036) (July 10, 2024: 2:25 PM)
Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

View of the Hallet ultraviolet (UV) disinfection system. (IMG_0039) (July 10, 2024: 2:30 PM)
Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

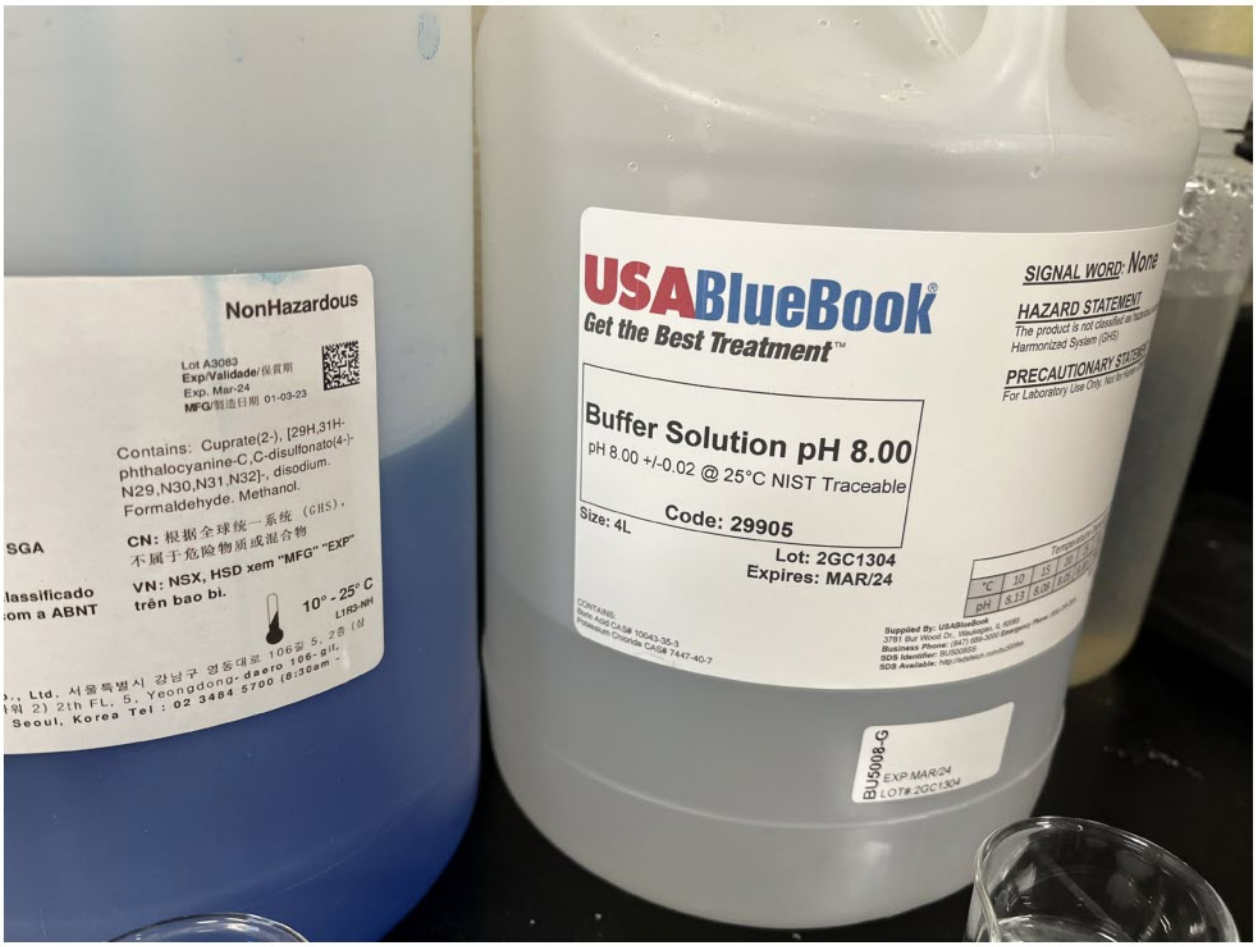
View of the solids drying beds. Note: The dried sludge material is transported and disposed at a landfill. (IMG_0046) (July 10, 2024: 2:40 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico



View of the ph10 and pH8 buffer solutions. Note: Both had expired in March 2024. (IMG_0007) (July 10, 2024: 1:30 PM) Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

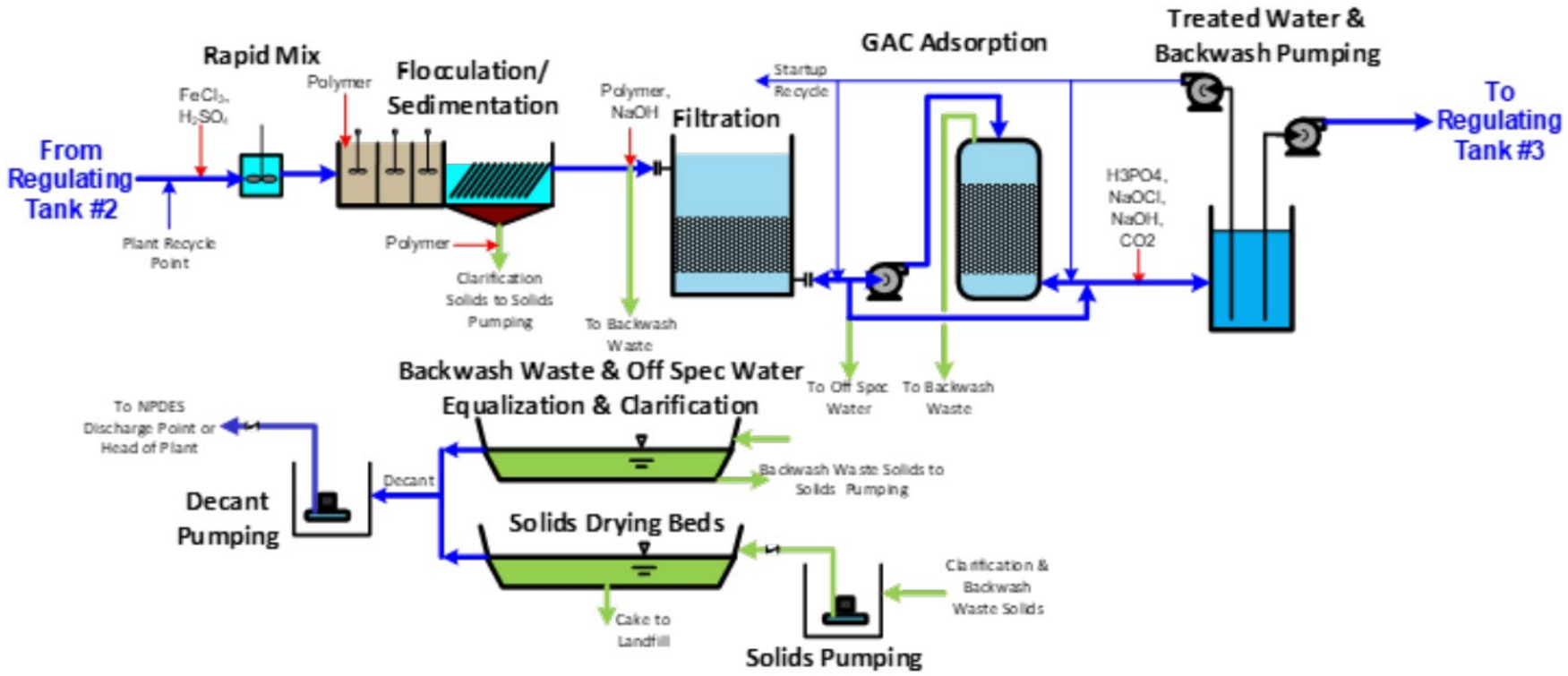
Photo No. 13

Location: BoR-Cutter Lateral		
City: Bloomfield	County/Parish: San Juan	State: New Mexico

View of the CTPL discharge conduit. Note: It was recommended the vagrant debris be removed. (IMG_0056) (July 10, 2024: 2:57 PM) Photographed by D. Esparza

Appendix 2

Cutter Treatment Plant Lateral
Process Flow Diagram


Rapid Mix
Flocculation/
Sedimentation
Filtration
GAC Adsorption
Treated Water &
Backwash Pumping
From
Regulating
Tank #2
To
Regulating
Tank #3
FeCl3,
H2SO4
Polymer
Plant Recycle
Point
Polymer
Clarification
Solids to Solids
Pumping
Polymer,
NaOH
To Backwash
Waste
Startup
Recycle
H3PO4,
NaOCl,
NaOH,
CO2
To Off Spec
Water
To Backwash
Waste
Backwash Waste & Off Spec Water
Equalization & Clarification
To NPDES
Discharge Point or
Head of Plant
Decant
Decant
Pumping
Backwash Waste Solids to
Solids Pumping
Solids Drying Beds
Cake to
Landfill
Clarification &
Backwash
Waste Solids
Solids Pumping

Appendix 3

Cutter Treatment Plant Lateral
On-site Laboratory Bench Sheet

CLWTP

Online Meter Bi-Weekly Comparasion Log

Date	Time Collected	Time Analyzed	Analyzer	SCADA Reading	Online Meter	Bench Meter	RPD See Calculations Below*	Adjustment (Yes/No)	Analyst	Comments
Chlorine, Free (mg/L) (> or < 20%)										
6-24-24	12:43	12;44	Chlorine, Chemical Seal Weir	1.45	1.45	1.45	<20%	NO	M.S.	(MON)/FRI DUP. 1.54
6.24.24	12:46	12;47	Chlorine, Domestic	0.57	0.57	0.53	<20%	NO	MS	(MON)/FRI
6.24.24	12:51	12:52	Chlorine, Treated Water to T3	1.48	1.48	1.47	<20%	NO	M.S	(MON)/FRI
6.24.24	13:7	13:08	Chlorine, Tank 3 A	1.37	1.37	1.44	<20%	NO	MS	(MON)/FRI
6.24.24	13:08	13:09	Chlorine, Tank 3 B	1.36	1.36	1.44	<20%	NO	MS	(MON)/FRI
Turbidity (NTU) (> or < 0.03)										
6.24.24	9:28	9:29	Turbidity, Raw	0.015	0.015	0.014	<0.03	NO	MS	(MON)/FRI
6.24.24	9:32	9:33	Turbidity, Basin #1 Eff	0.016	0.016	0.013	<0.03	NO	MS	(MON)/FRI
6.24.24	9:36	9:37	Turbidity, Basin #2 Eff	0.015	0.015	0.013	<0.03	NO	MS	(MON)/FRI
6.24.24	9:40	9:41	Turbidity, Filter Inf	0.018	0.018	0.014	<0.03	NO	MS	(MON)/FRI
6.24.24	9:43	9:44	Turbidity, Filter #1, Eff	0.014	0.014	0.013	<0.03	NO	MS	(MON)/FRI
6.24.24	9:45	9:46	Turbidity, Filter #2, Eff	0.014	0.014	0.013	<0.03	NO	MS	(MON)/FRI
6.24.24	9:48	9:49	Turbidity, Filter #3, Eff	0.014	0.014	0.014	<0.03	NO	MS	(MON)/FRI
6.24.24	9:50	9:51	Turbidity, Filter #4, Eff	0.015	0.015	0.014	<0.03	NO	MS	(MON)/FRI
6.24.24	10:00	10:01	Turbidity, CFE	0.016	0.016	0.014	<0.03	NO	MS	(MON)/FRI
6.24.24	10:04	10:05	Turbidity, GAC	0.016	0.016	0.014	<0.03	NO	MS	(MON)/FRI
6.24.24	10:10	10:11	Turbidity, Treated Water to T3	0.017	0.017	0.015	<0.03	NO	MS	(MON)/FRI
pH (S.U.) (> or < 0.2)										
6.24.24	10:27	10:29	pH, Raw	7.97	7.97	7.96	<0.2	NO	MS	1/wk
6.24.24	10:33	10:38	pH, Floc/Sed #1 (Top)	6.26	6.26	6.29	<0.2	NO	M.S	1/wk
6.24.24	10:34	10:40	pH, Floc/Sed #2 (Top)	6.16	6.16	6.45	>0.2	YES	MS	1/wk RECAL
6.24.24	10:48	10:51	pH, Sed Basin #1, Eff	6.29	6.29	6.26	<0.2	NO	MS	1/wk
6.24.24	10:49	10:53	pH, Sed Basin #2, Eff	6.60	6.60	6.46	<0.2	NO	MS	1/wk WON'T RECAL
6.24.24	10:56	10:57	pH, Filter Influent	7.39	7.39	7.51	<0.2	NO	MS	1/wk
6.24.24	11:04	11:10	pH, Chemcial Seal Weir	7.85	7.85	8.00	<0.2	NO	MS	1/wk
6.24.24	11:07	11:11	pH, Treated Water to T3	7.86	7.86	8.02	<0.2	NO	MS	1/wk
Conductivity (uS/cm) (> or < 20%)										
6.26.24	1159	1200	Conductivity, Raw	160.2	160.2	80.1	>20%	NO	AT	1/wk
6.26.24	1202	1203	Conductivity, Treated Water to T3	225.64	225.64	122.2	>20%	NO	AT	1/wk
UV-254 Absorbance (1/m) (if both number are > than 0.1 than 20%, if one or both number are 0.1 or < then + or - 0.03)										
6.26.24	1208	1209	UV Absorbance, Raw	11.12	11.12	0.111	<0.03	NO	AT	1/wk
6.26.24	1209	1210	UV Absorbance, Filter Influent	7.71	7.71	0.081	<0.03	NO	AT	1/wk
6.26 24	1210	1211	UV Absorbance, CFE	0.00	0.00	0.021	>0.03	NO	AT	1/wk
6.26.24	1211	1212	UV Absorbance, GAC	0.00	0.00	0.012	>0.03	NO	AT	1/wk
6.26.24	1212	1213	UV Abs , Treated Water to T3	4.99	4.99	0.020	>0.03	NO	AT	1/wk
Floc Sed #1/#2 Sludge Judge Reads										
6-25-24	1140	1145	Floc Sed #1	5"	Floc Sed #2			7"	~~AT~~	Analyze before plant online

CLWTP

Online Meter Bi-Weekly Comparasion Log

Date	Time Collected	Time Analyzed	Analyzer	SCADA Reading	Online Meter	Bench Meter	RPD See Calculations Below	Adjustment (Y/N)	Analyst	Comments
Chlorine, Free (mg/L) (> or < 20%)										
6-28-24	1400	1402	Chlorine, Chemical Seal Weir	1.76	1.76	1.76	<20%	N	AT	MON/FRI Dup 1.78
6-28-24	1403	1405	Chlorine, Domestic	0.51	0.51	0.50	<20%	N	AT	MON/FRI
6-28-24	1410	1412	Chlorine, Treated Water to T3	1.64	1.64	1.60	<20%	N	AT	MON/FRI
6-28-24	1439	1440	Chlorine, Tank 3 A	1.55	1.55	1.49	<20%	N	AT	MON/FRI
6-28-24	1440	1441	Chlorine, Tank 3 B	1.55	1.55	1.49	<20%	N	AT	MON/FRI
Turbidity (NTU) (> or < 0.03)										
6-28-24	0916	0917	Turbidity, Raw	0.014	0.014	0.015	<0.03	N	AT	MON/FRI
6-28-24	0919	0920	Turbidity, Basin #1 Eff	0.014	0.014	0.016	<0.03	N	AT	MON/FRI
6-28-24	0922	0923	Turbidity, Basin #2 Eff	0.013	0.013	0.015	<0.03	N	AT	MON/FRI
6-28-24	0925	0926	Turbidity, Filter Inf	0.015	0.015	0.018	<0.03	N	AT	MON/FRI
6-28-24	0927	0928	Turbidity, Filter #1, Eff	0.013	0.013	0.014	<0.03	N	AT	MON/FRI
6-28-24	0930	0931	Turbidity, Filter #2, Eff	0.014	0.014	0.014	<0.03	N	AT	MON/FRI
6-28-24	0932	0933	Turbidity, Filter #3, Eff	0.014	0.014	0.014	<0.03	N	AT	MON/FRI
6-28-24	0934	0935	Turbidity, Filter #4, Eff	0.014	0.014	0.015	<0.03	N	AT	MON/FRI
6-28-24	0937	0938	Turbidity, CFE	0.014	0.014	0.016	<0.03	N	AT	MON/FRI
6-28-24	0939	0940	Turbidity, GAC	0.014	0.014	0.016	<0.03	N	AT	MON/FRI
6-28-24	0945	0946	Turbidity, Treated Water to T3	0.015	0.015	0.017	<0.03	N	AT	MON/FRI

CLWTP

Online Meter Weekly Comparasion Log

For any analyzer that was adjusted or calibrated, it must be verified afterwards and the results recorded below.

Date	Time Collected	Time Analyzed	Analyzer	SCADA Reading	Online Meter	Bench Meter	RPD See Calculations Below	Adjustment Y/N	Analyst	Comments