EPA United States Environmental Protection Agency

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	03/27/2024	
Media Program:	Water	
Regulatory Program(s)	CWA	
Company Name:	**Los Alamos County**	
Facility Name:	**White Rock WWTF**	
Facility Physical Location:	600 Overlook Road	
(city, state, zip code)	White Rock, New Mexico 87571	
Mailing address:	1000 Central Avenue	
(city, state, zip code)	Los Alamos, New Mexico 87544	
County/Parish:	Los Alamos	
Facility Phone Number	505-470-5606	
Facility Contact:	Joshua Silva	Superintendent
	joshua.silva@lacnm.us	
FRS Number:	110009831209	
Identification/Permit Number:	NM0020133	
Media Identifier Number:	NA	
NAICS:	221320	
SIC:	4952	

Personnel participating in inspection:		
Jennifer Baca	Los Alamos County Department of Public Utilities	Engineering Associate
Marcos Ocanas	Los Alamos County Department of Public Utilities SMA-Operations (Contract Operator)	WWTP Supervisor
Joshua Silva	Los Alamos County Department of Public Utilities	WWTP Superintendent
James Martinez	Los Alamos County Department of Public Utilities	WWTP Operator
Nafis Fuad	NMED-PSRS	Compliance/Enforcement Team Lead
Shawnee Suazo	NMED-SWQB	Complex Facilities Inspector
David Esparza	EPA-R6/ECDWM	Environmental Engineer

EPA Lead Inspector Signature/Date	DAVID ESPARZA Digitally signed by DAVID ESPARZA Date: 2024.04.24 12:02:12 -06'00'	
	David Esparza	Date
Supervisor Signature/Date	ROBERTO BERNIER Digitally signed by ROBERTO BERNIER Date: 2024.04.25 10:01:16 -05'00'	
	Roberto Bernier	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

United States Environmental Protection Agency (EPA) Region 6 inspector David Esparza, PE, accompanied by Mr. Nafis Fuad, and Ms. Shawnee Suazo from the New Mexico Environment Department (NMED), arrived at the Los Alamos County-White Rock (White Rock) Wastewater Treatment Facility (WWTF) approximately 9:30 AM on March 27, 2024, for an unannounced inspection. I presented my credentials to Mr. Joshua Silva and Mr. Marcos Ocanas and informed them 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 Los Alamos County representatives, observations made by the EPA inspector, NMED, and records and reports maintained by the permittee (Los Alamos County), and the EPA. Before leaving the facility on March 27, 2024, an exit briefing was held with Ms. Baca, Mr. Silva, and Mr. Ocana, to explain areas of concern noted at the time of the inspection. It should be noted the WWTP also maintains a discharge permit (DP-907) issued by the New Mexico Environment Department (NMED), Groundwater Quality Bureau (GWQB) that allows a permitted discharge up to 0.8MGD.

FACILITY DESCRIPTION

The Los Alamos County White Rock Wastewater Treatment Facility (WWTF) was originally constructed circa 1966 with improvements completed in 1978. The WWTF has a design flow of 0.82 MGD with an average daily flow of 0.3 MGD serving a population of approximately 5,800 residents. The facility is located at 600 Overlook Road White Rock, Los Alamos County, New Mexico (denoted in Aerial Image #1 below). WWTP hours of operation are Monday through Friday 7 AM to 4:30 PM.

The existing WWTF provides primary and secondary levels of treatment. The wastewater is treated with a trickling filter system. Currently the effluent is disinfected with chlorine, followed by dechlorination, thence discharged to Cañada Del Buey, through a closed conduit pipe to the Rio Grande, via Outfall 001. Water designated for reuse under a ground water permit (DP-907) is drawn off before dechlorination and used for irrigation of nearby athletic fields and a park. Generated sewage sludge is transported and disposed of approximately 5-miles Northeast at the Los Alamos-Bayo WWTF (NM0020141) for further treatment.

Construction of the new WWTF commenced in January 2022 with an estimated substantial completion date of August 2024. The planned construction would replace either by demolition or abandonment the existing headworks, clarifiers, and chorine contact chamber. The new WWTF proposes a design flow of 0.5 MGD or an approximate 40% decrease, while continuing to provide primary and secondary levels of treatment. The wastewater will be treated with an activated sludge system. Following treatment by primary and secondary clarifiers, the wastewater is processed through a tertiary filtration system consisting of disk filters. Under the new process scheme the effluent will traverse through two (2) channels of two (2) banks each of ultraviolet (UV) modules for disinfection, prior to being discharged to Cañada Del Buey, thence to the Rio Grande via an outfall (Outfall 001).

Aerial Image #1: Overall view of the Los Alamos-White Rock Wastewater Treatment Facility. Note: this Aerial Image is dated May 7, 2023, and illustrates the existing WWTF. Aerial from Google Earth maps.

Table 1: White Rock Lift Stations

	Lift Station
1	Karen Circle
2	Kimberly
3	Rio Bravo
4	Potrillo
5	Estante Way

Note: See Appendix 4 White Rock Lift Station Map

White Rock does have 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).

Currently, there is no Industrial Users (IU) contributing to the WWTF.

Section II – OBSERVATIONS

I observed the following and/or the following information was provided or stated on January 19, 2024.

- The collection systems (lift stations, etc.) and operation of the WWTF are maintained by different departments within the Los Alamos Public Utilities.

- The existing WWTF does not have Supervisory Control and Data Acquisition (SCADA) system, however, the current upgrades will provide monitoring of WWTF operations.

- All five (5) lift station are securely locked inclusive of the hatchways and electrical panels. The Public Utilities Department has an ongoing capital improvement project to implement SCADA and/or upgrades for all lift stations.

- Los Alamos County does not have a current Asset Management Plan.

- Los Alamos County does not have a Fats, Oils and Grease (FOG) or permitting program, though the Public Utility Department does preform grease trap inspections.

- The WWTF maintains a backup diesel generator for power that is routinely exercised.

- There are no satellite communities contributing to the WWTF.

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

Section III – AREAS OF CONCERN

- A review of the submitted Integrated Compliance Information System (ICIS) Discharge Monitoring Reports (DMR) data for the period January 20, 2022, through October 31, 2023, indicates NPDES permit excursions with respect to Nitrogen (ammonia total), Total Suspended Solids (TSS), 5-day Biological Oxygen Demand (BOD_5), Escherichia coli (E. coli), Total Chlorine Residual (TCR), Total Mercury (as Hg), fecal Coliform (general), and pH (Appendix 5 ICIS E90 Effluent Violations).

EPA Region 6 inspector David Esparza conducted a closing conference at the Los Alamos -White Rock WWTF approximately at 11:30 AM on March 27, 2024, for the inspection.

Section IV – FOLLOW UP

Additional information or clarification was requested on April 1, 2024, via electronic mail (email) and by telephone. The Request for Information (RFI) included:

- A current copy of the WWTP Site Plan- **Note:** the previous/existing Plan can be notated (clearly) to reflect the rehabilitation/upgrades currently under construction.

- A project timeline of commissioning or substantial completion of the current construction

- A complete electronic copy of your Sanitary Sewer Overflow (SSO) protocol, inclusive of all SSO events and associated work orders/work sheets for the previous two (2) years.

- A complete electronic copy of your Standard Operating Procedures (SOPs) and clarification how often it is updated.

- Identification of the quantity, location, and names of any lift stations (LS), wet wells etc.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log 4 photographs taken 3/27/2024.
Appendix 2 – Current Site Plan
Appendix 3 – Process Flow Diagram
Appendix 4 – White Rock Lift Station Map
Appendix 5 – Integrated Compliance Information System (ICIS) Database E90 Exceedances

Appendix 1

Photograph Log

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: White Rock Wastewater Treatment Facility		
City: White Rock	County/Parish: Los Alamos	State: New Mexico

View of existing headworks looking approximately North. Note: this structure is identified in Appendix 2 Current White Rock Site Plan to be demolished or abandoned. (DSCN2688). Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: White Rock Wastewater Treatment Facility		
City: White Rock	County/Parish: Los Alamos	State: New Mexico

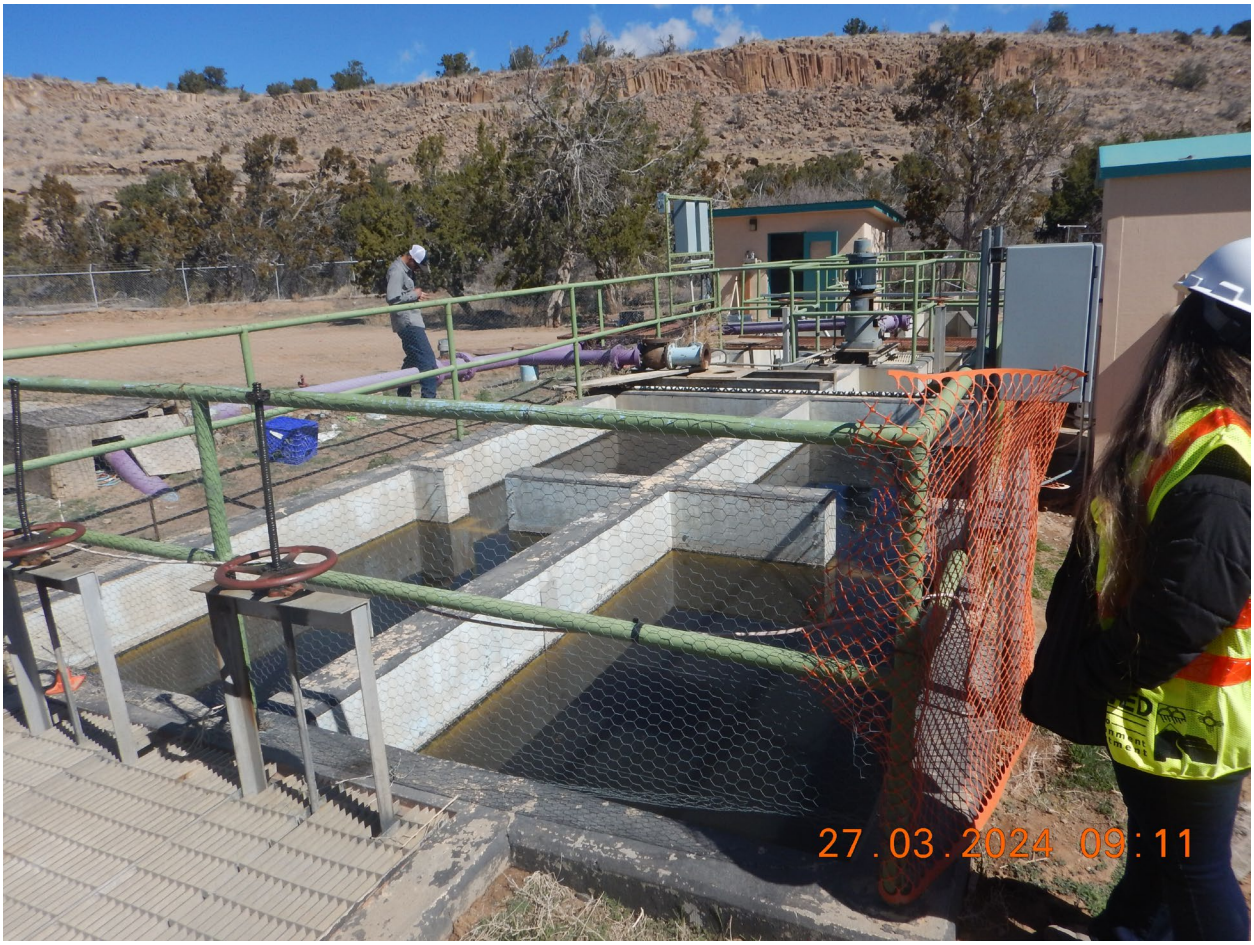
View of existing grit removal located adjacent to the existing headworks looking approximately South. **Note$_1$**: the concrete degradation and spalling. **Note$_2$**: this structure is identified in Appendix 2 Current White Rock Site Plan to be demolished or abandoned. (DSCN2689). Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: White Rock Wastewater Treatment Facility		
City: White Rock	County/Parish: Los Alamos	State: New Mexico



View of the existing chlorine contact chamber. **Note$_1$**: this structure is identified in Appendix 2 Current White Rock Site Plan to be demolished or abandoned. This disinfection process will be replaced by two (2) channels of two (2) banks each of ultraviolet (UV) modules for disinfection, prior to being discharged to Cañada Del Buey, thence to the Rio Grande via an outfall (Outfall 001). (DSCN2691). Photographed by D. Esparza

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

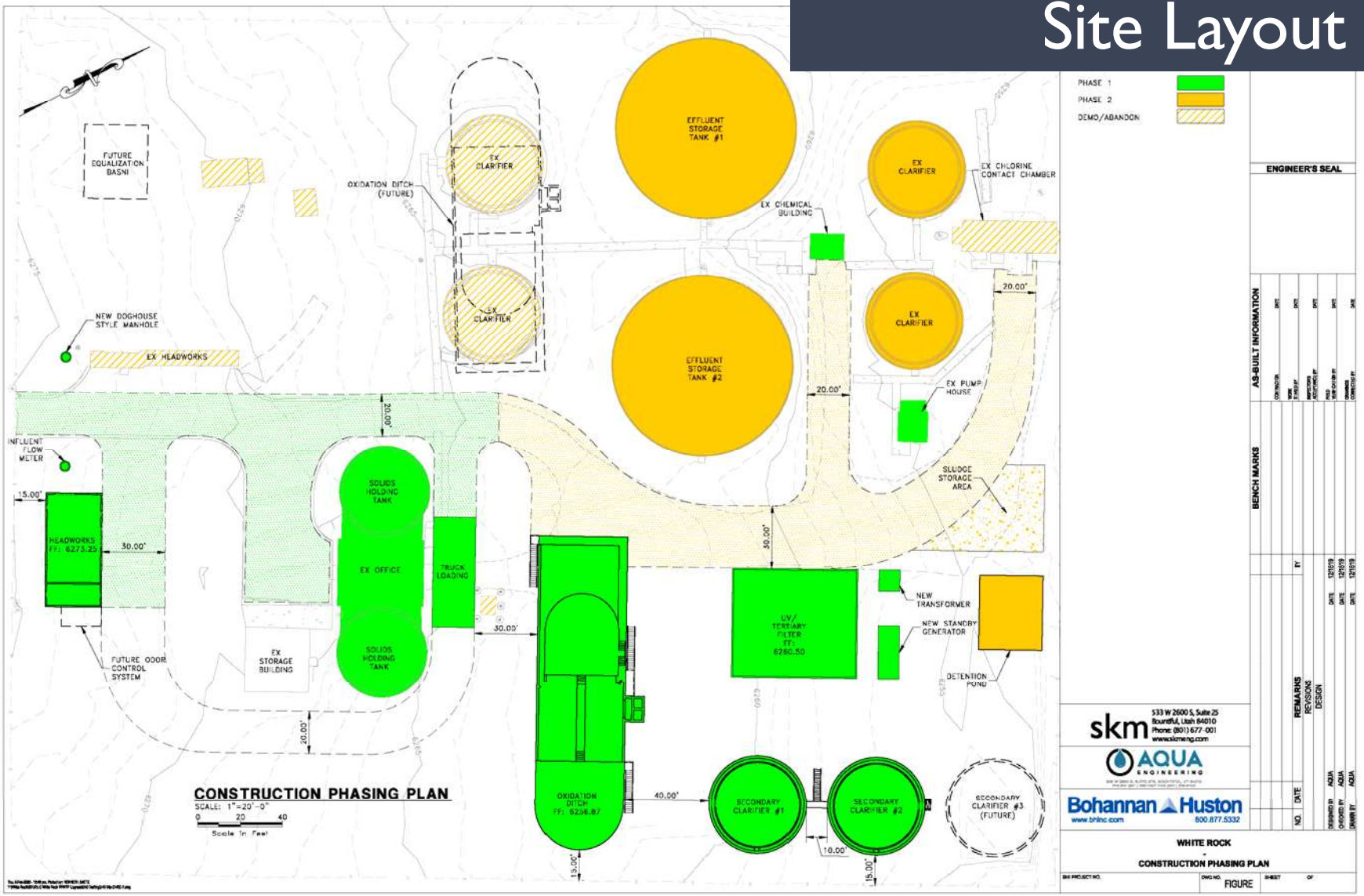
Location: White Rock Wastewater Treatment Facility		
City: White Rock	County/Parish: Los Alamos	State: New Mexico

View of the White Rock WWTP Outfall 001. Note: it was suggested debris be cleared from the discharge conduit and “riprap” or similar be placed to minimize/prevent back flow or conduit undermining. (DSCN2692). Photographed by D. Esparza

Appendix 2

Current White Rock WWTF
Site Plan

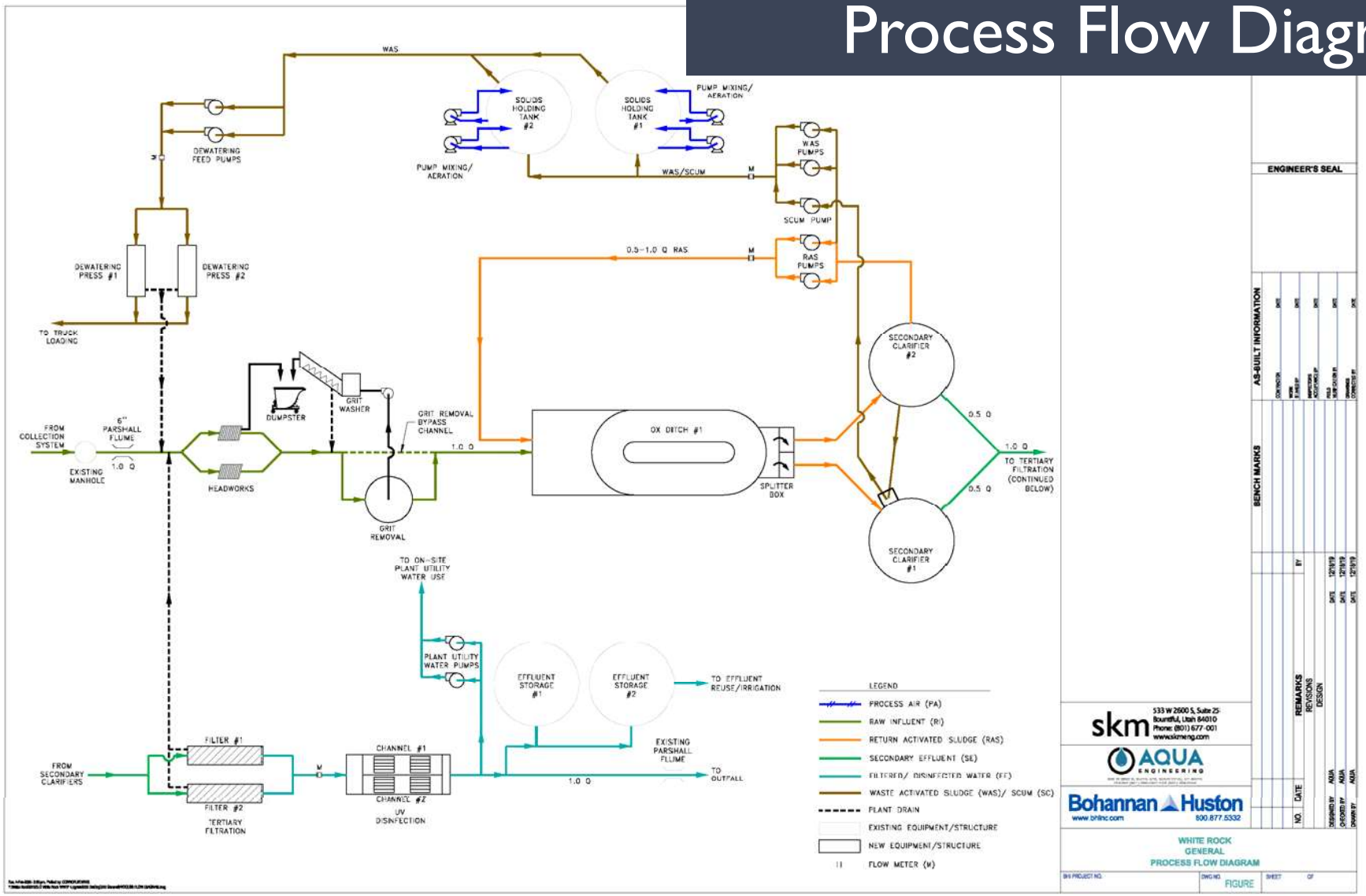
Site Layout


PHASE 1
PHASE 2
DEMO/ABANDON
FUTURE EQUALIZATION BASIN
OXIDATION DITCH (FUTURE)
EX CLARIFIER
EFFLUENT STORAGE TANK #1
EX CHEMICAL BUILDING
EX CLARIFIER
EX CHLORINE CONTACT CHAMBER
NEW DOGHOUSE STYLE MANHOLE
EX HEADWORKS
EFFLUENT STORAGE TANK #2
EX CLARIFIER
EX PUMP HOUSE
INFLUENT FLOW METER
SLUDGE STORAGE AREA
HEADWORKS FF: 6273.25
SOLIDS HOLDING TANK
EX OFFICE
TRUCK LOADING
SOLIDS HOLDING TANK
UV/ TERTIARY FILTER FF: 6260.50
NEW TRANSFORMER
NEW STANDBY GENERATOR
FUTURE ODOR CONTROL SYSTEM
EX STORAGE BUILDING
DETENTION POND
OXIDATION DITCH FF: 6256.87
SECONDARY CLARIFIER #1
SECONDARY CLARIFIER #2
SECONDARY CLARIFIER #3 (FUTURE)
CONSTRUCTION PHASING PLAN
SCALE: 1"=20'-0"
Scale In Feet
ENGINEER'S SEAL
AS-BUILT INFORMATION
BENCH MARKS
REMARKS
REVISIONS
DESIGN
skm
533 W 2600 S, Suite 25
Bountiful, Utah 84010
Phone: (801) 677-001
www.skmeng.com
AQUA ENGINEERING
Bohannan Huston
www.bhinc.com
800.877.5332
WHITE ROCK
CONSTRUCTION PHASING PLAN
FIGURE

Appendix 3

White Rock WWTF
Process Flow
Diagram

Process Flow Diagram



Appendix 4

White Rock WWTF
Lift Station
Map

SEWER LIFT STATIONS - WHITE ROCK

KAREN CIRCLE LIFT STATION

KIMBERLY LIFT STATION

RIO BRAVO LIFT STATION

POTRILLO LIFT STATION

ESTANTE WAY LIFT STATION

N
W E
S

1,000 500 0 1,000 Feet

Legend

- DPU Lift Stations
- Gravity Main
- Pressure Main
- Structures
- Parcels

LAC_IMG.LACGIS.topography_LIDAR_4ft_hillshade

Value

- High : 254
- Low : 0

Appendix 5

Integrated Compliance Information System (ICIS)
Database E90 Exceedances

E90 Effluent Violations From 01/01/2019 - Present

NM0020133

LOS ALAMOS COUNTY (W

Monitoring Period End Date	Perm Feature ID	Limit Set Designator	Parameter Desc	Statistical Base Short Desc	Limit Unit Short Desc	Limit Value	DMR Value Qualifier Code	DMR Value
01/31/2022	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	42.23
01/31/2022	001	A	BOD, 5-day, 20 deg. C	7 DA AVG	mg/L	45	=	47.26
02/28/2022	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	46.46
02/28/2022	001	A	BOD, 5-day, 20 deg. C	7 DA AVG	mg/L	45	=	52.87
02/28/2022	001	A	BOD, 5-day, percent remo	MO AV MN	%	85	=	83.9
03/31/2022	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	33.18
03/31/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.25
04/30/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.03
05/31/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.49
06/30/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.43
07/31/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.62
08/31/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.56
09/30/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.64
10/31/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.64
11/30/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.72
12/31/2022	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	39.47
12/31/2022	001	A	BOD, 5-day, 20 deg. C	7 DA AVG	mg/L	45	=	45.18
12/31/2022	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.73
01/31/2023	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	40.95
01/31/2023	001	A	BOD, 5-day, 20 deg. C	7 DA AVG	mg/L	45	=	46.53
01/31/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.85
02/28/2023	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	40.26
02/28/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.85
03/31/2023	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	31.38
03/31/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.98
04/30/2023	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	35.67

Monitoring Period End Date	Perm Feature ID	Limit Set Designator	Parameter Desc	Statistical Base Short Desc	Limit Unit Short Desc	Limit Value	DMR Value Qualifier Code	DMR Value
04/30/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.32
05/31/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.88
06/30/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.53
07/31/2023	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	31.47
07/31/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.27
08/31/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.99
09/30/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	2.85
10/31/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.98
11/30/2023	001	A	Oxygen, dissolved [DO]	MINIMUM	mg/L	4.1	=	3.6
12/31/2023	001	A	BOD, 5-day, 20 deg. C	30DA AVG	mg/L	30	=	30.72