FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: MINDEN GARDNERVILLE SANITATION DISTRICT

1790 U.S. HIGHWAY 395
MINDEN, NV 89423

Permit Number: NS0040027

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: MINDEN GARDNERVILLE SANITATION DISTRICT, DOUGLAS
1790 U.S. HIGHWAY 395, MINDEN, NV 89423
LATITUDE: 38.965556, LONGITUDE: -119.781111
TOWNSHIP: 13N, RANGE: 20E, SECTION: 30

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	INFLUENT	Influent Structure		38.964861	-119.779694	GROUNDWATER
002	CHLORINE CONTACT TANK	External Outfall		38.965417	-119.781667	GROUNDWATER
003	MGSD IRRIGATION FIELDS	Land Application Site		38.966667	-119.783056	GROUNDWATER
004	STORAGE RESERVOIRS	External Outfall		38.973333	-119.791667	GROUNDWATER
005	MW-2	Monitoring Well		38.973160	-119.787410	GROUNDWATER
006	MW-3	Monitoring Well		38.975630	-119.800830	GROUNDWATER
007	MW-4	Monitoring Well		38.979560	-119.796770	GROUNDWATER
008	MW-5	Monitoring Well		39.002260	-119.7941	GROUNDWATER
009	MW-6	Monitoring Well		39.025040	-119.790890	GROUNDWATER
010	MW-7	Monitoring Well		38.975740	-119.786250	GROUNDWATER
011	MW-8	Monitoring Well		39.017440	-119.802190	GROUNDWATER
012	MW-9	Monitoring Well		39.008080	-119.8027	GROUNDWATER
013	MW-10	Monitoring Well		38.989020	-119.813020	GROUNDWATER
014	PARK RANCH HOLDINGS (PERMIT NS2000501)	External Outfall		39.970556	-119.80	GROUNDWATER
015	PARK RANCH HOLDINGS (PERMIT NS2003500)	External Outfall		38.973056	-119.791944	GROUNDWATER
016	GALEPPI LAND AND LIVESTOCK COMPANY (PERMIT NS2002513)	External Outfall		38.9794	-119.7916	GROUNDWATER
017	BENTLY RANCH	External Outfall		38.9630	-119.6810	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Minden Gardnerville Sanitation District (MGSD), has applied for the renewal of Permit NS0040027 for the MGSD's Wastewater Treatment Plant (WWTP), at 1790 U.S. Highway 395, in Gardnerville, within Douglas County, Nevada. The Permittee proposes to continue to discharge treated wastewater to groundwater of the State via applied irrigation uses or into storage ponds for evaporation.

This permit was first issued on April 18, 1996. The most recent permit was issued on May 1, 2015, and expired on April 30, 2020; the permit has been administratively continued since.

Facility Overview
MGSD operates a 3.1 million gallons per day (Mgal/d) WWTP in Douglas County, Nevada. Wastewater from residential and commercial sources in the Minden and Gardnerville areas is treated to meet secondary treatment standards, partially denitrified, and disinfected.

Wastewater entering the headworks is screened on parallel FMC® traveling bar screens, with grit removed in an aerated Pista® grit chamber. Screened wastewater is discharged to three parallel 45-foot diameter primary clarifiers. Primary clarified effluent is then split and treated in parallel through attached-growth trickling filters packed with cross-flow plastic media for biological treatment. Effluent from the trickling filters is then mixed with return activated sludge (RAS) from the secondary clarifiers in aerated contact basins to further enhance nitrification and reduce the 5-day carbonaceous biochemical oxygen demand (CBOD5). The mixed liquor is then discharged to three secondary clarifiers for final clarification before disinfection. Effluent is disinfected using sodium hypochlorite in two chlorine contact basins.

Sludge from the primary and secondary clarifiers is digested in two anaerobic digesters operated in series. Sludge is subsequently treated at 95° degrees Fahrenheit (°F) for 90 days, producing Class B biosolids. Recovered methane gas from the digestion process is used to maintain proper digester temperature, as well as to heat the plant buildings. Digested sludge is thickened with polymer additives, and is dewatered using a belt filter press. The MGSD currently uses Bently Family Limited Partnership composting facilities for the disposal of biosolids as a beneficial soil amendment and source of crop nutrients (permit NS0097012).

Because commercial and residential developments have encroached into the area surrounding the treatment plant, the MGSD has installed a number of odor control measures. The MGSD uses a chemical scrubber to treat odorous gases from the headworks. Primary clarifiers are either partially (#1 & #2) or fully (#3) covered for odor capture, and the air is discharged through a biofilter for biological treatment of the odor-causing compounds. Air is also down-drafted through the trickling filters for odor capture and the pulled air is vented through the odor neutralization beds. The MGSD has been proactive in implementing odor control measures.

Following disinfection, the reclaimed water, being of Category D bacterialogical quality per Nevada Administrative Code (NAC) 445A.276, is either discharged for storage in two clay-lined reservoirs or discharged for the irrigation of approximately 28 acres of land owned and cultivated by the MGSD. The storage reservoirs have a cumulative holding capacity of 550 acre-feet and are located northwest of the treatment plant, across Muller Lane. Treated wastewater is released from the reservoirs on an as-needed basis for reuse irrigation of property owned and cultivated for forage crops by Park Cattle Company (permits NS2000501 and NS2003500), Galeppi Land & Livestock (permit NS200213), and Bently Family Limited Partnership (permit NS2009507). Off-site reuse of treated effluent is administered by each entity under their individual permits. There is no direct discharge of effluent to ground or surface waters.

This permit renewal allows for continued wastewater treatment plant operation, reuse irrigation, and distribution of biosolids meeting Class B treatment standards for land application uses. Site-specific permits for either reuse irrigation or land application of biosolids must be applied for and obtained by those receiving and using the treated products.

The MGSD's Reclaimed Water Management Plan (RWMP) (formerly known as an Effluent Management Plan) was last reviewed and approved by the Division on October 2003. The Technical, Compliance, and Enforcement (TCE) Branch of the Bureau of Water Pollution Control requires RWMPs be updated every ten (10) years; therefore, an updated RWMP will need to be submitted to the Division for review and approval within three months after the permit issuance date.

Outfall Summary
Outfall 001 - This internal measuring point outfall is for monitoring and reporting of incoming domestic sewage (influent) and is located at the treatment plant.

Outfall 002 - This external outfall is for the monitoring and reporting of the treated effluent being sampled at the chlorine contact tank located at the treatment.

Outfall 003 - This external outfall is for the monitoring and reporting of the treated effluent being discharged to the irrigated fields owned by MGSD.

Outfall 004 - This external outfall is for the monitoring and reporting of the treated effluent being piped and discharged into the storage reservoirs.

Outfall 005 - This monitoring well outfall (MW-2) is located upgradient of MGSD's storage reservoirs.

Outfall 006 - This monitoring well outfall (MW-3) is located downgradient of MGSD's storage reservoirs.

Outfall 007 - This monitoring well outfall (MW-4) is located downgradient of the MGSD's storage reservoirs.

Outfall 008 - This monitoring well outfall (MW-5) is located within the right-of-way of Genoa Lane.

Outfall 009 - This monitoring well outfall (MW-6) is located within the tailwater area of Park Cattle Company.

Outfall 010 - This monitoring well outfall (MW-7) is located upgradient from the storage reservoirs.

Outfall 011 - This monitoring well outfall (MW-8) is located at Galeppi-Byington Ranch (aka Galeppi Land & Livestock).

Outfall 012 - This monitoring well outfall (MW-9) is located at Galeppi-Byington Ranch (aka Galeppi Land & Livestock).

Outfall 013 - This monitoring well outfall (MW-10) called the "New Well" is located to the north of the treatment plant, near the irrigated fields.

Outfall 014 - This external outfall is for discharges of reclaimed water to Park Ranch Holdings (permit NS2000501).

Outfall 015 - This external outfall is for discharges of reclaimed water to Park Ranch Holdings (permit NS2003500).

Outfall 016 - This external outfall is for discharges of reclaimed water to Galeppi Land and Livestock Company (permit NS2002513).

Outfall 017 - This external outfall is for discharge of reclaimed water to Bently Ranch (permit NS2009507).

Facility Upgrades since last issued permit
There have been no upgrades since the last permit cycle.

Solids Handling
Sludge from the primary and secondary clarifiers is digested in two anaerobic digesters operated in series. Sludge is subsequently treated at 95°F for 90 days, producing Class B biosolids. Recovered methane gas from the digestion process is used to maintain proper digester temperature, as well as to heat the plant buildings. Digested sludge is thickened with polymer additives, and is dewatered using a belt filter press. The MGSD currently uses Bently Family Limited Partnership composting facilities for the disposal of biosolids as a beneficial soil amendment and source of crop nutrients (permit NS0097012).

Effluent Management and Reuse
Reclaimed water, being of Category D bacteriological quality per NAC 445A.276, is discharged to groundwater of the State via applied irrigation at either Galeppi Land and Livestock (permit NS2002513), Park Cattle Company (permits NS2000501 and NS2003500), Bentley (permit NS2009507), MGSD's Ironwood field (covered by this permit), MSGD's Muller Lane field (covered by this permit), and/or the storage reservoirs for evaporation.

Design Flow (and basis) and Measurement & Current Capacity
The MGSD WWTP was designed for a 30-day average flow rate of 1.94 Million Gallons per Day (Mgal/d) and a daily maximum flow rate of 5.56 Mgal/d.

The reported 30-day average flow rate reported during the period reviewed, July 2020 through October 2025, was 1.54 Mgal/d, along with the daily maximum reported average from that same period being 1.73 Mgal/d.

Pretreatment Program
The facility does not meet the federal Environmental Protection Agency's (EPA's) guidelines requiring them to have a pretreatment program.

Operations & Maintenance (O&M) Manual status
The MGSD's Operation and Maintenance (O&M) Manual was last reviewed and approved on January 2013. The TCE Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every ten (10) years, with an updated O&M Manual being due within three (3) monthes from the permit issuance date.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from July 2020 to October 2025, was reviewed as part of this permit renewal process. Below are the averaged, reported numbers for each parameter associated with that outfall:

Notes:
CFU/100mL = Colony Forming Units per 100 Milliliters
mg/L = Milligrams per Liter
Mgal/d = Million Gallons per Day
S.U.= Standard Units
ug/L = Micrograms per Liter
CBOD5 = Carbonaceous Biochemical Oxygen Demand, 5-Day
N = Nitrogen
TDS = Total Dissolved Solids
TSS = Total Suspended Solids
Depth: Depth to Water Level (Feet below Land surface)
Water Level = Water Level Relative to Mean Sea Level
* = One Instance Reported

Outfall 001 (Influent):
Flow Rate: 1.54 Mgal/d (30-day Average)
Flow Rate: 1.73 Mga/d (Daily Maximum)
CBOD5: 335.21 mg/L
TSS: 320.43 mg/L

Outfall 002 (Effluent - being sampled at the chlorine contact tank):
CBOD5: 8.41 mg/L
CBOD5, Percent Removed: 95.82%
Fecal Coliform: 63.31 CFU/100mL
pH: 7.25 S.U.

Phosphate: 4.56 mg/L
TSS: 10 mg/L
TSS, Percent Removed: 94.82%
.delta.-BHC: 0.004 ug/L*
Antimony: 0.50 ug/L
Arsenic: 1.28 ug/L
Asbestos: 3.4 Fibers per Milliliter
Beryllium: 0.50 ug/L*
Cadmium: 0.50 ug/L*
Chloroform: 1.55 ug/L
Chromium: 1.00 ug/L
Copper: 3.63 ug/L
Cyanide: 0.007 ug/L
Endosulfan sulfate: 0.017*
Lead: 0.50 ug/L*
Nickel: 1.00 ug/L
Selenium: 1.00 ug/L*
Silver: 2.00 ug/L*
Thallium: 0.50 ug/L*
Toluene: 0.83 ug/L*
Zinc: 12.35 ug/L

Outfall 003 (MSGD's Reuse Sites):
Coliform: 75.56 CFU/100mL
Flow Rate: 1.97 Mgal/d
Nitrogen: 7.21 mg/L

Outfall 003 (MGSD’s Reuse Sites):
Flow Rate, Daily Maximum: 6.01 Mgal/d
Flow Rate, Monthly Total: 38.24 Mgal/d
Nitrate as N: 19.08 mg/L
Nitrogen, Monthly: 10.89 mg/L
Nitrogen, Quarterly: 20.04 pounds per quarter
Nitrogen, Yearly: 119.5 pounds per year

Outfall 004 (Storage Reservoirs):
Flow Rate, Monthly Total: 5.62 Mgal/d
Nitrate as N: 10.48 mg/L
Nitrogen: 5.13 mg/L

Outfall 005 (Monitoring Well 2):
Chloride: 22.9 mg/L
Depth: 2.75 Feet
Nitrate as N: 1.58 mg/L
Nitrogen: 0.81 mg/L
TDS: 563 mg/L
Water Level: 4,703.68 Feet

Outfall 006 (Monitoring Well 3):
Chloride: 23.84 mg/L
Depth: 2.76 Feet
Nitrate as N: 0.86 mg/L
Nitrogen: 0.41 mg/L
TDS: 419.75 mg/L
Water Level: 4.681.18 Feet

Outfall 007 (Monitoring Well 4):
Chloride: 51.45 mg/L
Depth: 2.92 Feet
Nitrate as N: 0.80 mg/L
Nitrogen: 0.40 mg/L
TDS: 630.55 mg/L
Water Level: 4,680.77 Feet

Outfall 008 (Monitoring Well 5):
Chloride: 47.05 mg/L
Depth: 2.45 Feet
Nitrate as N: 0.96 mg/L
Nitrogen: 0.56 mg/L
TDS: 535 mg/L
Water Level: 4,673.40 Feet

Outfall 009 (Monitoring Well 6):
Chloride: 41.6 mg/L
Depth: 1.96 Feet
Nitrate as N: 0.66 mg/L
Nitrogen: 0.37 mg/L
TDS: 438 mg/L
Water Level: 4,660.66 Feet

Outfall 010 (Monitoring Well 7):
Chloride: 30.3 mg/L
Depth: 3.68 Feet
Nitrate as N: 3.64 mg/L
Nitrogen: 3.25 mg/L
TDS: 897 mg/L
Water Level: 4,690.20 Feet

Outfall 011 (Monitoring Well 8):
Chloride: 27.90 mg/L
Depth: 2.05 Feet
Nitrate as N: 0.85 mg/L
Nitrogen: 0.47 mg/L
TDS: 421.50 mg/L
Water Level: 4,665.14 Feet

Outfall 012 (Monitoring Well 9):
Chloride: 56.9 mg/L
Depth: 2.74 Feet
Nitrate as N: 0.94 mg/L
Nitrogen: 0.37 mg/L
TDS: 777 mg/L
Water Level: 4,668.88 Feet

Outfall 013 (Monitoring Well 10):
Chloride: 28.7 mg/L
Depth: 4.28 Feet
Nitrate as N: 0.77 mg/L
Nitrogen: 0.42 mg/L
TDS: 390 mg/L
Water Level: 4,435.14 Feet

There were several reportable parameters that were below detection and are not listed in the breakdown for each outfall. This includes heavy metals, inorganic chemicals, pesticides, and VOCs.

Pollutants of Concern
Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Common pollutants of concern for the reclaimed water and monitoring wells are:

Effluent – CBOD5, Nitrogen, pH, *Escherichia coli* (*E. coli*), General Fecal Coliform, heavy metals, inorganic chemicals, pesticides, and VOCs.

Monitoring Wells: Chloride, Nitrogen, and TDS.

Receiving Water
The receiving water is groundwater of the State. Groundwater monitoring is required to ensure groundwaters of the State are protected. Groundwater is monitored and was previously reported by the nine (9) active monitoring wells, located near both the storage reservoirs and applied use sites, with average depth to water levels reported being approximately 3 feet below the surface during the July 2020 through October 2025 period.

Compliance History
The treatment plant has been in compliance with the exception of some reported exceedances during the period reviewed (July 2020 through October 2025).

Proposed Effluent Limitations
The discharge shall be limited and monitored by the Permittee as specified below:

WWTP Discharge Limitations Table for Sample Location 001 (Influent) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	30 Day Average	<= 2.8 Million Gallons per Day (Mgal/d)		Raw Sewage Influent[2]	001	Continuous	METER
Flow rate	Daily Maximum	<= 3.1 Million Gallons per Day (Mgal/d)		Raw Sewage Influent[2]	001	Continuous	METER
BOD, carbonaceous, 05 day, 20 C[3]	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent[1]	001	Weekly	COMPOS
BOD, carbonaceous, 05 day, 20 C[3]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent[1]	001	Weekly	COMPOS
Solids, total suspended[3]	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent[1]	001	Weekly	COMPOS
Solids, total suspended[3]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent[1]	001	Weekly	COMPOS

Notes (WWTP Discharge Limitations Table):

1. At the influent pump station wet well.
2. At the intake Parshall flume.
3. Sampling for CBOD, 5-day and total suspended solids (TSS) should be done concurrently when effluent (Outfall 002) is sampled to determine the exact percentages of removal achieved.

WWTP Discharge Limitations Table for Sample Location 002 (Chlorine Contact Tank) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
BOD, carbonaceous, 05 day, 20 C[2]	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
BOD, carbonaceous, 05 day, 20 C[2]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
BOD, carb-5 day, 20 deg C, percent removal	Monthly Average Minimum		> 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD
Coliform, fecal, colony forming units	30 Day Average		<= 200 Colony Forming Units per 100ml T (CFU/100mL)[1]	Effluent Gross	002	Weekly	DISCRT
Coliform, fecal, colony forming units	Daily Maximum		<= 400 Colony Forming Units per 100ml T (CFU/100mL)	Effluent Gross	002	Weekly	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	DISCRT
pH, maximum	Daily Maximum		<= 9 Standard Units (SU)	Effluent Gross	002	Weekly	DISCRT
pH, minimum	Daily Minimum		>= 6 Standard Units (SU)	Effluent Gross	002	Weekly	DISCRT
Solids, total suspended[2]	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
Solids, total suspended[2]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
Solids, suspended percent removal	Monthly Average Minimum		> 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. CFU/100mL or MPN/100mL.
2. Sampling for CBOD, 5-day and total suspended solids (TSS) should be done concurrently when influent (Outfall 001) is sampled to determine the exact percentages of removal achieved.

WWTP Discharge Limitations Table for Sample Location 002 (Chlorine Contact Tank) To Be Reported Annually[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Alkalinity, bicarbonate (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Calcium, dissolved (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Chlorine Contact Tank) To Be Reported Annually[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Copper, total recoverable	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Cyanide, total (as CN)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nickel, total (as Ni)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Chlorine Contact Tank) To Be Reported Annually[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Selenium, dissolved [as Se]	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Sodium, dissolved (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT

Notes (WWTP Discharge Limitations Table):

1. The Permittee shall submit the results of an annual priority pollutant analysis with the fourth quarter report.

WWTP Discharge Limitations Table for Sample Location 014 (Park Ranch Holdings, Permit Ns2000501) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	014	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	014	Continuous	METER

WWTP Discharge Limitations Table for Sample Location 015 (Park Ranch Holdings, Permit Ns2003500) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	015	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	015	Continuous	METER

WWTP Discharge Limitations Table for Sample Location 016 (Galeppi Land And Livestock, Permit Ns2002513) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	016	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	016	Continuous	METER

WWTP Discharge Limitations Table for Sample Location 017 (Bently Ranch, Permit Ns2009507)
To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	017	Monthly	CONTIN
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	017	Monthly	CONTIN

Groundwater Monitoring Wells Table for Sample Location 005 (Upgradient Of Mgsd's Storage Reservoirs Monitoring Well Mw-2) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	005	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	005	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 006 (Downgradient Of Mgsd's Storage Reservoirs Monitoring Well Mw-3) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	006	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	006	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 007 (Downgradient Of Mgsd's Storage Reservoir Monitoring Well Mw-4) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	007	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	007	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 008 (Genoa Lane Monitoring Well Mw-5) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	008	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	008	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 009 (Tailwater Area Monitoring Well Mw-6) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	009	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	009	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwatre elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 010 (Upgradient To The North Reservoir Monitoring Well Mw-7) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	010	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	010	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 011 (Byington Ranch Monitoring Well Mw-8) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	011	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	011	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	011	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	011	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	011	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 012 (Byington Ranch Monitoring Well Mw-9) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	012	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	012	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	012	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	012	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	012	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 013 (Monitoring Well Mw-10) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	013	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	013	Quarterly	VISUAL[1]
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	013	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	013	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	013	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Field measurement
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Re-use Discharge Limitations Table for Sample Location 003 (Mgsd's Irrigation Fields) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow, total [2]	Monthly Total	M&R Million Gallons (Mgal)[3]		Prior to Reuse[4]	003	Monthly[1]	CALCTD
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Reuse[4]	003	Monthly[1]	COMPOS
Flow rate	Monthly Total	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse[4]	003	Monthly	METER

Notes (Re-use Discharge Limitations Table):

1. During reuse. When not in reuse season, this condition shall be indicated on the Discharge Monitoring Report (DMR).
2. The annual application volume applied only to those fields managed by the MGSD.
3. Report in million gallons per acre. Volume determined for/from Consumptive Use Balance.
4. At the discharge of the chlorine contact tank prior to MGSD field application.

Re-use Discharge Limitations Table for Sample Location 003 (Mgsd's Irrigation Fields) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, total	Quarterly Total	M&R Pounds per Quarter (lb/qtr)[1]		Prior to Reuse[2]	003	Quarterly	CALCTD

Notes (Re-use Discharge Limitations Table):

1. **Actual Nitrogen Loading** should be reported in lbs/acre/quarter and should be less than the allowable Nitrogen Loading Value listed in the Reclaimed Water Management Plan (RWMP).

   Mass determined in accordance with guidance document *WTS-1B: General Criteria for Preparing an Reclaimed Water Management Plan* for fields managed by the MGSD.

   The total annual nitrogen applied (lbs/acre/year) shall not be greater than 110% of the total annual nitrogen uptake (lbs/acre/year). Calculations and monitoring data (submitted quarterly) shall use the **total nitrogen** in the applied wastewater (monitored by the treatment facility), total nitrogen from fertilizer applications, nitrogen uptake by crops or vegetation, evapotranspiration rate, precipitation rate, and fraction of applied nitrogen removed by denitrification and volatilization. Quarterly calculations shall be used to reconcile available nitrogen balance, prorated based on the allocated limitation (lbs/acre/year) defined in the Reclaimed Water Management Plan, and an annual report shall be submitted for the fourth quarter of every year demonstrating compliance with the Annual Nitrogen Balance limitation.
2. At the discharge of the chlorine contact tank prior to MGSD field application.

Re-use Discharge Limitations Table for Sample Location 003 (Mgsd's Irrigation Fields) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, total	Annual Mass Loading	M&R Pounds per Year (lb/yr)[2]		Prior to Reuse[4]	003	Quarterly[3]	CALCTD
Nitrogen, total	Cumulative Total	M&R Pounds per Year (lb/yr)[1]		Prior to Reuse[4]	003	Quarterly	CALCTD

Notes (Re-use Discharge Limitations Table):

1. **Cumulative Annual Nitrogen Loading <u>to Date</u>** shall be reported in lbs/acre/year and shall be less than the allowable Nitrogen Loading Value listed in the Reclaimed Water Management Plant (RWMP).

   Mass determined in accordance with guidance document *WTS-1B: General Criteria for Preparing a Reclaimed Water Management Plan* for fields managed by the MGSD.

   The total annual nitrogen applied (lbs/acre/year) shall not be greater than 110% of the total annual nitrogen uptake (lbs/acre/year). Calculations and monitoring data (submitted quarterly) shall use the **total nitrogen** in the applied wastewater (monitored by the treatment facility), total nitrogen from fertilizer applications, nitrogen uptake by crops or vegetation, evapotranspiration rate, precipitation rate, and fraction of applied nitrogen removed by denitrification and volatilization. Quarterly calculations shall be used to reconcile available nitrogen balance, prorated based on the allocated limitation (lbs/acre/year) defined in the RWMP, and an annual report shall be submitted for the fourth quarter of every year demonstrating compliance with the Annual Nitrogen Balance limitation.
2. **Allowable Nitrogen Loading** shall be reported in lbs/acre/year.

   Calculated in the required RWMP for irrigation fields managed by the MGSD and incorporated by reference as the effluent limitation for the allowable application of nitrogen mass in lbs/acre/year. The amount of nitrogen applied shall not exceed 110% of the amount of nitrogen consumed by irrigated crops.
3. The calculated Annual Nitrogen Loading value included in the RWMP must be reported on each quarterly DMR.
4. At the discharge of the chlorine contact tank prior to MGSD field application.

Re-use Discharge Limitations Table for Sample Location 004 (Mgsd's Storage Reservoirs) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Monthly Total	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	004	Monthly	METER
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Reuse	004	Monthly	COMPOS

Summary of Changes From Previous Permit
Under Outfall 001 (Influent), To Be Reported Monthly, the following addition was made:

ADDED - Footnote 3.

3. Sampling for CBOD, 5-day and total suspended solids (TSS) should be done concurrently when effluent (Outfall 002) is sampled to determine the exact percentages of removal achieved.

Under Outfall 002 (Chlorine Contact Tank), To Be Reported Monthly, the following additions, deletions, or changes were made:

DELETED: BOD, 5-day, percent removal, with a “Monthly Minimum”.

ADDED: BOD, carb-5 day, 20 deg C, percent removal, with a “Monthly Average Minimum” Base, a “>85 Percent (%)” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

DELETED – pH, with a “Monthly Average” Base as the minimum and maximum pH covers that parameters.

CHANGED – pH, minimum, with a “Monthly Minimum” Base to a “Daily Minimum” Base.

CHANGED – pH, maximum, with a “Monthly Maximum” Base to a “Daily Maximum” Base.

ADDED – Nitrogen, total, with a “Daily Maximum” Base, a “>=M&R Milligrams per Liter (mg/L)” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Weekly” Measurement Frequency, and a “Discrt” Sample Type.

DELETED - Under Outfall 002 (Chlorine Contact Tank), To Be Reported Quarterly along with the following parameters:

DELETED - Phosphate, total (as PO4), with a "Quarterly Maximum" Base.

DELETED - Phosphate, total (as PO4), with a "Quarterly Average" Base.

ADDED - Footnote 2.

2. Sampling for CBOD, 5-day and total suspended solids (TSS) should be done concurrently when effluent (Outfall 001) is sampled to determine the exact percentages of removal achieved.

Under Outfall 002 (Chlorine Contact Tank), To Be Reported Annually, the following additions, changes, or

deletions were made:

ADDED – The Profile 1 Dissolved parameters with an “Effluent Gross” Monitoring Location, an “002” Sample Location, an “Annual” Measurement Frequency, and a “Discrt” Sample Type.

DELETED – Antimony, total recoverable, with a “Daily Maximum” Base.

DELETED – Arsenic, total recoverable, with a “Daily Maximum” Base.

DELETED – Beryllium, total recoverable (as Be), with a “Daily Maximum” Base.

DELETED – Cadmium, total recoverable, with a “Daily Maximum” Base.

DELETED – Chromium, total recoverable, with a “Daily Maximum” Base.

DELETED – Copper, total recoverable, with a “Daily Maximum” Base.

DELETED - Lead, total recoverable, with a “Daily Maximum” Base.

DELETED – Mercury, total recoverable, with a “Daily Maximum” Base.

DELETED – Nickel, total recoverable, with a “Daily Maximum” Base.

DELETED – Selenium, total recoverable, with a “Daily Maximum” Base.

DELETED – Silver, total recoverable, with a “Daily Maximum” Base.

DELETED – Thallium, total recoverable, with a “Daily Maximum” Base.

DELETED – Zinc, total recoverable, with a “Daily Maximum” Base.
Under Outfalls 005 through 013 (MW2-MW10) the following changes were made:

CHANGED - Chloride (as Cl), the Base was changed from “Quarterly Maximum” to a “Daily Maximum” with the remaining discharge limitations and monitoring requirements remained unchanged.

CHANGED - Depth to water level ft. below land surface, the Base was changed from “Quarterly Minimum” to a “Daily Minimum” with the remaining discharge limitations and monitoring requirements remained unchanged.

CHANGED - Nitrogen, nitrate total (as N), the Base was changed from “Quarterly Maximum” to a “Daily Maximum” with the remaining discharge limitations and monitoring requirements remained unchanged.

CHANGED – Solids, total dissolved, the Base was changed from “Quarterly Maximum” to a “Daily Maximum” with the remaining
discharge limitations and monitoring requirements remained unchanged.

CHANGED – Water level relative to mean sea level, the Base was changed from “Quarterly Maximum” to a “Daily Maximum” with the remaining discharge limitations and monitoring requirements remained unchanged.

DELETED - Nitrogen, nitrate total (as N), with a "Quarterly Maximum" Base.

CHANGED - Footnote 3 to read:

3. Groundwater elevation above mean sea level (AMSL).

ADDED - Outfall 014 (Park Ranch Holdings, permit NS2000501), To be Reported Monthly, with the follow parameters:

ADDED - Flow Rate, with a Daily Maximum, a "M&R Million Gallons per Day (Mgal/d)" Quantity, a "Prior to Irrigation" Monitoring Location, a "014" Sample Location, a "Continuous" Measurement Frequency, and a "Meter" Sample Type.

ADDED - Flow Rate, with a 30-Day Average, a "M&R Million Gallons per Day (Mgal/d)" Quantity, a "Prior to Irrigation" Monitoring Location, a "014" Sample Location, a "Continuous" Measurement Frequency, and a "Meter" Sample Type.

ADDED - Outfall 015 (Park Ranch Holdings, permit NS2003500), To be Reported Monthly, with the follow parameters:

ADDED - Flow Rate, with a Daily Maximum, a "M&R Million Gallons per Day (Mgal/d)" Quantity, a "Prior to Irrigation" Monitoring Location, a "015" Sample Location, a "Continuous" Measurement Frequency, and a "Meter" Sample Type.

ADDED - Flow Rate, with a 30-Day Average, a "M&R Million Gallons per Day (Mgal/d)" Quantity, a "Prior to Irrigation" Monitoring Location, a "015" Sample Location, a "Continuous" Measurement Frequency, and a "Meter" Sample Type.

ADDED - Outfall 016 (Galeppi Land and Livestock, permit NS2002513), To be Reported Monthly, with the follow parameters:

ADDED - Flow Rate, with a Daily Maximum, a "M&R Million Gallons per Day (Mgal/d)" Quantity, a "Prior to Irrigation" Monitoring Location, a "016" Sample Location, a "Continuous" Measurement Frequency, and a "Meter" Sample Type.

ADDED - Flow Rate, with a 30-Day Average, a "M&R Million Gallons per Day (Mgal/d)" Quantity, a "Prior to Irrigation" Monitoring Location, a "016" Sample Location, a "Continuous" Measurement Frequency, and a "Meter" Sample Type.

ADDED - Outfall 017 (Bently Ranch, permit NS2009507), To be Reported Monthly, with the follow parameters:

ADDED - Flow Rate, with a Daily Maximum, a "M&R Million Gallons per Day (Mgal/d)" Quantity, a "Prior to Irrigation" Monitoring Location, a "017" Sample Location, a "Continuous" Measurement Frequency, and a "Meter" Sample Type.

ADDED - Flow Rate, with a 30-Day Average, a "M&R Million Gallons per Day (Mgal/d)" Quantity, a "Prior to Irrigation" Monitoring Location, a "017" Sample Location, a "Continuous" Measurement Frequency, and a "Meter" Sample Type.

ADDED - Special Condition Item 5.

5. The Permittee may apply for a permit modification to incorporate additional reclaimed water use sites.

Technology Based Effluent Limitations

Technology based effluent limitations (TBELs) are required as promulgated by the United States (U.S.) EPA for Publicly Owned Treatment Works (POTWs). The following limits are based on secondary treatment standards as allowed by Title 40 of the Code of Federal Regulations (40 CFR), Section 133, and which has been adopted by the State of Nevada. U.S. EPA published federal secondary treatment standards at 40 CFR 133 based on an evaluation of performance data for POTWs practicing a combination of physical and biological treatment. Performance is measured by monitoring biodegradable organics, suspended solids in the effluent, and ensuring pH remains within regulatory limits. Federal secondary treatment standards are defined under 40 CFR 133 for maximum CBOD5 as a 30-day average of 25 mg/L and a 7-day average of 40 mg/L and for maximum TSS as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L. In addition to describing the minimum levels of effluent quality attainable by secondary treatment, 40 CFR

133.102 states that the 30-day average percent removal of CBOD5 and TSS shall not be less than 85%. The Division has adopted these standards for discharges from treatment facilities, and has applied the same 7-day average thresholds as daily maximum effluent limits for CBOD5 and TSS.

The following performance standards for POTWs with secondary treatment standards have been included in the permit:

CBOD5: Monthly average limit: <= 25 mg/L; Daily maximum limit: <= 40 mg/L.

TSS: Monthly average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

pH: Daily Maximum: <= 9.0 Standard Units

pH: Daily Minimum >= 6.0 Standard Units
Limits Based on Secondary Treatment Standards:

BOD5 Percent removal: >= 85 percent.

TSS: Percent removal: >= 85 percent.

Limits Based on the Facility's Design Criteria Review:

Permitted 30-day average influent flow rate is limited to <= 2.8 Mgal/d.

Permitted daily maximum influent flow rate is limited to <= 3.1 Mgal/d.

Water Quality Based Effluent Limitations
Water quality-based effluent limitations are not applicable to this permit.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)
Water quality-based effluent limitations are not applicable to this permit.

Basis for Effluent Limitations
There are currently no specific water quality standards that have been formally adopted by the State for groundwater. However, the Division has the discretion to implement effluent limitations outside water quality standards per NAC 445A.243, which states, “In establishing an effluent limitation to carry out the policy of this State set forth in NRS 445A.305, consideration must be given to, but is not limited by the following: ... (2) the need for standards that specify by chemical, physical, biological or other characteristics the extent to which pollution by various substances will not be tolerated.”The requirement to monitor the effluent for Profile 1 pollutants once per permit term is included to evaluate the quality of the effluent and determine whether the effluent has potential to impact the receiving water. Although cyanide and uranium are not expected to be present in the effluent, the proposed permit requires the Permittee sample these constituents annually as they are included in the Profile 1 list and they have not been sampled before.

The constituents listed in Profile 1 have been vetted by the Division and have been included in groundwater discharge permits for many years as a means of regulating groundwater quality. Per Nevada Revised Statute (NRS) 445A.490, “No permit may be issued which authorizes any discharge or injection of fluids through a well into any waters of the State: ...(3) which would result in the degradation of existing or potential underground sources of drinking water.”

Influent and Effluent Monitoring Requirements:

Weekly influent and effluent monitoring for CBOD5 and TSS are included to assess the treatment performance of the MGSD's treatment plant. A weekly sampling frequency for CBOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations. Percent removal requirements for CBOD5 and TSS are established in the permit as monthly average minimums of 85%, based on secondary-treatment standards.

Some wastewater treatment processes can increase or decrease wastewater pH; therefore, weekly monitoring for pH is included in assessing compliance with effluent limits of 6.0 S.U. as a daily minimum and 9.0 S.U. as a daily maximum.

Other Required Water Quality Monitoring:

The groundwater monitoring requirement has been maintained to allow for continued assessment of potential contamination, understanding aquifer behavior, along with determining plant performance based on discharged treated effluent and associated interaction with the groundwater.

The requirement to sample the effluent for fecal coliform prior to irrigation is for the protection of the environment and human health.

Anti-backsliding
None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit. Under this permit, Nitrogen, total nitrate (as N) was removed. The Total Nitrogen (as N) arameter encompasses all forms of nitrogen, including organic, ammonia, nitrite, and nitrate. Thus, no backsliding will be caused by these removals and allows this permit to adhere to current Nevada Division of Water Pollution Control (Division) reporting requirements.

Also, based on the MGSD WWTP not having a pretreatment program, the requirement to sample those parameters as defined as Priority Pollutants has been removed as they are not discharging to an EPA-defined surface water source nor do they handle industrial waste.

Antidegradation
The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the Code of Federal Regulations (CFR) § 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable.

Special Conditions
See the Special Approvals / Conditions Section below:

SA – Special Approvals / Conditions Table

Item #	Description
1	The cumulative mass of nitrogen applied to irrigation plots shall be reported in each quarterly report for comparison with estimates of annual nitrogen uptake and consumption.
2	Nitrogen balance calculations and a cumulative reconciliation between mass of nitrogen applied to irrigation plots versus the calculated mass of nitrogen uptake determined for the crops actually grown and irrigated during the calendar year must be reported annually in the fourth quarter report.
3	Should monitoring results indicate questionable or anomalous data, confirmation samples shall be collected and analyzed within six weeks of any compliance samples yielding potentially unreliable data. All confirmation sampling results shall be reported with any anomalous data detected during a reporting period.
4	Biosolids shall be sampled at the discharge of the belt press after the digester.
5	The Permittee may apply for a permit modification to incorporate additional reclaimed water use sites.

Discharges From Future Outfalls/ Planned Facility Changes

There are no planned discharges from future outfalls or facility changes.

Corrective Action Sites
There are no active Bureau of Corrective Actions (BCA) remediation sites within a one-mile radius of the treatment plant (MGSD WWTP).

Wellhead Protection Program
Outfalls 002 and 003 are located 590 feet northeast and 870 feet north, respectively, of a Public Water Supply (PWS) well placing the outfall in the Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well with a cross gradient. The outfalls are located in a Wellhead Protection Area (WHPA), which represents an approximate 10-year capture zone of a well. The well is located in an unconfined aquifer at a depth of 400 feet . The recent chemical history of the well reports that the well has been having detections of Arsenic. Based on the direction and gradient of the well and the chemical history, the well is at minimal risk of contamination.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS-2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant, and be prepared and wet stamped by a licensed, qualified Nevada engineer (P.E.).	5/1/2026
2	The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of a Reclaimed Water Management Plan (RWMP) to the Division for review and approval. The RWMP shall follow the Division's guidance document WTS-1B: General Design Criteria for Preparing a Reclaimed Water Management Plan and be prepared by either a licensed, qualified Nevada engineer (P.E.) or other competent professional.	5/1/2026
3	The Permittee shall submit a Biosolids Monitoring Report (BMR) for the previous calendar year to the Division.	1/28/2027

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2026
2	Annual Report	Annually	1/28/2027

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at https://ndep.nv.gov/posts. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **1/22/2026,** a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

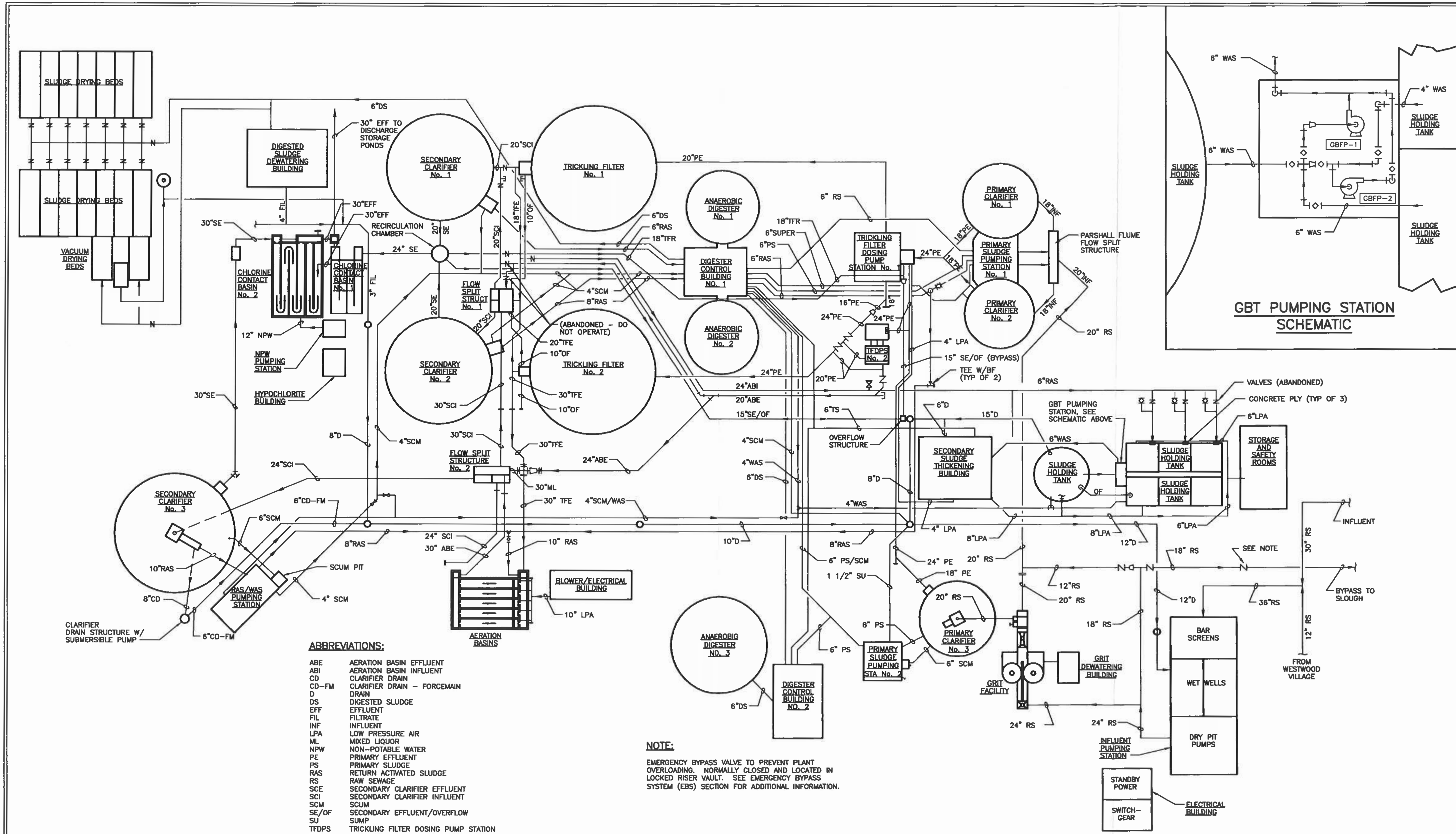
A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to issue/re-issue the proposed 5-year permit.

Prepared by: **Melissa Hanson**
Date: **12/17/2025**
Title: **Staff II Engineer**



ABBREVIATIONS:

ABE	AERATION BASIN EFFLUENT
ABI	AERATION BASIN INFLUENT
CD	CLARIFIER DRAIN
CD-FM	CLARIFIER DRAIN - FORCEMAIN
D	DRAIN
DS	DIGESTED SLUDGE
EFF	EFFLUENT
FIL	FILTRATE
INF	INFLUENT
LPA	LOW PRESSURE AIR
ML	MIXED LIQUOR
NPW	NON-POTABLE WATER
PE	PRIMARY EFFLUENT
PS	PRIMARY SLUDGE
RAS	RETURN ACTIVATED SLUDGE
RS	RAW SEWAGE
SCE	SECONDARY CLARIFIER EFFLUENT
SCI	SECONDARY CLARIFIER INFLUENT
SCM	SCUM
SE/OF	SECONDARY EFFLUENT/OVERFLOW
SU	SUMP
TFDPS	TRICKLING FILTER DOSING PUMP STATION
TFE	TRICKLING FILTER EFFLUENT
TFR	TRICKLING FILTER RETURN
TS	THICKENED SLUDGE
WAS	WASTE ACTIVATED SLUDGE

NOTE:

EMERGENCY BYPASS VALVE TO PREVENT PLANT OVERLOADING. NORMALLY CLOSED AND LOCATED IN LOCKED RISER VAULT. SEE EMERGENCY BYPASS SYSTEM (EBS) SECTION FOR ADDITIONAL INFORMATION.

GENERAL PLANT SCHEMATIC

HDR

Figure 1-1