FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: PRIMM VALLEY RESORTS

31900 LAS VEGAS BLVD. SO
PRIMM, NV 89019

Permit Number: NS0090001

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: PRIMM WASTEWATER TREATMENT PLANT, CLARK
32250 FASHION OUTLET WAY, PRIMM, NV 89019
LATITUDE: 35.6050, LONGITUDE: -115.387222
TOWNSHIP: T27S, RANGE: R59E, SECTION: S08N

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	001 - EFFLUENT	External Outfall		35.6050	-115.387222	GROUNDWATER
002	002 - RAPID INFILTRATION BASINS	External Outfall		35.613333	-115.368333	GROUNDWATER
003	003 - WALTER M. HIGGINS GENERATING STATION	External Outfall		35.613611	-115.36	GROUNDWATER
004	004 - LANDSCAPE IRRIGATION	External Outfall		35.605278	-115.3875	GROUNDWATER
005	005 - DUST CONTROL	External Outfall		35.605278	-115.3875	GROUNDWATER
006	MONITORING WELL 1A	Monitoring Well		35.6150	-115.367778	GROUNDWATER
007	MONITORING WELL 2A	Monitoring Well		35.613056	-115.368333	GROUNDWATER
008	MONITORING WELL 3	Monitoring Well		35.607778	-115.380833	GROUNDWATER
009	MONITORING WELL 4	Monitoring Well		35.605833	-115.381944	GROUNDWATER
INF	INFLUENT METER	Influent Structure		35.6050	-115.387222	N/A

Permit History/Description of Proposed Action

The Permittee, Primm Valley Resorts, has applied for the renewal of Permit NS0090001 for the Primm Wastewater Treatment Plant (PWWTP), at 32250 Fashion Outlet Way, located in Primm, within Clark County, Nevada. The Permittee proposes to continue to discharge treated wastewater to groundwater of the State either via multiple rapid infiltration basins (RIBs), piped to NV Energy's Walter M. Higgins III Generating Station (560 MW Summer Peaking Plant) for plant makeup water (permit NS2002500), applied irrigation use, or dust control.

This permit was first issued on September 27, 1991. The most recent permit was issued on March 5, 2015, and expired on March 4, 2020; the permit has been administratively continued since.

Facility Overview

The PWWTP utilizes a pre-manufactured, activated sludge/extended aeration package treatment plant, produced by MAR-WOOD. The treatment plant services three hotels and casinos, employee housing units

(460 apartments), a California Lotto store, two gas stations, and restaurants.

Domestic sewage is transported through a sanitary sewer collection system consisting of a network of gravity collection lines and force mains, ranging from 4 to 10 inches in diameter. Included in the network are five lift stations, with one being located west of Interstate 15 (I-15), and the other four on the east side of the interstate, that take the water to the treatment plant. The PWWTP is composed of an activated sludge/extended aeration package plant that includes five aeration basins, two final settling basins, two chlorine contact chambers, an aerobic digester, and an effluent wet well. The treatment system includes five lift stations, two grinders, MAR-WOOD package treatment plant, four RIBs, and twelve asphalt-lined sludge drying beds.

The packaged treatment works from MAR-WOOD includes inline grinders on the primary force main, twin compartments for aerated flow equalization, preanoxic denitrification compartment, three extended aeration compartments, a combined post anoxic denitrification and post-aeration compartment, twin compartments for secondary effluent clarification and bleach disinfection, and a waste activated sludge digestion compartment. Operations staff from the resort indicated that a maintenance project has been approved and funded to begin removal (pumping/dredging) of accumulated grit and debris (e.g., trash) from the treatment compartments, including the floating vegetation mats observed in the EQ compartments.

The secondary treatment system includes aeration diffusers for carbonaceous organic matter decomposition and ammonia nitrification, and the subsequent nitrate conversation to nitrogen gas. The treated effluent is then disinfected using bleach and pressure-filtered (via dual media filters). The Category B bacteriological quality level, as defined under Nevada Administrative Code (NAC) 445A.276, denitrified and disinfected reclaimed water is discharged either to the RIBs for evaporation/percolation (Outfall 002), or to the Walter M. Higgins III Generating Station to be used as cooling tower/plant makeup water (Outfall 003) or used at the Primm Valley resort properties for landscape irrigation (Outfall 004) and construction/dust control uses (Outfall 005). Waste activated sludge is discharged to a series of asphalt-lined drying beds prior to disposal at a permitted landfill.

Note: The original plant layout had four RIBs, located north of the drying beds, that became inactive following construction of the generating station in 2004.

Outfall Summary

Outfall INF – This internal outfall is for measuring the influent entering the plant.

Outfall 001 – This effluent outfall is for measuring the treated effluent from the treatment plant.

Outfall 002 – This external outfall is for measuring the treated effluent being discharged into the RIBs.

Outfall 003 – This external outfall is for the discharge of the reclaimed water to the Walter M Higgins III Generating Station (permit NS2002500).

Outfall 004 – This external outfall is for the discharge of the reclaimed water for applied irrigation use throughout the Primm Valley resorts.

Outfall 005 – This external outfall is for the discharge of reclaimed water for dust control throughout the Primm Valley resorts through a truck standpipe.

Outfall 006 – This downgradient monitoring well (MW1A) is located north of the RIBs.

Outfall 007 – This downgradient monitoring well (MW2A) is located near the RIBs.

Outfall 008 – This downgradient monitoring well (MW3) is located near the inactive, original RIBs.

Outfall 009 – This downgradient monitoring well (MW4) is located near the asphalt-lined drying beds.

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

Solids Handling
Waste activated sludge is discharged to a series of asphalt-lined drying beds prior to disposal at a permitted landfill.

Effluent Management and Reuse
Treated effluent is discharged either to the RIBs for evaporation/percolation (Outfall 002), or the Walter M. Higgins III Generating Station (permit NS2002500) to be used as cooling tower/plant makeup water (Outfall 003), or used at the Primm Valley resort properties for landscape irrigation (Outfall 004) and dust control (Outfall 005). Based on the Division's September 2024 inspection findings, only the Higgins III generating station is currently receiving reclaimed water.

Design Flow (and basis) and Measurement & Current Capacity
The PWWTP was designed for an average day flow rate of 1.0 million gallons per day (Mgal/D).

The daily maximum influent flow rate for Outfall 001 is limited to 1.00 Mgal/D. This outfall was added to the permit during this renewal period.

The long-term average discharge (effluent) flow rate for Outfall 002 was 0.42 Mgal/d. The daily maximum discharge rate was previously based on a daily maximum of 1.0 Mgal/d. The revised flow rates will be based on a monitor and report (M&R) basis for both the 30-day daily average and daily maximum during this renewal period.

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 PWWTP's Operation and Maintenance (O&M) Manual was last reviewed and approved on May 18, 2020. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every two (2) permit cycles which equate to every ten (10) years and being due on or before December 1, 2029, being 180 days prior to the expiration of this permit cycle.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from January 2020 to October 2024, was reviewed as part of this permit renewal process.

PWWTP treats sanitary sewage from the three hotels and casinos, employee housing units (460 apartments), California Lotto store, two gas stations, and restaurants and provides treated reclaimed water that meets a Category B bacteriological quality level, per the requirements under NAC 445A.276, for various uses; therefore, the reclaimed water should meet, at a minimum, a daily maximum fecal coliform of 23 colony forming units (CFU) / 100 mL and a 30-day geometric mean of 2.2 CFU / 100 mL. The following reclaimed water averages were taken from January 2020 to October 2024 reporting period:

Notes:
mg/L = Milligrams per Liter
Mgal/d = Million Gallons per Day
S.U.=Standard Units
BOD5 = Biochemical Oxygen Demand, 5-Day
TDS = Total Dissolved Solids
TSS = Total Suspended Solids

Outfall 001:
BOD5: 9.48 mg/L

Flow Rate: 0.42 Mgal/d
Nitrogen: 5.56 mg/L
pH: 7.69 S.U.
TSS: 4.17 mg/L, with 33% reported numbers being below detectable levels

Outfall 002:
Flow Rate: 0.30 Mgal/d

Outfall 003:
Fecal Coliform: 0.52 Colony forming units per 100mL
Flow Rate: 0.14 Mgal/d

Outfall 004:
Fecal Coliform: 0.5 Colony forming units per 100mL
Flow Rate: No Flow (28%) or No Discharge (72%)

Outfall 005:
Fecal Coliform: 0.5 Colony forming units per 100mL
Flow Rate: No Flow (25%) or No Discharge (75%)

Outfall 006:
Chloride: 348.62 mg/L
Depth to water level below land surface: 158.17 Feet
Nitrogen: 5.48 mg/L
TDS: 1099.33 mg/L

Outfall 007 (averages are based on 68% reported flow during the period reviewed):
Chloride: 348.08 mg/L
Depth to water level below land surface: 167.46 Feet
Nitrogen: 5.05 mg/L
TDS: 1143.08 mg/L

Outfall 008 (averages are based on 47% reported flow during the period reviewed):
Chloride: 1030.03 mg/L
Depth to water level below land surface: 82.44 Feet
Nitrogen: 1.10 mg/L
TDS: 2526.67 mg/L

Outfall 009:
Chloride: 762.62 mg/L
Depth to water level below land surface: 108.31 Feet
Nitrogen: 2.73 mg/L
TDS: 2088.89 mg/L

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 from wastewater treatment facilities that denitrify and provide reclaimed water are Fecal Coliform, Nitrogen, Total Dissolved Solids, and pH along with potential inorganic chemicals and metals (Profile 1 contaminants).

Receiving Water
The receiving water is groundwater of the State. Groundwater is found at a depth ranging from approximately 117 ft. to 160 ft. below ground surface and flows in a northwesterly direction. Drinking water for the area is pumped from wells located approximately 10 miles southwest of Primm near the base of

Clark Mountain.

Compliance History
The facility was in substantial compliance during the January 2020 to October 2024 reporting period.

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

WWTP Discharge Limitations Table for Sample Location 001 (Effluent - External Outfall) 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)		Effluent Gross	001	Continuous	CALCTD
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	CALCTD
BOD, 5-day	Daily Maximum[1]		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS [3]
BOD, 5-day	30 Day Average[1]		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS [3]
pH, maximum	Daily Maximum[2]		<= 9.0 Standard Units (SU)	Effluent Gross	001	Monthly	DISCRT
pH, minimum	Daily Minimum[2]		>= 6.0 Standard Units (SU)	Effluent Gross	001	Monthly	DISCRT
Nitrogen, total	Daily Maximum[1]		< 10 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS
Solids, total suspended	Daily Maximum[1]		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS [3]
Solids, total suspended	30 Day Average[1]		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	COMPOS [3]
BOD, 5-day, percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	001	Monthly	CALCTD
Solids, suspended percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	001	Monthly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.
2. If only one sample is taken during the monitoring period, enter the result as both the monthly minimum and monthly maximum.
3. Sampling for BOD, 5-day and total suspended solids (TSS) should be done concurrently when the influent is sampled to determine exact percentages of removal achieved.

WWTP Discharge Limitations Table for Sample Location 001 (Effluent - External Outfall) To Be Reported Once During The Permit Term

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	001	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Aluminum, total (as Al)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Antimony, total (as Sb)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Arsenic, total (as As)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Barium, total (as Ba)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Calcium, total (as Ca)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, total (as Cr)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 001 (Effluent - External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Iron, total (as Fe)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Lead, total (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Magnesium, total (as Mg)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Manganese, total (as Mn)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
pH, maximum	Daily Maximum		M&R Standard Units (SU)	Effluent Gross	001	Once Per Permit Term	DISCRT
pH, minimum	Daily Minimum		M&R Standard Units (SU)	Effluent Gross	001	Once Per Permit Term	DISCRT
Potassium, total (as K)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

WWTP Discharge Limitations Table for Sample Location 001 (Effluent - External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Silver, total (as Ag) [1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sodium, total (as Na)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Thallium, total (as Tl)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Analysis shall be for the dissolved fraction.

WWTP Discharge Limitations Table for Sample Location Inf (Influent Meter) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 1.0 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	INF	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Raw Sewage Influent	INF	Continuous	METER
BOD, 5-day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	COMPOS [1]
BOD, 5-day	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	COMPOS [1]
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	COMPOS [1]
Solids, total suspended	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	COMPOS [1]

Notes (WWTP Discharge Limitations Table):

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

Groundwater Monitoring Wells Table for Sample Location 006 (Monitoring Well 1A) To Be Reported Quarterly[1]

	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	INSITU
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
pH	Value		M&R Standard Units (SU)	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. If the monitoring well is found to be dry during the reporting period, report as "Dry" on the DMR for this outfall.
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 007 (Monitoring Well 2A) To Be Reported Quarterly[1]

	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	INSITU
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
pH	Value		M&R Standard Units (SU)	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. If the monitoring well is found to dry during the reporting period, report as "Dry" on the DMR for this outfall.
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 008 (Monitoring Well 3) To Be Reported Quarterly[1]

	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	INSITU
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
pH	Value		M&R Standard Units (SU)	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. If the monitoring well is found to be dry during the reporting period, report as "Dry" on the DMR for this outfall.
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 009 (Monitoring Well 4) To Be Reported Quarterly[1]

	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	INSITU
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
pH	Value		M&R Standard Units (SU)	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. If the monitoring well is found to be dry during the reporting period, report as "Dry" on the DMR for this outfall.
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Re-use Discharge Limitations Table for Sample Location 003 (Walter M. Higgins Iii Generating Station - External Outfall) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Coliform, fecal, colony forming units	Daily Maximum[2]		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	003	Monthly	DISCRT
Coliform, fecal, colony forming units	30 Day Geometric Mean[2]		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	003	Monthly	DISCRT
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	003	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	003	Continuous	METER

Notes (Re-use Discharge Limitations Table):

1. If there is no discharge from this outfall during the reporting period, enter "No Discharge" on the Discharge Monitoring Report for this outfall.
2. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.

Re-use Discharge Limitations Table for Sample Location 004 (Landscape Irrigation - External Outfall) To Be Reported Monthly[1]

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	004	Continuous	METER
Coliform, fecal, colony forming units	Daily Maximum[2]		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Irrigation	004	Monthly When Discharging	DISCRT
Coliform, fecal, colony forming units	30 Day Geometric Mean[2]		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Irrigation	004	Monthly When Discharging	DISCRT
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	004	Continuous	METER

Notes (Re-use Discharge Limitations Table):

1. If there is no discharge from this outfall during the reporting period, enter "No Discharge" on the Discharge Monitoring Report for this outfall.
2. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.

Re-use Discharge Limitations Table for Sample Location 005 (Dust Control - External Outfall) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	005	Continuous	METER
Coliform, fecal, colony forming units	Daily Maximum[2]		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	005	Monthly When Discharging	DISCRT
Coliform, fecal, colony forming units	30 Day Geometric Mean[2]		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	005	Monthly When Discharging	DISCRT
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	005	Continuous	METER

Notes (Re-use Discharge Limitations Table):

1. If there is no discharge from this outfall during the reporting period, enter "No Discharge" on the Discharge Monitoring Report for this outfall.
2. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.

Ponds / Rapid Infiltration Basins for Sample Location 002 (Rapid Infiltration Basins - External Outfall) To Be Reported Monthly[1]

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)		Effluent Gross	002	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER

Notes (Ponds / Rapid Infiltration Basins):

1. If there is no discharge from this outfall during the reporting period, enter "No Discharge" on the Discharge Monitoring Report for this outfall.

Summary of Changes From Previous Permit

The facility's address was updated to 32250 Fashion Outlet Way, based on information found on the Clark County Assessor's website.

The facility's coordinates were changed to reflect exact facility location: Lat 35.6050, Long -115.387222.

Profile 1 Pollutants of Concern were added to the Wastewater Treatment Plant Table for Outfall 001 along with the footnote:
1. Analysis is for the dissolved fraction.

Under Outfall 001, for a monthly reporting period, the following two parameters were added:

BOD, 5-day, percent removal, being a "Monthly Average Minimum" base, a "Greater than or equal to 85 Percent (%)", an "Effluent Gross" monitoring location, a "Monthly when discharging" measurement frequency, and a "Calctd" sample type.

TSS, percent removal, being a "Monthly Average Minimum" base, a "Greater than or equal to 85 Percent (%)", an "Effluent Gross" monitoring location, a "Monthly when discharging" measurement frequency, and a "Calctd" sample type.

Along with the footnote:
Sampling for BOD, 5-day and TSS should be done concurrently when the influent is sampled to determine exact percentages of removal achieved.

Nitrogen, with a "30-Day Average" and a "M&R Milligrams per Liter" concentration has been removed to maintain current Division reporting standards for WWTPs.

Outfall INF was added to measure the flow rate, BOD5, and TSS of the domestic sewage entering the plant to determine actual treatment level achieved. The following parameters were added under the outfall:

Flow Rate, having a "Daily Maximum" base, a "1.0 Million Gallons per Day (Mgal/d)" discharge monitoring rate, a "Raw Sewage Influent" monitoring location, a "Continuous" measurement frequency, and a "Meter" sample type.

Flow Rate, being a "30-Day Average" base, a "M&R Million Gallons per Day" discharge monitoring rate, a "Raw Sewage Influent" monitoring location, a "Continuous" measurement frequency, and a "Meter" sample type.

BOD, 5-day, having a “Daily Maximum” base, a “M&R Milligrams per Liter” concentration, a “Raw Sewage Influent” monitoring location, a “Monthly” measurement frequency, and a “Compos” sample type.

BOD, 5-day, having a “30-Day Average” base, a “M&R Milligrams per Liter” concentration, a “Raw Sewage Influent” monitoring location, a “Monthly” measurement frequency, and a “Compos” sample type.

Solids, Total Suspended, having a “Daily Maximum” base, a “M&R Milligrams per Liter” concentration, a “Raw Sewage Influent” monitoring location, a “Monthly” measurement frequency, and a “Compos” sample type.

Solids, Total Suspended, having a “30-Day Average” base, a “M&R Milligrams per Liter” concentration, a “Raw Sewage Influent” monitoring location, a “Monthly” measurement frequency, and a “Compos” sample type.

The "Water level relative to mean sea level" parameter was added to the Monitoring Well Table for Outfalls 006, 007, 008 and 009 with a quarterly reporting schedule, with a "Daily Maximum" base, "M&R Feet" discharge limitation, a "Monitoring Well" location, a "Quarterly" measurement frequency, and a "Calctd" Sample Type.

Along with the footnote:
3. Groundwater elevation above mean sea level.

Technology based effluent limitations were updated based on the Environmental Protection Agency's (EPA) secondary treatment standards.

The Basis for Effluent Limitations was added to provide an expanded explanation of the EPA's secondary treatment standards, and associated monitoring requirements based on parameter, being for BOD, 5-day, TSS, and the Profile 1 Pollutants.

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 the Code of Federal Regulation (CFR) Title 40, 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 and suspended solids in the effluent, and the ability to maintain pH. Federal secondary treatment standards are defined under 40 CFR 133 for maximum BOD, 5-day as a 30-day average of 30 mg/L and a 7-day average of 45 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 BOD, 5-day and TSS shall not be less than 85%. The Division has adopted these standards for groundwater dischargers and applied the 7-day average thresholds as daily maximum effluent limits for BOD, 5-day and TSS.

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

BOD, 5-day: 30-day average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

TSS: 30-day 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:
BOD, 5-day Percent removal: >= 85 percent.

TSS: Percent removal: >= 85 percent.

Limits Based on Facility's Design Criteria Review:

30-day average flow rate for influent is limited to <= M&R Mgal/d.

Daily maximum flow rate for influent is limited to <= 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 Nevada Revised Statutes (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 constituents listed in Profile I 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 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.”

Other Required Water Quality Monitoring:
The requirement to monitor the effluent for Profile I 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 once during the permit term as they are included in the Profile 1 list and they have not been sampled before.

Influent and Effluent Monitoring Requirements:
Monthly influent and effluent monitoring for BOD, 5-day and TSS are included to assess the treatment performance of PWWTP. A monthly sampling frequency for BOD, 5-day and TSS is sufficient for determining compliance with the applicable effluent limitations. The recent removal requirements for BOD, 5-day 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, monthly 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.

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

The proposed permit maintains effluent limits for fecal coliform in accordance with NAC 445A.276.

The proposed permit maintains effluent limits for nitrogen for the protection of the environment and human health.

Monitoring is required to ensure that the treatment plant capacity is not exceeded, to assess the quality of the effluent being discharged, to monitor the amount of treated effluent delivered to the approved reuse sites, and to monitor groundwater quality.

Anti-backsliding
None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit.

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 NRS 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at 40 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 of groundwater, and not surface water, the new antidegradation rule is not applicable. There are currently no specific water quality standards that have been formally adopted by the State for groundwater, however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from the treated effluent/reclaimed water discharged within the compliance limits of the proposed permit.

Special Conditions
There are no Special Approvals or Conditions for this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

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 facility, RIBs, and drying ponds.

Wellhead Protection Program
The outfalls are not located within a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well, or within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well.

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, WTS2 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.).	12/1/2029

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Reports	Quarterly	10/28/2025
2	Annual Reports	Annually	1/28/2026

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. **6/2/2025,** 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: **4/25/2025**
Title: **Staff II Engineer**