FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: CLARK COUNTY DEPARTMENT OF AVIATION

5757 WAYNE NEWTON BLVD
LAS VEGAS, NV 89111

Permit Number: NV0023761

Permit Type: MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL FACILITY THAT DISCHARGES NON-PROCESS WASTEWATER

Designation: MINOR NPDES

New/Existing: EXISTING

Location: HARRY REID INTERNATIONAL AIRPORT, CLARK
5757 WAYNE NEWTON BOULEVARD, LAS VEGAS, NV 89119
LATITUDE: 36.085556, LONGITUDE: -115.128889
TOWNSHIP: 21S, RANGE: 61E, SECTION: 34

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	CENTRAL UTILITY PLANT	External Outfall		36.0856	-115.1289	LAS VEGAS WASH VIA THE CLARK COUNTY STORM DRAIN SYSTEM
002	AUTOMATED TRANSIT SYSTEM TUNNEL	External Outfall		36.0864	-115.1408	LAS VEGAS WASH VIA THE CLARK COUNTY STORM DRAIN SYSTEM
003	SUM OF OUTFALLS 001 & 002	Sum		36.0874	-115.1315	LAS VEGAS WASH VIA THE CLARK COUNTY STORM DRAIN SYSTEM

Permit History/Description of Proposed Action
The Permittee, the Clark County Department of Aviation, has applied for the renewal of National Pollutant Discharge Elimination System permit, NV0023761, for the Harry Reid International Airport (formerly known as McCarran International Airport) located at 5757 Wayne Newton Boulevard in Las Vegas, Clark County, Nevada. The Permittee proposes to continue to discharge intercepted groundwater to the Las Vegas Wash via the Clark County storm drain system.

This permit was first issued in December of 2009. The last renewal of this permit was issued on October 1, 2015, and expired on September 30, 2020; the permit has been administratively continued since.

Facility Overview
Terminal Three (T3), located at the Harry Reid International Airport, was opened in June of 2012. An underground Automated Transit System (ATS) connects T3 with the Satellite D gates. The ATS tunnel extends below the water table and as such requires a dewatering system. The airport also includes a Central Utility Plant that includes a subgrade component extending below the water table and also requires a dewatering system. Both dewatering systems include under slab drain piping and drain rock wrapped in geotextile fabric supported by sump pumps.

The dewatering system for the ATS includes a sump pump sized for 150 gallons per minute (gpm). After the groundwater is intercepted, it is discharged from the sump into an 18-inch reinforced concrete pipe

(RCP) that flows into a 42-inch storm drain. The storm drain system flows under the Satellite D gates and into an existing manhole located south of the T3 building. The water then flows from the storm drain into a detention basin located northeast of the site after which it flows into the Clark County storm drain system and eventually to the Las Vegas Wash.

The Central Utility Plant has a sump pump sized for 210 gpm. Groundwater intercepted by the sump flows into a 6-inch polyvinyl chloride (PVC) pipe and is gravity fed to a series of piping that travels counterclockwise around the perimeter of the building in increasing size from 12-inch PVC pipe to 15-inch PVC pipe and then to a 24-inch RCP to the detention basin located to the northeast of the site. From the basin the water flows into the Clark County storm drain system and eventually to the Las Vegas Wash.

The sump pumps automatically start up whenever the water level rises enough to activate the float switch. The sumps include a high-level alarm which will sound in the Airport Control Center for T3 or the Energy Management Control Systems room for the Central Utility Plant.

Outfall Summary
Outfall 001 – This outfall is for the discharge of intercepted groundwater from the Central Utility Plant.

Outfall 002 – This outfall is for the discharge of intercepted groundwater from the ATS tunnel.

Outfall 003 – This outfall is for the sum of discharges from Outfalls 001 and 002.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the year 2019 to 2023, was reviewed as part of this permit renewal process. The long-term average discharge flow rate for Outfall 001 was 0.015 million gallons per day (MGD). The long-term average discharge flow rate for Outfall 002 was 0.007 MGD. The previous permit included a 30-day average flow rate limit of 0.50 MGD for the combined discharge of Outfalls 001 and 002; there were no exceedances of this limit.

There were no exceedances of any permit limit from 2019 to 2023.

Pollutants of Concern
Pollutants of concern are any pollutant, or parameters, that are believed to be present in the discharge and could alter the physical, chemical, or biological conditions of the receiving water. A common pollutant of concern for intercepted groundwater is petroleum hydrocarbons from failed mechanical equipment. Additionally, per the reasonable potential analysis (RPA), selenium, boron, total inorganic nitrogen (TIN), and total dissolved solids (TDS) are considered pollutants of concern.

Receiving Water
The receiving water is the Las Vegas Wash via the Clark County storm drain system.

Applicable Water Quality Standards/Beneficial Uses
The water quality standards (WQSs) for the nearest downstream control point, “Las Vegas Wash at the Historic Lateral” (NAC 445A.2156) apply. WQSs for the Las Vegas Wash, from the confluence of the Sloan Channel and the Las Vegas Wash to the Historic Lateral, includes beneficial uses for watering of livestock, irrigation, aquatic life, recreating not involving contact with the water, propagation of wildlife, and maintenance of a freshwater marsh. Additional WQSs applicable to this section of the Las Vegas Wash include toxic materials (NAC 445A.1236). Furthermore, water quality narrative standards applicable to all surface waters (NAC 445.121) apply.

303 (d) Listing Status
According to Nevada’s 2020 – 2022 Water Quality Integrated Report, none of the designated beneficial uses are currently impaired for the Las Vegas Wash from the confluence of the Sloan Channel and the Las Vegas Wash to the Historic Lateral.

TMDL
Per section 303(d)(1)(C) of the Clean Water Act (CWA), states are required to develop Total Maximum Daily Loads (TMDLs) for those waters which the effluent limitations are not stringent enough to implement any WQSs applicable to such waters. The Las Vegas Wash, from the Historic Lateral to its confluence with Lake Mead, includes a TMDL for total ammonia as nitrogen and total phosphorus.

Waste Load Allocation
Per a memo dated May 16, 2024, from the Bureau of Water Quality Planning (BWQP), "For NPDES permitting purposes, total phosphorus discharge loads associated with groundwater dewatering activities within the Las Vegas Wash area can be assumed to be part of the base phosphorous load recognized in the 1989 Las Vegas Wash Total Phosphorous TMDL Load Allocation." Therefore, there is no waste load allocation (WLA) for total phosphorus associated with this permit. Although the permit does not include a WLA for total phosphorus, the Permittee is required to monitor and report the mass load discharged to the Las Vegas Wash for the Division's information. Furthermore, total ammonia loads discharged to the Las Vegas Wash will be monitored and reported to obtain data which will assist with determining if there is a need for an individual WLA for the facility.

Compliance History
The facility was considered to be in substantial compliance during the 2019 to 2023 reporting period.

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

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) 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	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloroform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		<= 1900 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, inorganic total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Phosphorus, total (as P)	Daily Maximum	M&R Pounds per Day (lb/d)	M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum	M&R Pounds per Day (lb/d)	M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Selenium, dissolved [as Se]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Boron, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1,2-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,2-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,2-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,2-Dichloropropane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,3-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
1,4-Dichlorobenzene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
2-Chloroethyl vinyl ether, (mixed)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Benzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Dichlorobromomethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Bromoform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methyl bromide (Bromomethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Carbon tetrachloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methyl chloride (Chloromethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
cis-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Dibromochloromethane	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Ethylbenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methylene chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Tetrachloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Toluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
trans-1,2-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
trans-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Trichlorofluoromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Vinyl chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Arsenic, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		<= 7.6 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI))[1]	Daily Maximum		<= 16 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III))[1]	Daily Maximum		<= 2024 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 58 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cyanide, total (as CN)	Daily Maximum		<= 22 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			<= 200				

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Manganese, total recoverable	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		<= 1.4 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Molybdenum, total recoverable	Daily Maximum		<= 6160 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nickel, total recoverable	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Silver total recoverable[1]	Daily Maximum		<= 46 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sulfide, total (as S)	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		<= 435 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Acrolein	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Aldrin	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
.alpha.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			<= 2.4				

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chlordane (tech mix. and metabolites)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chlorpyrifos	Daily Maximum		<= 0.08 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
4,4-DDT	Daily Maximum		<= 1.1 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		<= 0.10 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Diazinon	Daily Maximum		<= 0.17 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Dieldrin	Daily Maximum		<= 0.24 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Endrin	Daily Maximum		<= 0.09 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		<= 0.01 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Heptachlor	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Heptachlor epoxide	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Lindane	Daily Maximum		<= 0.95 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			<= 0.10				

Discharge Limitations Table for Sample Location 001 (Central Utility Plant) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Malathion	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Methoxychlor	Daily Maximum		<= 0.03 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mirex	Daily Maximum		<= 0.001 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nonylphenol	Daily Maximum		<= 28 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		<= 0.07 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Pentachlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		<= 0.01 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Toxaphene	Daily Maximum		<= 0.73 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		<= 0.46 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

1. Analysis is for the dissolved fraction.

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) 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	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chloroform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, inorganic total	Daily Maximum		<= 20 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Phosphorus, total (as P)	Daily Maximum	M&R Pounds per Day (lb/d)	M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum	M&R Pounds per Day (lb/d)	M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1,2-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,2-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,2-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,2-Dichloropropane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,3-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
1,4-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
2-Chloroethyl vinyl ether, (mixed)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Benzene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Dichlorobromomethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Bromoform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Methyl bromide (Bromomethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Carbon tetrachloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Chlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Chloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Methyl chloride (Chloromethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
cis-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Dibromochloromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Ethylbenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Methylene chloride	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Tetrachloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Toluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
trans-1,2-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
trans-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Trichlorofluoromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT
Vinyl chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Annual	DISCRT

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Arsenic, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		<= 7.6 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, total recoverable	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI))[1]	Daily Maximum		<= 16 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III))[1]	Daily Maximum		<= 2023 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 58 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cyanide, total (as CN)	Daily Maximum		<= 22 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		<= 321 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			<= 200				

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Manganese, total recoverable	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		<= 1.4 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Molybdenum, total recoverable	Daily Maximum		<= 6160 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nickel, total recoverable	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver total recoverable[1]	Daily Maximum		<= 46 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfide, total (as S)	Daily Maximum		<= 2 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		<= 435 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Acrolein	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aldrin	Daily Maximum		<= 3 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
.alpha.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		<= 0.22 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chlordane (tech mix. and metabolites)	Daily Maximum		<= 2.4 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chlorpyrifos	Daily Maximum		<= 0.08 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
4,4-DDT	Daily Maximum		<= 1.1 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		<= 0.10 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Diazinon	Daily Maximum		<= 0.17 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Dieldrin	Daily Maximum		<= 0.24 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Endrin	Daily Maximum		<= 0.09 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		<= 0.01 Micrograms per Liter (ug/L)	Effluent Gross (Supplementary)	002	Once Per Permit Term	DISCRT
Heptachlor	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Heptachlor epoxide	Daily Maximum		<= 0.52 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lindane	Daily Maximum		<= 0.95 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			<= 0.10				

Discharge Limitations Table for Sample Location 002 (Automated Transit System Tunnel) To Be Reported Once During The Permit Term

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Malathion	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Methoxychlor	Daily Maximum		<= 0.03 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Mirex	Daily Maximum		<= 0.001 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nonylphenol	Daily Maximum		<= 28 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		<= 0.07 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Pentachlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		<= 0.01 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Toxaphene	Daily Maximum		<= 0.73 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		<= 0.46 Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

1. Analysis is for the dissolved factor.

Discharge Limitations Table for Sample Location 003 (Sum Of Outfalls 001 & 002) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 0.50 Million Gallons per Day (Mgal/d)		Effluent Gross	003	Monthly	CALCTD[1]
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	003	Monthly	CALCTD[2]

Notes (Discharge Limitations Table):

1. The daily maximum flow rate shall be the sum of the daily maximum flow rate for Outfalls 001 + Outfall 002.
2. The 30-day average flow rate shall be the sum of the 30-day average flow rate for Outfalls 001 + 002.

Summary of Changes From Previous Permit

The proposed permit establishes a daily maximum flow limit of 0.50 MGD for Outfall 003.

The proposed permit removes the 30-day average flow limit of 0.50 for Outfall 003 and replaces it with the requirement to monitor and report.

The proposed permit establishes a limit of 1,900 mg/L for TDS for Outfall 001.

The proposed permit removes the limit of 20 mg/L for TIN for Outfall 001.

The proposed permit establishes the requirement to sample for volatile organic compounds (VOCs) (excluding chloroform) once a year in lieu of once each quarter.

The proposed permit removes the 1.0 lbs/day limit for total phosphorus and total ammonia (as N).

The proposed permit establishes a limit of 6.3 ug/L for selenium for Outfall 002.

Furthermore, the requirement to sample for selenium once a year for Outfall 002 has been changed to once a quarter.

The proposed permit establishes a limit of 750 ug/L for boron for Outfall 002.

Furthermore, the requirement to sample for boron once a year for Outfall 002 has been changed to once a quarter.

The proposed permit removes the requirement to sample for priority pollutants.

The proposed permit establishes the requirement to sample for toxic materials found at NAC 445A.1236.

The proposed permit establishes the requirement to sample for trichloroethylene (TCE) and tetrachloroethylene (PCE) once a year in lieu of once each quarter.

Technology Based Effluent Limitations

There are no technology based effluent limitations associated with this permit.

Water Quality Based Effluent Limitations

Per NAC 445A.2156, dissolved oxygen (DO), temperature, total suspended solids (TSS), fecal coliform, and *Escherichia coli* (E. Coli) are required to be monitored. The discharge from this facility will travel many miles through the Clark County storm drain system before finally reaching the Las Vegas Wash; therefore, sampling the discharge for DO and temperature is irrelevant in this instance. TSS is also not required to be sampled as groundwater typically has low suspended solids. Furthermore, since the discharge is not associated with treated wastewater, sampling of fecal coliform and E. Coli are not required.

The proposed permit retains a daily maximum limit of 9.0 standard units (S.U.) and a daily minimum limit of 6.5 S.U. for pH as prescribed at NAC 445A.2156 to protect the aquatic life designated beneficial use.

The proposed permit establishes the requirement to monitor and report TIN in lieu of retaining the daily maximum limit of 20 mg/L for Outfall 001, as prescribed at NAC 445A.2156. TIN proved no reasonable potential to cause, or contribute to, an in-stream excursion above the applicable water quality criteria for Outfall 001. However, a limit of 20 mg/L for Outfall 002 has been retained as the reasonable potential did show Outfall 002 has the potential to cause, or contribute to, an in-stream excursion for TIN.

The proposed permit retains the requirement to monitor and report total nitrate (as N) and total nitrite (as N) in lieu of establishing a limit based on WQSs found at NAC 445A.2156 as these constituents proved no reasonable potential to cause, or contribute to, an in-stream excursion above the applicable water quality criteria.

The receiving water body, the Las Vegas Wash, has an RMHQ of 95 percent of a single value sample of less than or equal to 1,900 mg/L limit for TDS and a beneficial use standard of less than or equal to 3,000 mg/L, per NAC 445A.2156. From 2019 to 2023, the effluent TDS ranged from 1,200 mg/L to 1,900 mg/L. The current project, by design, does not alter the background TDS, as such the TDS concentration in the effluent is the same as that of the influent. The RPA determined that Outfall 002 had no potential to cause, or contribute to, an exceedance above the RMHQ or the beneficial use standard for TDS; however, the RPA did determine that Outfall 001 has the potential to cause, or contribute to, an exceedance above the RMHQ but not the beneficial use standard for TDS. Even so, it is reasonable to expect the effluent to not be within the RMHQ standard.

The TDS in the effluent is consistent with the assumptions for the natural background water per NAC 445A.120(2), “Natural water conditions may, on occasion, be outside the limits established by standards. The standards adopted in NAC 445A.070 to 445A.2234, inclusive, related to the condition of waters as affected by discharges relating to human activities.” It also follows that the intercepted groundwater is consistent with NAC 445A.121(8), which states, “The specified standards are not considered violated when the natural conditions of the receiving water are outside the established limits, including periods of extreme high or low flow.”

Therefore, a limit of 1,900 mg/L for Outfall 001 for TDS is deemed protective of the receiving water and sufficient to continue to maintain the RMHQ for the Las Vegas Wash. A limit for TDS for Outfall 002 has not been included as the RPA determined that there was no potential to cause, or contributed to, an exceedance above the WQSs; therefore, TDS shall be monitored and reported for Outfall 002.

Per NAC 445A.1236, the standards for toxic materials apply. Most of the toxic materials listed only have limits for municipal or domestic water supply beneficial uses which are not applicable to the section of the Las Vegas Wash receiving the discharge. Therefore, only the constituents with beneficial uses for aquatic life, irrigation, and watering of livestock apply. Furthermore, due to the low discharge flow rate, the 1-hour average for the beneficial uses for aquatic life limits are used, unless there was no 1-hour limit listed for that constituent in which case the 96-hour limit was used. The full toxic materials list shall be sampled for once during this permit term (excluding boron, chloroform, and selenium which shall be sampled for once each quarter) to obtain initial water quality data. If, during the next renewal review process, the water quality data shows a reasonable potential (via an RPA) for any constituent, the Division will retain that constituent with a limit and may increase the sampling frequency for that constituent during the next permit renewal cycle.

NAC 445A.1236 lists water quality criteria for seven (7) metals that vary as a function of hardness. The lower the hardness, the lower the water quality criteria. The metals with hardness dependent criteria include cadmium, chromium (III), copper, lead, nickel, silver, and zinc. The BWQP recommends calculating a 10th percentile receiving water hardness value to determine water quality criteria for hardness dependent metals that are sufficiently protective of aquatic life.

For NPDES permitting purposes, the BWQP looked at 10 years of data on the Las Vegas Wash at the Historic Lateral (NAC 445A.2156) to determine if a representative value for hardness could be derived. The BWQP found the hardness data to be normally distributed and recommends a 10th percentile value of 470 mg/L for hardness to be sufficiently protective of aquatic life under most conditions for this reach of the Las Vegas Wash. Therefore, the Division has used the 10th percentile value of 470 mg/L to calculate the applicable water quality criteria for hardness dependent metals listed in NAC 445A.1236.

Limits for the toxic materials were rounded to the nearest tenth / hundredth when applicable.

The proposed permit retains the requirement to monitor and report selenium for Outfall 001 and establishes a limit of 6.3 ug/L for Outfall 002 based on the findings of the RPA. Furthermore, the requirement to sample for selenium once a year for Outfall 002 has been changed to once a quarter.

The proposed permit retains the requirement to monitor and report boron for Outfall 001 and establishes a limit of 750 ug/L for Outfall 002 based on the findings of the RPA. Furthermore, the requirement to sample for boron once a year for Outfall 002 has been changed to once a quarter.

Reasonable Potential Analysis (RPA)

Section 301(b)(1)(c) of the CWA requires effluent limitations necessary to meet WQSs, and Title 40 of the Code of Federal Regulation (CFR) section 122.44(d) requires permits to include conditions that are necessary to achieve WQSs established under section 303 of the CWA, including state narrative criteria for water quality. Federal regulations at 40 CFR section 122.44(d)(1)(i) state, “Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality standards.” The process to determine whether a WQBEL is required as described in 40 CFR 122.44(d)(1)(i) is referred to as a reasonable potential analysis, or RPA. Furthermore, NAC 445A.243 requires the Division to consider the establishment of effluent limitations necessary to meet WQSs.

For conducting the RPA, the Division used a mass-balanced approach to determine the expected critical downstream receiving water concentration using steady-state modeling. The Division determined critical effluent pollutant concentrations using statistics recommended in EPA’s Technical Support Document (TSD) for Water Quality-Based Toxics Control for statistically calculating the projected maximum effluent concentration (i.e., Table 31 of the TSD using the 99 percent probability basis and 99 percent confidence interval). For purposes of the RPA, the critical receiving water flow was assumed to be zero (i.e., no dilution); therefore, the critical effluent pollutant concentrations were compared with the most restrictive water quality criteria in NAC 445A.2156 and NAC 445A.1236 to determine if the discharge has reasonable potential to cause or contribute to an excursion above a state WQS. Unit conversions have been used to convert milligrams per liter to micrograms per liter when applicable.

Based on the RPA, the discharge exhibits reasonable potential to cause, or contributed to, in-stream excursions above the applicable water quality criteria for TDS for Outfall 001 and selenium, boron, and TIN for Outfall 002 (see Attachment A for a summary of the RPA findings). Therefore, limits were included for these constituents. If, during the renewal review process, the water quality data shows a reasonable potential (via an RPA) for any constituent, the Division will retain that constituent with a limit and may increase the sampling frequency for that constituent. Limits for constituents that prove no reasonable potential may be removed and the sampling frequency may be decreased in future permits unless new information proves otherwise.

Mass-Based Limits (If Applicable)
There are currently no mass-based limits associated with this permit.

Basis for Effluent Limitations
The Las Vegas Wash has established TMDLs for total ammonia (as N) and total phosphorus which are meant to protect downstream beneficial uses in the Inner Las Vegas Bay. The average total phosphorus for Outfall 001 was 0.02 lbs / day and the average for Outfall 002 was 0.007 lbs / day during the 2019 to 2023 reporting period. Per a memo dated May 16, 2024, from the BWQP, "For NPDES permitting purposes, total phosphorus discharge loads associated with groundwater dewatering activities in the Las Vegas Wash area can be assumed to be part of the base phosphorous load recognized in the 1989 Las Vegas Wash Total Phosphorous TMDL Load Allocation." Therefore, there is no WLA for total phosphorus associated with this permit. Although the permit does not include a WLA for total phosphorus, the Permittee is required to monitor and report the mass load discharged to the Las Vegas Wash for the Division's information. Furthermore, total ammonia (as N) loads discharged to the Las Vegas Wash will be monitored and reported to obtain data which will assist with determining if there is a need for an individual WLA for the facility.

The proposed permit retains the requirement to sample for TPH due to the potential for it to be present in the discharge. A limit of 1.0 mg/L, per the State action level for remediation projects, remains in place.

The previous permit included the requirement to sample the intercepted groundwater for VOCs each quarter from Outfall 001 and Outfall 002. Water quality data collected from 2019 to 2023 showed all VOCs, except for chloroform, were non-detect. Therefore, the proposed permit establishes the requirement to sample the VOCs, excluding chloroform, once each year in lieu of once each quarter.

The toxic material list, found at NAC 445A.1236, includes a municipal or domestic supply beneficial use for total trihalomethanes which is the sum of the concentration of bromodichloromethane, dibromochloromethane, bromoform, and chloroform. Although the section of the Las Vegas Wash receiving discharges from this facility does not include the beneficial use for municipal or domestic supply, the proposed permit retains the requirement to sample for chloroform once each quarter due to its presence in the intercepted groundwater.

The previous permit included the requirement to sample the intercepted ground for TCE and PCE each quarter from Outfall 001 and Outfall 002. Water quality data collected from 2019 to 2023 showed TCE and PCE to be non-detect each quarter. The toxic material list, found at NAC 445A.1236, includes a municipal or domestic supply beneficial use for TCE; however, PCE is not included in the toxic material list. Furthermore, the section of the Las Vegas Wash receiving discharges from this facility does not include the beneficial use for municipal or domestic supply. However, due to known TCE and PCE plumes in the Las Vegas area, the proposed permit establishes the requirement to sample TCE and PCE once each year in lieu of once each quarter.

The proposed permit retains the requirement to report total phosphorus and total ammonia (as N) in pounds per day and establishes the requirement to also report total phosphorus and total ammonia (as N) as a concentration.

The proposed permit establishes a daily maximum flow limit of 0.50 MGD for Outfall 003 and replaces the 30-day average flow limit of 0.50 MGD with the requirement to monitor and report. This change was made so the permit would be in conformance with similar permitted facilities.

Anti-backsliding
Sections 402(o) and 303(d)(4) of the CWA and federal regulations of 40 CFR 122.44(i) prohibit backsliding and require effluent limitations in a reissued permit to be as stringent as those in the previous permit with some exceptions.

The previous permit included the requirement to sample for priority pollutants once during the permit term. Typically, wastewater treatment facilities that accept industrial wastewater are required to sample for priority pollutants which were developed by the federal Environmental Protection Agency to make implementation

of the Toxic Pollutant List more practical for water testing and regulatory purposes. However, the priority pollutant list is outdated and does not include numerical limits. Additionally, the state of Nevada has created its own list of toxic materials which does include numerical limits. Given that discharges covered under this permit do not originate from a wastewater treatment facility and that Nevada's toxic materials list is more stringent than the priority pollutant list, the proposed permit replaces the requirement to sample Outfall 001 and Outfall 002 for priority pollutants with the requirement to sample for the toxic materials found at NAC 445A.1236.

Per a memo dated May 16, 2024, from the BWQP, "For NPDES permitting purposes, total phosphorus discharge loads associated with groundwater dewatering activities in the Las Vegas Wash area can be assumed to be part of the base phosphorous load recognized in the 1989 Las Vegas Wash Total Phosphorous TMDL Load Allocation." Hence, an IWLA limit for total phosphorus associated with this permit is not required. Furthermore, using the same rational, an IWLA limit for total ammonia (as N) is not required. Therefore, the Division has determined that the previous requirement to limit total phosphorus and total ammonia (as N) to 1.0 lb / day was mistakenly applied. For this reason, the proposed permit removes the 1.0 lb / day daily maximum limit for total phosphorus and total ammonia (as N) for Outfall 001 and Outfall 002 which is consisted with the anti-backsliding conditions specified in the CWA section 402(o)(2)(B)(ii).

The previous permit included a 30-day average flow limit of 0.50 MGD for Outfall 003. The proposed permit replaces the 30-day average flow limit with the requirement to monitor and report. Additionally, the proposed permit establishes a daily maximum flow limit of 0.50 MGD for Outfall 003. Compliance with the daily maximum flow limit for Outfall 003 will ensure that the 30-day average flow rate remains below 0.50 MGD. Therefore, replacing the 30-day average flow limit for Outfall 003 with a requirement to monitor and report the 30-day average flow will not result in an increase in flow or change in water quality.

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 CFR section 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. This objective is achieved through the implementation of procedures to ensure that waters are protected from regulated activities that have the potential to degrade the water quality. The regulation uses four (4) tiers of antidegradation protection. Tier 1 protects water quality for beneficial uses of the water on a parameter-by-parameter basis. Tier 2 protects high-quality waters where data show the water quality is better than levels needed to protect beneficial uses (on a parameter-by-parameter basis). Tier 2.5 and Tier 3 protect water quality and the special characteristics of waterbodies designated with the beneficial use of "extraordinary, ecological, aesthetic or recreational value" (NAC 445A.122). The Division will conduct an antidegradation review only when a permit application is submitted for a new or expanding point source discharge to a surface water or for a new or altered zone of mixing.

Since the discharge is going to a waterbody that is considered an "effluent-dominated water", the antidegradation review is not required and, therefore, each parameter defaults to Tier 1 protection. However, data reviewed during the renewal process does not indicate the potential for degradation of the receiving water body from the effluent discharged within the compliance limits of the proposed permit.

Special Conditions

There are no special conditions associated with this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes
Discharges from future outfalls are not anticipated at this time.

Corrective Action Sites
There are no open Bureau of Corrective Action sites located within a one-mile radius of either dewatering location.

Wellhead Protection Program
The nearest Public Water Supply (PWS) well is located approximately 1.8 miles to the northwest of the discharge location. There are other PWS wells located to the north, east, south, and west of the detention basin. The discharge location is not located within a Drinking Water Protection Area which is defined by a 3,000-foot radius around a PWS well. Furthermore, there are no Wellhead Protection Areas, which represents an approximate 10-year capture zone of a well, in the vicinity of the permitted facility. The discharge is not anticipated to affect any PWSs due to the distances of the PWS wells.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of an updated Operations & Maintenance (O&M) Manual to the Division. The O&M Manual shall be prepared by a qualified person familiar with facility operations in accordance with the relevant sections of guidance document *WTS-2: Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant*.	11/1/2024

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Discharge Monitoring Reports	Quarterly	10/28/2024
2	Annual Discharge Monitoring Reports	Annually	1/28/2025

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. **7/26/2024,** 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: **Bonnie Hartley**
Date: **6/21/2024**
Title: **Staff II, Associate Engineer**

ATTACHMENT A

Summary of Reasonable Potential Analysis for Outfall 001

Parameter	Units	No. of Effluent Samples	Critical Effluent Concentration	Most Stringent Criterion	Criterion Basis	Does RP Exist?
Volatile Organic Compounds						
Chloroform	ug/L	20	3.2	No Criteria		No
Other Pollutants						
Boron	ug/L	4	2.42	750	Irrigation	No
Nitrate, Total (as N)	mg/L	18	3.50	90	WQC to Protect Beneficial Uses	No
Nitrite, Total (as N)	mg/L	19	4.46	5	WQC to Protect Beneficial Uses	No
Nitrogen, Inorganic Total	mg/L	20	8.18	20	RMHQ	No
Total Dissolved Solids	mg/L	20	2,174.99	1900	RMHQ	**Yes**

Summary of Reasonable Potential Analysis for Outfall 002

Parameter	Units	No. of Effluent Samples	Critical Effluent Concentration	Most Stringent Criterion	Criterion Basis	Does RP Exist?
Metals (Total Recoverable), Cyanide and Phenols						
Selenium, Total Recoverable	ug/L	5	50.3	6	Chronic Aquatic Life	**Yes**
Volatile Organic Compounds						
Chloroform	ug/L	21	1.2	No Criteria		No
Other Pollutants						
Boron	ug/L	5	1,467.22	750	Irrigation	**Yes**
Nitrate, Total (as N)	mg/L	21	4.03	90	WQC to Protect Beneficial Uses	No
Nitrite, Total (as N)	mg/L	21	2.94	5	WQC to Protect Beneficial Uses	No
Nitrogen, Inorganic Total	mg/L	21	31.44	20	RMHQ	**Yes**
Phosphorus, Total (as P)	mg/L	21	0.18	No Criteria		No
Total Dissolved Solids	mg/L	21	1,470.46	1900	RMHQ	No