



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: RESORTS WORLD LAS VEGAS
3000 LAS VEGAS BLVD, SOUTH
LAS VEGAS, NV 89005

Permit Number: NV0023621

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

Designation: MINOR NPDES

New/Existing: EXISTING

Location: RESORTS WORLD LAS VEGAS, CLARK
3000 SOUTH LAS VEGAS BLVD, LAS VEGAS, NV 89109
LATITUDE: 36.132381, LONGITUDE: -115.169117
TOWNSHIP: T21S, RANGE: R61E, SECTION: S9

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	DEWATERING DISCHARGE	External Outfall		36.1325	-115.169167	FLAMINGO WASH VIA STORM DRAIN

Permit History/Description of Proposed Action

The Permittee, Resorts World Las Vegas (RWLV), has applied for the renewal of their National Pollutant Discharge Elimination System Permit NV0023621, for their hotel and casino complex located at 3000 South Las Vegas Boulevard, in Las Vegas, within Clark County, Nevada. The Permittee proposes to continue to discharge intercepted groundwater to the Flamingo Wash, via the Clark County storm drain system, which outlets to the Las Vegas Wash.

This permit was first issued on March 30, 2009. The most recent permit was issued on October 1, 2015, and expired on September 30, 2020; the permit has been administratively continued since.

Facility Overview

RWLV is a full-service casino, located in the downtown Las Vegas corridor, offering lodging, dining, and shopping. This site started dewatering in June 2007 during initial construction-related activities. The casino site now contains a permanent dewatering system to protect the structural integrity of the hotel towers, podium, and parking structure. The intercepted groundwater is discharged into the Clark County storm drain system.

Dewatering is done via a passive, under-slab French drain collection system which consists of five (5) dewatering ejector pits with pumps that divert nuisance groundwater into a pipe system that discharges to a storm drain located on the southwest portion of the property. The extracted groundwater does not require treatment prior to discharge to the storm drain system.

RWLV's Operation and Maintenance (O&M) Manual was last reviewed and approved on May 14, 2021. 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.

Outfall Summary

Outfall 001 – This external outfall is for the discharge of untreated intercepted groundwater to a storm drain drop inlet located at the intersection of Las Vegas Boulevard and Resorts World Avenue.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years January 2020 to December 2024, was reviewed as part of this permit renewal process. The reported long-term average daily maximum flow rate was 0.172 million gallons per day (Mgal/d), with both the 30-day average and daily maximum flow rates being permitted for 0.50 Mgal/d. There was one reported exceedance of this limit.

Notes:

mg/L = Milligrams per Liter

Gal/d = Gallons per Day

S.U.= Standard Units

TDS = Total Dissolved Solids

TIN = Total Inorganic Nitrogen

TPH = Total Petroleum Hydrocarbons

VOC = Volatile Organic Compounds

Outfall 001 (Averaged, unless otherwise noted):

Ammonia Nitrogen: 0.23 mg/L, one instance reported

Boron: 0.63 mg/L

Chloroform: 0.0062 mg/L

Chromium, total : 0.027 mg/L, one instance reported

Copper: 0.0073 mg/L

pH: 7.77 S.U.

Phosphorus: 0.15 mg/L

TDS: 1,973 mg/L

TIN: 7.81 mg/L

Zinc, total: 0.16 mg/L

Many of the Total Inorganics, TPHs, Heavy Metals, and VOCs, apart from those listed above, reported during the same period, were below detectable levels.

Pollutants of Concern

Pollutants of concern are any pollutant, or parameters, that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological conditions of the receiving water. Pollutants of concern are Heavy Metals, Iron, Selenium, TDS, Tetrachloroethylene (PCE), Benzene, Total Inorganics, Total Hydrocarbons, and VOCs.

Receiving Water

The dewatering system discharges into a Clark County storm drain inlet, and into the Flamingo Wash, which eventually discharges to the Upper Las Vegas Wash.

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 Historic Lateral include the following beneficial uses: for watering of livestock, irrigation, aquatic life, recreation 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 445A.121) apply.

303 (d) Listing Status

According to Nevada's 2020 – 2022 Water Quality Integrated Report (WQIR), the following beneficial uses for the Flamingo Wash are not supported:

- The Aquatic Life beneficial use is impaired by 96-hour Iron, 1-hour Selenium, and 96-hour Selenium.
- The Irrigation beneficial use is impaired by Boron.

According to Nevada's 2020 – 2022 WQIR, the following beneficial uses for the Las Vegas Wash above Treatment Plants are not supported:

- The Aquatic Life beneficial use is impaired by 96-hour Iron, 1-hour Selenium, 96-hour Selenium, and Total Suspended Solids.
- The Irrigation beneficial use is impaired by Boron.
- The Recreation Not Involving Contact with the Water beneficial use is impaired by *Escherichia Coli*. (*E. coli*).
- The Watering of Livestock beneficial use is impaired by TDS.

TMDL

Per section 303(d)(1)(C) of the Clean Water Act (CWA), states are required to develop Total Maximum Daily Loads (TMDLs) for parameters that do not meet WQSs for a waterbody. TMDLs are implemented during the permitting process by limiting the load of that parameter that may be discharged to the receiving water. According to the Las Vegas Wash TMDL Evaluation dated October 2003, the current total phosphorus and total ammonia (as N) TMDLs on the Las Vegas Wash were established in 1989, and became fully effective in 1994 and 1995, respectively. The TMDL applies to the downstream segment: Las Vegas Wash at Lake Mead (NAC 445A.2158).

Waste Load Allocation

The Las Vegas Wash at Lake Mead (NAC 445A.2158) has established TMDLs for total ammonia (as N) and total phosphorus. Per the Bureau of Water Quality Planning (BWQP) memo dated May 16, 2024, "For NPDES permitting purposes, total phosphorus discharge loads associated with groundwater dewatering activities in the Las Vegas area can be assumed to be part of the base phosphorus load recognized in the 1989 Las Vegas Wash Total Phosphorous TMDL Load Allocation." Thus, total phosphorus, both concentration and mass, will be monitored and reported. Using the same rationale, total ammonia (as N), both concentration and mass, will be monitored and reported. A quarterly sampling frequency is deemed appropriate to monitor the load to the Las Vegas Wash.

Compliance History

The facility has been in substantial compliance during the reporting period from January 2020 to December 2024.

Proposed Effluent Limitations

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

Discharge Limitations Table for Sample Location 001 (Dewatering Discharge) 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	< 0.500 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	Daily Maximum	< 0.500 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

Discharge Limitations Table for Sample Location 001 (Dewatering Discharge) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, ammonia, total (as NH3)	Daily Maximum	M&R Pounds per Day (lb/d)	M&R 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
Nitrogen, nitrate total (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	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
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		<= 3000 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chromium, Hexavalent [As CR] (Chromium (VI))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Acrolein	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Aldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
.alpha.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chlorpyrifos	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
4,4-DDT	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Diazinon	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Dieldrin	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Endrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Heptachlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Heptachlor epoxide	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Lindane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Malathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Methoxychlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mirex	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nonylphenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Pentachlorophenol	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Toxaphene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1,2-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,2-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,2-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

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

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

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloroform	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Methyl chloride (Chloromethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
cis-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Dibromochloromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Ethylbenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Methylene chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Tetrachloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Toluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
trans-1,2-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
trans-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Trichlorofluoromethane	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Vinyl chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO ₃)	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
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Daily Maximum		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
Copper, dissolved (as Cu)	Daily Maximum		M&R 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
Lead, dissolved (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
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
Silver, total (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sodium, total (as Na)	Daily Maximum		M&R Milligrams per Liter	Effluent Gross	001	Once Per Permit Term	DISCRT

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
			(mg/L)				
Sulfate, total (as SO ₄)	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
Hydrocarbons, total petroleum	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Xylene (mix of m+o+p) [2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

1. Analysis shall be for the dissolved fraction.
2. Total xylenes.

Summary of Changes From Previous Permit

Under the Permit, the following parameter was added to Outfall 001 (Parking Garage) for a “Annual” reporting period:

Nitrogen, Total Inorganic, was changed from, “≤20 Milligrams per Liter (mg/L)” Concentration to a “Monitor & Report (M&R)” Concentration, based on the findings from the Reasonable Potential Analysis completed on May 20, 2025.

Under Outfall 001 for an annual reporting period the following parameter was added:

Iron, Total as Fe, with a “Daily Maximum” Base, with a “≤1000 micrograms per liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, “001” Sample Location, an “Annual” Measurement Frequency, and a “Discret” Sample Type.

Water Quality Based Effluent Limitations were added for TDS and Selenium.

NAC 445A.1236 Toxic Materials list was added for a “Once A Permit Term” reporting.

VOC sampling and reporting requirements were changed from "Annually" to a "Once A Permit Term" reporting.

Technology Based Effluent Limitations

Technology based effluent limitations are not applicable to this permit.

Water Quality Based Effluent Limitations

State regulations require that point source discharges not cause a violation of any applicable WQSs in the receiving water, nor interfere with the attainment or maintenance of beneficial uses. The following water quality-based effluent limit (WQBEL) requirements, based on NAC 445A.2156, are included in the proposed permit to ensure that the discharge does not cause WQS violations. In addition, the proposed permit requires monitoring and reporting of constituents that are subject of WQSs and may be present in the discharge.

Per NAC 445A.2156, sampling is required for temperature, dissolved oxygen (D.O.), total suspended solids (TSS), fecal coliform, and Escherichia coli (E. coli). 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 temperature and D.O. is irrelevant in this instance. TSS is also not required to be sampled as groundwater, typically, has low suspended solids. Also, as there are no sources of E. coli or fecal coliform in the intercepted groundwater, sampling of these constituents are not required.

The proposed permit retains the requirement to monitor and report both Total Ammonia (as N) and Phosphorus on quarterly basis to comply with the Las Vegas Wash TMDLs.

The proposed permit removes the daily maximum limit of 20 mg/L for TIN as prescribed under NAC 445A.2156 in accordance with the requirement to maintain higher existing quality (RMHQ) standard as the Reasonable Potential Analysis (RPA) proved no reasonable potential for TIN to cause or contribute to an instream excursion of the WQS.

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 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 instream 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 1,450 mg/L to 2,470 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 001 has potential to cause, or contribute to, an exceedance above the RMHQ, but not the beneficial use standard for TDS. 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 3,000 mg/L for Outfall 001 for TDS is deemed protective of the receiving water.

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 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." 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 the RPA, the Division used a mass balance approach to statistically calculate the projected maximum effluent concentration and the expected critical downstream receiving water concentrations using the guidance and recommendations from the US EPA's Technical Support Document for Water Quality Based Toxic Control (i.e. Table 31 of the TSD using the 99 percent probability basis and 99 percent confidence levels).

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 under NAC 445A.2156 to determine if the discharge has reasonable potential to cause, or contribute to, an excursion above a State WQS.

Based on the RPA, the discharge exhibits reasonable potential to cause, or contributed to, instream excursions above the applicable water quality criteria for TDS for Outfall 001 (see Attachment A for a summary of the RPA findings). Therefore, a limit was included for this constituent. 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.

The RPA was based on data collected from January 2020 to December 2024 which includes effluent data submitted in DMRs and the Permittee's monitoring laboratory reports. Based on the RPA, the discharge from Outfall 001 exhibits no reasonable potential to cause, or contribute to, instream excursions above the applicable water quality criteria.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)

The proposed permit establishes once per permit term sampling of toxic materials as these constituents are listed in NAC 445A.1236. The Division does not expect most of these constituents to be present in the discharge; therefore, once per permit term sampling is deemed sufficient for obtaining initial water quality data for toxic materials.

The permit retains the requirement to monitor and report VOCs to satisfy antibacksliding requirements, even if the prior results have been non-detect during the past 5 years. However, since VOCs have been non-detect since, at least, 2015, the Permittee is only required to sample for VOCs once per permit term. There are no numerical limits for VOCs as these constituents either have a maximum contaminant level (MCL), or are regulated through NAC 445A.1236 for municipal or domestic supply, both of which do not apply to this section of the Las Vegas Wash; therefore, VOCs will be monitored and reported.

The permit establishes a concentration for Selenium based on site-specific WQSs for the Las Vegas Wash, and which were officially approved by EPA on May 9, 2025, to protect the aquatic life beneficial use.

The proposed permit establishes the requirement to sample for Iron, with a 96-hour average, based on the EPA's National Recommended Water Quality Criteria, published May 2009.

The permit retains the requirement to monitor and report VOCs to satisfy antibacksliding requirements, even if the prior results have been non-detect during the past 5 years. Since VOCs have been non-

detect since, at least, 2019, the Permittee is only required to sample for VOCs once per permit term. There are no numerical limits for VOCs as these constituents either have a maximum contaminant level (MCL), or are regulated through NAC 445A.1236 for municipal or domestic supply, both of which do not apply to this section of the Las Vegas Wash; therefore, VOCs will be monitored and reported.

Basis for Effluent Limitations

The permit retains the requirement to monitor and report VOCs to satisfy anti-backsliding requirements; however, as the VOCs were reported as non-detect during the past five years, sampling has been decreased from annually to once per permit term.

Quarterly monitoring and reporting of pH, both minimum and maximum, is required to verify that the pH of groundwater samples collected meets water quality standards stipulated in NAC 445A.2156.

Because the Flamingo Wash and the Las Vegas Wash at the Historic Lateral are impaired by Selenium (i.e. on the 303(d) List), a limit for Selenium has been added to this permit, with it being 6.3 ug/L, as established for the Las Vegas Wash. This parameter will be monitored and reported quarterly to allow NDEP the opportunity to review and ensure concentrations remain consistent with background levels and degradation of waters does not occur.

Because Flamingo Wash and the Las Vegas Wash at the Historic Lateral are impaired by Iron (i.e. on the 303(d) List), the proposed permit establishes a discharge limitation for Iron, Total (as Fe) of ≤ 1000 ug/L in accordance with NAC 445A.1236.

Anti-backsliding

Sections 303(d)(4) and 402(o) 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 VOCs once a year. After review of the DMR data, it was noted that VOCs have been reported as non-detect since 2019. Due to the consistent non-detect values, and because there are no numerical limits for VOCs as they either have a MCL, or are regulated through NAC 445A.1236 for the municipal or domestic supply, both of which do not apply to this section of the Las Vegas Wash, the requirement to sample VOCs once a year has been changed to once a permit term. Refer to the Water Quality Based Effluent section.

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 water is 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 uses 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 proposed renewal of this permit does not include a new or expanding point source discharge or a new or altered zone of mixing, the antidegradation review is not required. However, data reviewed during

the drafting process does not indicate the potential for degradation of the receiving water body from the intercepted groundwater discharged within the compliance limits of the proposed permit.

Special Conditions

There are no Special Approvals/Conditions applicable to 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 two (2) active Bureau of Corrective Action (BCA) remediation sites located within a one-mile radius of the permitted facility. Both sites (8-000841 and H-000708), are for the release of solvents, via an unknown or other container, to the groundwater. BCA does not anticipate any impact(s) between the remediation sites and the permitted facility. There are also five (5) groundwater contaminant plumes (8-00084, 8-000299, 8-001467, H-000236, and H-000789) located within a one-mile radius of the property. Based on the extent of contamination at each of the sites listed above (including plumes), and the direction of the groundwater flow, BCA does not have any concerns with the renewal of this permit, and they feel that the groundwater at Resorts World will not be impacted by any of these sites.

Plumes 8-000084 and H-000789 are residual solvent plumes each located within a one-mile radius of the RWLV's property, each being composed of tetrachloroethylene (PCE) at an estimated 5 µg/L (micrograms per liter). Based on the lab reports received, PCE has been below detectable concentrations (i.e. non-detect) during the years reviewed (January 2020 – December 2024). Continued monitoring shall be required during this upcoming permit cycle.

Plumes 8-000299, 8-001467, H-000236, and H-000789, are solvent plumes each located within a one-mile radius of the Resort World's property, each being composed of benzene at an estimated 5 µg/L (micrograms per liter). Based on the lab reports received, benzene has been below detectable concentrations (i.e. non-detect) during the years reviewed (January 2020 – December 2024). Continued monitoring shall be required during this upcoming permit cycle.

Wellhead Protection Program

The outfall is 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

There are no Schedule of Compliance items

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	1/28/2026
2	Annual DMRs	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. **10/20/2025**, 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: **9/17/2025**

Title: **Staff II Engineer**

Summary of Reasonable Potential Analysis

Parameter	Units	No. of Effluent Samples	Critical Effluent Concentration	Most Stringent Criterion	Criterion Basis	Does RP Exist?
Chromium, Total	ug/L	6	0.1	100	Municipal or Domestic	No
Copper, Total Recoverable	ug/L	6	0.0	35	Chronic Aquatic Life	No
Zinc, Total Recoverable	ug/L	6	0.9	445	Acute Aquatic Life	No
Chloroform	ug/L	7	0.0	No Criteria		No
Boron	ug/L	6	2.78	750	Irrigation	No
Nitrogen, total inorganic	mg/L	20	9.55	20	RMHQ	No
Total Dissolved Solids	mg/L	21	2,879.54	1900	RMHQ	Yes