FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: DOUBLETREE BY HILTON LAS VEGAS

4055 PALOS VERDES ST
LAS VEGAS, NV 89119

Permit Number: NV0023744

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

Designation: MINOR NPDES

New/Existing: EXISTING

Location: DOUBLETREE BY HILTON, CLARK
4055 PALOS VERDES, LAS VEGAS, NV 89119
LATITUDE: 36.115111, LONGITUDE: -115.151270
TOWNSHIP: 21S, RANGE: 61E, SECTION: 15

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	STORM DRAIN DROP INLET	External Outfall		36.115788	-115.150750	LAS VEGAS WASH

Permit History/Description of Proposed Action
The Permittee, Doubletree by Hilton Las Vegas, has applied for the renewal of National Pollutant Discharge Elimination System (NPDES) permit NV0023744 for the Doubletree by Hilton (formerly Four Points Sheraton) hotel located at 4055 Palos Verdes 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 March 2010. The last renewal of this permit was issued on July 1, 2016, and expired on June 30, 2021; the permit has been administratively continued since.

Facility Overview
To prevent the levels below the ground surface from flooding, shallow groundwater, encountered approximately 12 feet to 15 feet below ground surface, is collected via a perforated pipe collection system that directs groundwater to one of two sumps located in the third level of the parking garage, which is located two (2) stories below ground level. Each sump is equipped with a 0.5 horsepower Goulds Waters Technology WE Series Model No. WE-0511H submersible pump. From the sumps, the intercepted groundwater is pumped upwards to the parking garage's second floor through 4-inch polyvinyl chloride (PVC) pipes. At the second floor, the pipes converge into one 4-inch pipe after which the water flows to a drop inlet located at the northeast corner of the building at the intersection of Tony Bennett Way and Palos Verdes Street. From the drop inlet the water enters the Clark County storm drain system and eventually discharges to the Las Vegas Wash.

Previously located up gradient from the hotel was the Royal Crest Cleaners. The retail building that housed the dry-cleaning business was involved in a fire in November of 2021 and the building was subsequently

demolished. In December of 2021, a groundwater sampling program was implemented after investigations identified tetrachloroethylene (PCE) in the groundwater beneath the former Royal Crest Cleaners, a result of a potential release from the facility. The program includes sampling of existing onsite and offsite monitoring wells and a sump located at the Doubletree by Hilton. Based on an analysis of samples obtained from 2021 to 2024, some of the monitoring wells show an increasing concentration of PCE.

Based on the analysis, the sumps located at Doubletree by Hilton have the potential to intercept the PCE plume. Due to this finding, the proposed permit establishes increased sampling of PCE and the requirement to submit a treatment plan to the Division per Schedule of Compliance Item #1.

Outfall Summary
Outfall 001 is for the discharge of intercepted groundwater to the Clark County storm drain system.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from 2020 to 2024, was reviewed as part of this permit renewal process. The long-term average discharge flow rate to the storm drain was 9,200 gallons per day, or 0.009 million gallons per day (MGD). The daily maximum flow rate is limited to 0.02 MGD; there were no exceedances of this limit.

There were no exceedances of any other permit limits from 2020 to 2024.

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. According to the Reasonable Potential Analysis (RPA) that was conducted, pollutants of concern associated with discharges from this facility include iron, boron, fluoride, and total dissolved solids (TDS). Additionally, PCE is a pollutant of concern due to the known plume located up gradient of the facility.

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” (Nevada Administrative Code (NAC) 445A.2156) apply. WQSs for the Las Vegas Wash from the confluence of the Sloan Channel and the Historic Lateral includes 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
Section 305(b) of the Clean Water Act (CWA) requires states to report on the overall condition of aquatic resources. Section 303(d) of the CWA requires states to develop lists of all impaired waterbodies and create a priority listing of waterbodies for which plans are needed to restore water quality. Combining the requirements of these two sections produces the integrated report, which provides an overall assessment of the quality of surface water resources within the state. This report, required biennially by the U.S. Environmental Protection Agency (U.S. EPA), also describes the extent to which current conditions are protecting the designated beneficial uses of Nevada’s surface waters. The Division’s most recent integrated report is the Nevada 2020 – 2022 Water Quality Integrated Report (published February 2022).

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 Historical Lateral.

TMDL
Per section 303(d)(1)(C) of the CWA, states are required to develop Total Maximum Daily Loads (TMDLs) for parameters that do not meet water quality standards 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 a 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. An annual sampling frequency is deemed appropriate to monitor the load to the Las Vegas Wash.

Compliance History
The facility was considered to be in compliance during the 2020 to 2024 reporting period.

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

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 0.02 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

Notes (Discharge Limitations Table):

1. Flow shall be monitored at the meter located after the two 4-inch pipes join into the one 4-inch pipe.

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Quarterly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Solids, total dissolved	Daily Maximum	M&R Pounds per Day (lb/d)	<= 3000 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Boron, total recoverable	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Boron, total recoverable	Quarterly Average		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Fluoride, total (as F)	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Fluoride, total (as F)	Quarterly Average		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Iron, total recoverable	Quarterly Average		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Quarterly Average		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	Quarterly Average		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
			<= 5				

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Quarterly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Tetrachloroethylene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Tetrachloroethylene	Quarterly Average		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Samples shall be obtained from the point of discharge into the drop inlet.

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Annually[2]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Antimony, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Arsenic, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Barium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Benzene	Daily Maximum		<= 5.0 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Benzene	Annual Average		<= 5.0 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Cadmium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chromium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Copper, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Ethylbenzene	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Ethylbenzene	Annual Average		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
			<= 1.0				

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Annually[2]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Hydrocarbons, total petroleum[1]	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Hydrocarbons, total petroleum	Annual Average		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Lead, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Manganese, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methyl tert-butyl ether	Daily Maximum		<= 20 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methyl tert-butyl ether	Annual Average		<= 20 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Nickel, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	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	Annual	DISCRT
Nitrogen, inorganic total	Daily Maximum		<= 20 Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrogen, inorganic total	Annual Average		<= 20 Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
pH, maximum	Daily Maximum		<= 9 Standard Units (SU)	Effluent Gross	001	Annual	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Annual	DISCRT
		M&R	M&R				

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Annually[2]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Phosphorus, total (as P)	Daily Maximum	Pounds per Day (lb/d)	Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Selenium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Thallium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Toluene	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Toluene	Annual Average		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Xylene	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Xylene	Annual Average		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Zinc, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT

Notes (Discharge Limitations Table):

1. Purgeable and extractable. Report full range, C6-C40, analyses with EPA Methods 8015B and 8260B or equivalent methods.
2. Samples shall be obtained from the point of discharge into the drop inlet.

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Once During The Permit Term[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Chromium, Hexavalent [As CR] (Chromium (VI))	Daily Maximum		<= 11 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III))	Daily Maximum		<= 268 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cyanide, total (as CN)	Daily Maximum		<= 5.2 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mercury, total recoverable	Daily Maximum		<= 0.77 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Molybdenum, total recoverable	Daily Maximum		<= 1650 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Silver total recoverable	Daily Maximum		<= 41 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
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		<= 0.056 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		<= 0.056 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			<= 0.0043				

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Once During The Permit Term[1]

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		<= 0.041 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
4,4-DDT	Daily Maximum		<= 0.001 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		<= 0.1 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		<= 0.056 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Every 2 Months	DISCRT
Endrin	Daily Maximum		<= 0.036 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		<= 0.0038 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Heptachlor epoxide	Daily Maximum		<= 0.0038 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
			<= 0.1				

Discharge Limitations Table for Sample Location 001 (Drop Inlet) To Be Reported Once During The Permit Term[1]

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		<= 6.6 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		<= 0.013 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		<= 0.014 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Toxaphene	Daily Maximum		<= 0.0002 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		<= 0.072 Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

1. Samples shall be obtained from the point of discharge into the drop inlet.

Summary of Changes From Previous Permit
Outfall 002 was renamed to Outfall 001.

The former Outfall 001, which reported flow and total petroleum hydrocarbons (TPH) results from the sump vaults, was removed.

The requirement to report flow has been moved from the former Outfall 001 to the new Outfall 001 (formerly Outfall 002).

The requirement to sample for TPH each year from the sump vaults has been removed.

The proposed permit establishes a daily maximum and quarterly average limit of 5.0 µg/L for PCE and increases the sampling frequency from once per permit term to once a quarter.

The proposed permit establishes a daily maximum and a quarterly average limit of 90 mg/L and 5 mg/L, for nitrate (as N) and nitrite (as N), respectively.

The proposed permit removes the limit of 20 mg/L for total inorganic nitrogen (TIN) per the results of the RPA.

The proposed permit increases the sampling frequency for boron, fluoride, and iron from once a year to once a quarter.

The proposed permit removes the requirement to sample for priority pollutants once during the term of the permit.

The proposed permit establishes the requirement to report the concentration of TDS in milligrams per liter (mg/L) and establishes a daily maximum limit of 3,000 mg/L for TDS.

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

Where applicable, both a maximum and an average limit has been established per Title 40 of the Code of Federal Regulation (CFR) section 122.445(d)(1).

Schedule of Compliance Item and Special Approvals / Conditions Item #1 have been added.

The proposed permit removes the 1.0 lb/day daily maximum limit for total phosphorus.

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. 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 removes the daily maximum limit of 20 mg/L for TIN as prescribed at NAC 445A.2156 in accordance with the requirement to maintain higher existing quality (RMHQ) standard as the RPA proved no reasonable potential for TIN to cause or contribute to an in-stream excursion of the WQS.

The proposed permit establishes the requirement to sample for nitrate (as N) and nitrite (as N) as prescribed at NAC 445A.2156 to protect the aquatic life designated beneficial use. The daily maximum and quarterly average limits of 90 mg/L and 5 mg/L, for nitrate (as N) and nitrite (as N), respectively, has been established.

Per NAC 445A.1236, the standards for toxic materials apply. Most of the toxic materials listed only have criteria to protect the 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 a beneficial use for aquatic life, irrigation, or watering of livestock apply. Limits have not been established for constituents that proved no reasonable potential, per the RPA. Limits have been established for constituents that proved to have reasonable potential, or that were not previously sampled for. Furthermore, taking the discharge flow rate into consideration, the 96-hour limits are used, unless there was no 96-hour limit listed for that constituent in which case the 1-hour limit was used.

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.

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 for permitting purposes. The BWQP found the hardness data to be normally distributed with a 10th percentile value of 470 mg/L. For hardness over 400 mg/L, Chapter 3 of the U.S. EPA's "Water Quality Standards Handbook: Second Edition" recommends two options: (1) calculate the criterion using a default water effects ratio (WER) of 1.0 and using a hardness of 400 mg/L in the hardness equation; or (2) calculate the criterion using a WER and the actual ambient hardness of the surface water in the equation. Consistent with the U.S. EPA's recommendation, the Division has calculated the applicable water quality criteria for hardness dependent metals listed at NAC 445A.1236 using a hardness value of 400 mg/L, since the 10th percentile calculated by the BWQP was found to be 470 mg/L which exceeds 400 mg/L.

Furthermore, conversion factors were used to convert dissolved metals to total recoverable.

Reasonable Potential Analysis (RPA)

Section 301(b)(1)(c) of the CWA requires effluent limitations necessary to meet WQSs, and 40 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." 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.1236 and NAC 445A.2156 to determine if the discharge has reasonable potential to cause or contribute to an excursion above a state WQS.

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 exhibits reasonable potential to cause, or contribute to, in-stream excursions above the applicable water quality criteria for iron, boron, fluoride, and TDS. 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 during the renewal process. Limits for constituents that prove no reasonable potential may be removed or the sampling frequency may be decreased in future permits, unless new information proves otherwise.

NAC 445A.2156 include a RMHQ for TDS in the Las Vegas Wash at the Historic Lateral of 1,900 mg/L, with at least 95 percent of samples being equal to or less than the single value. NAC 445A.2156 also includes water quality criterion for TDS of 3,000 mg/L, as a single value, to protect the livestock watering beneficial use. Although the previous permit did not require the concentration of TDS to be reported, the Permittee did sample the effluent for TDS, in mg/L, to calculate the quantity of TDS discharge, in lbs/day, to the Las Vegas Wash which was a requirement of the previous permit. From 2020 to 2024, the effluent TDS ranged from 1,790 mg/L to 2,100 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 results of the RPA determined that there is reasonable potential for TDS To exceed the RMHQ and beneficial use standards. However, per section I.B.4.a of the NPDES Permit Program Policy for Implementation of Colorado River Salinity Standards found in Appendix B of the 2023 Review Water Quality Standards for Salinity Colorado River System document, the "no-salt" discharge requirement may be waived at the option of the permitting authority in those cases where the discharged salt load reaching the main stem of the Colorado River is less than one ton per day or 366 tons per year. At the maximum daily flow rate of 0.02 MGD, the Permittee would have to discharge 11,990 mg/L of TDS per day to exceed the one ton per day limit. Therefore, the proposed permit establishes the requirement a daily maximum limit of 3,000 mg/L for TDS. A sampling frequency of once per quarter is deemed appropriate to determine compliance with the effluent limit. Furthermore, the proposed permit retains the requirement for the Permittee to report TDS in lbs/day each quarter to satisfy anti-backsliding requirements.

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

As described in the Reasonable Potential Analysis (RPA) section of the fact sheet, there is reasonable potential for the facility's effluent to cause or contribute to an in-stream excursion above the applicable water quality criteria at NAC 445A.1236 for iron, boron, and fluoride. Therefore, the proposed permit establishes the following effluent limits based on the water quality criteria at NAC 445A.1236:

- Boron: The daily maximum and quarterly average thresholds are limited to 750 µg/L based on water quality criterion at NAC 445A.1236 for the protection of the irrigation beneficial use;
- Fluoride: The daily maximum and quarterly average thresholds are limited to 1,000 µg/L based on water quality criterion at NAC 445A.1236 for the protection of the irrigation beneficial use;
- Iron: The daily maximum and quarterly average thresholds are limited to 1,000 µg/L based on water quality criterion at NAC 445A.1236 for the protection of the aquatic life beneficial use.

The proposed permit increases the sampling frequency, from annually to quarterly, for boron, fluoride, and iron to determine compliance with effluent limits.

The proposed permit retains the requirement to monitor and report effluent concentrations annually for arsenic, beryllium, cadmium, total chromium, copper, lead, manganese, nickel, selenium, and zinc as these constituents proved no reasonable potential per the RPA.

For the rest of the toxic materials listed at NAC 445A.1236, a once per permit term sampling frequency is deemed appropriate to acquire additional water quality data and to determine compliance with effluent limits.

Basis for Effluent Limitations

The daily maximum flow rate limit is 0.02 MGD based on the maximum possible system capacity.

The previous permit included the requirement to sample for antimony, barium, and thallium. Although these constituents are included in NAC 445A.1236 for toxic materials, they only have criteria to protect the municipal or domestic water supply beneficial uses which are not applicable to the section of the Las Vegas Wash receiving the discharge. However, the permit retains the requirement to monitor and report these constituents once a year to satisfy anti-backsliding requirements.

The previous permit included daily maximum effluent limits for benzene, ethylbenzene, methyl tert-butyl ether (MTBE), toluene, TPH, and xylene based on active BCA remediation sites located within a one-mile radius of the facility. Although the water quality samples obtained from 2020 to 2024 indicated non-detect values for these constituents, the proposed permit retains the following effluent limits due to the continued presence of active BCA remediation sites:

- Benzene: The daily maximum and annual average thresholds are limited to 5.0 µg/L per a Memo titled BTXE Limits for Remediation Projects dated February 1, 1991.
- Ethylbenzene: The daily maximum and annual average thresholds are limited to 100 µg/L per a Memo titled BTXE Limits for Remediation Projects dated February 1, 1991.
- MTBE: The daily maximum and annual average thresholds are limited to 20 µg/L per the interim action level for the occurrence of MTBE in groundwater at sites in close proximity to water wells (receptors) and, or, sensitive environments established in the NDEP Oxygenated Fuel Corrective Action Guidance document, dated October 12, 1998.
- Toluene: The daily maximum and annual average thresholds are limited to 100 µg/L per a Memo titled BTXE Limits for Remediation Projects dated February 1, 1991.
- TPH: The daily maximum and annual average thresholds are limited to 1.0 mg/L per the State action level for remediation projects.
- Xylene: The daily maximum and annual average thresholds are limited to 200 µg/L per a Memo titled BTXE Limits for Remediation Projects dated February 1, 1991.

The previous permit included the requirement to sample for priority pollutants once per permit term which included PCE. The proposed permit increases the sampling frequency for PCE from once per permit term to once a quarter due to its presence in a nearby plume. Additionally, the proposed permit establishes a daily maximum and quarterly average threshold limits of 5.0 µg/L as previously established by the Division.

Anti-backsliding

Sections 402(o) and 303(d)(4) of the CWA and 40 CFR 122.44(l) 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 term of the permit. The priority pollutant list is comprised of 126 constituents that are typically sampled by wastewater treatment facilities that accept industrial wastewater. As this permit only authorizes discharges of intercepted groundwater, and not treated domestic and/or, industrial wastewater, the priority pollutant list (except for PCE) does not apply. However, the toxic materials listed in NAC 445A.1236, are applicable to the waters specified in NAC 445A.123 to NAC 445A.2234, inclusive. Therefore, the proposed permit replaces the requirement to sample for priority pollutants (except for PCE) with the requirement to sample for the toxic materials listed 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 individual waste load allocation (IWLA) limit for total phosphorus associated with this permit is not required. Therefore, the Division has determined that the previous requirement to limit total phosphorus 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 which is consistent with the anti-backsliding conditions specified in the CWA section 402(o)(2)(B)(ii).

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 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
Per Schedule of Compliance Item #1, within 60 days of permit reissuance, the Permittee shall submit to the Division, for review and approval, a proposed treatment plan to address the increasing concentration levels of PCE in the intercepted groundwater.

Additionally, per the Special Approvals / Conditions Table Item #1, upon approval, by the Division, of the proposed treatment plan, AND after two consecutive quarters of exceedances of the PCE limit of 5.0 µg/L, the Permittee shall implement the approved treatment plan. Documentation shall be provided to the Division that the plan was put in place and that it functions accordingly.

SA – Special Approvals / Conditions Table

Item #	Description
1	Upon approval, by the Division, of the proposed treatment plan, AND after two consecutive quarters of exceedances of the PCE limit of 5.0 µg/L, the Permittee shall implement the approved treatment plan. Documentation shall be provided to the Division that the plan was put in place and that it functions accordingly.

Discharges From Future Outfalls/ Planned Facility Changes
The Permittee does not anticipate any planned facility changes or the addition of future outfalls.

Corrective Action Sites
There are five (5) active BCA remediation sites located within a one-mile radius of the facility. Four (4) of the sites (8-000542, 8-001356, 8-001356, and 8-001356) are for the release of gasoline to soil or groundwater from underground storage tanks. The fifth site (H-001364), which is for the former Royal Crest Cleaners, is for the release of solvents (i.e., PCE) to groundwater. Discharges from the Doubletree by Hilton is not anticipated to affect the five (5) active BCA remediation sites.

Wellhead Protection Program
The closest Public Water System (PWS) well is located approximately 1.45 miles to the southwest of the facility. There are other PWS wells located to the north and south of the facility. The Doubletree by Hilton 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 facility. The discharge is not anticipated to affect any PWSs due to the distance of the PWS wells.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies of an updated Operations & Maintenance (O&M) Manual to the Division for review and approval. The O&M Manual shall be prepared by a qualified person 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*.	10/1/2025
2	Within 60 days of permit reissuance, the Permittee shall submit to the Division, for review and approval, a proposed treatment plan to address the increasing concentration levels of PCE in the intercepted groundwater.	9/1/2025

Deliverable Schedule:

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

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

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at https://ndep.nv.gov/posts. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **6/23/2025,** 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: **Bonnie Hartley**
Date: **5/21/2025**
Title: **Staff II, Associate Engineer**