



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: BRE/HC LAS VEGAS PROPERTY HOLDINGS, L.L.C., C/O COLLIERS INTERNATIONAL
3800 HOWARD HUGHES PKWY, SUITE 140
LAS VEGAS, NV 89169

Permit Number: NV0023604

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

Designation: MINOR NPDES

New/Existing: EXISTING

Location: HUGHES CENTER, CLARK
3883 HOWARD HUGHES PARKWAY, LAS VEGAS, NV 89169
LATITUDE: 36.118220, LONGITUDE: -115.157240
TOWNSHIP: T21S, RANGE: R61E, SECTION: S16

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	GROUNDWATER COLLECTION DISCHARGE	External Outfall		36.118220	-115.157240	LAS VEGAS WASH

Permit History/Description of Proposed Action

The Permittee, BRE/HC Las Vegas Property Holdings, L.L.C. c/o Colliers International, has applied for the renewal of their National Pollutant Discharge Elimination System Permit NV0023604, for the Hughes Center located at 3883 Howard Hughes Parkway, in Las Vegas, within 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 on July 8, 2008. The most recent permit was issued on January 1, 2016, and expired on December 31, 2020; the permit has been administratively continued since.

Facility Overview

The Hughes Center is an office complex, built on a 75-acre campus, composed of 10 mid- and high-rise office buildings, luxury condos and apartment complexes, high-end dining and retail stores, a hotel, and multiple parking garages. The discharge permit is for the dewatering system located at the five-story Manhattan Street Garage, located at 3898 Manhattan Street. The parking garage has been dewatering since 2008, to protect the structural integrity of its below-grade foundation. The collection system consists of three elements - a network of perforated collection pipes, a sump pit, and dewatering pumps with sealed plumbing.

The untreated groundwater enters a network of 4-inch diameter perforated collector drainpipes placed, below the garage basement slab-on-grade, at a minimum slope to direct collected groundwater to the gravity outfall in the collection sump pit.

The sump pit was constructed to accumulate infiltration seepage collected from the perforated collection pipe network, for discharge by pumps and sealed plumbing to the Clark County storm drain. The sump pit is located near the center portion of the northern half of the parking structure. The sump dimensions are five feet wide, five feet long and six feet deep. Maintenance access grates span the sump pit. The sump is equipped with two pumps, (one lead pump and one back-up pump) each having a continuous duty minimum rated capacity of 50 gallons per minute at a head of 20 feet plus all associated line loss from the sump pumps to the approved gravity discharge. A high-water detector will alert the facility maintenance offices in the event of a system failure. The high-water detector is set to alert at a water level at the drain inlet inverted elevation.

The untreated groundwater is then pumped through sealed plumbing, which flows to the east into a drain inlet located on Howard Hughes Parkway, being part of Clark County storm drain system, which discharges to the Flamingo Wash, which flows into the Las Vegas Wash.

The Center's Operation and Maintenance (O&M) Manual was last reviewed and approved on August 10, 2016. 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 equates to every ten (10) years, with an updated O&M Manual being due on August 10, 2026.

Outfall Summary

Outfall 001 – This external outfall is for the discharge of untreated intercepted groundwater to a storm drain drop inlet located in Howard Hughes Parkway.

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 long-term average discharge flow rate was 0.0020 million gallons per day (Mgal/d). The daily maximum flow limit is 0.05 Mgal/d; with twelve instances of no discharge reported. Based on the numbers reported, there were no exceedances of this limit.

Notes:

mg/L = Milligrams per Liter

Mgal/d = Million Gallons per Day

S.U. = Standard Units

N = Nitrogen

TIN = Total Inorganic Nitrogen

TDS = Total Dissolved Solids

Outfall 001:

Ammonia as N: 1.42 mg/L

Arsenic: 0.013 mg/L

Chromium: 0.014 mg/L

Copper: 0.37 mg/L

Lead: 0.01 mg/L

Nickel: 0.017 mg/L

pH: 7.58 S.U.

Phosphorus, total: 0.26 mg/L

Selenium: 0.012 mg/L

Thallium: 0.014 mg/L

TDS: 1,993 mg/L

TIN: 3.79 mg/L

Zinc, total: 2.31 mg/L

Unless listed above, the Volatile Organic Compounds, Total Recoverable Metals, Base Neutral

Compounds, and other pollutants reported annually 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 Boron, Copper, Iron, Lead, Selenium, TDS, Zinc, and VOCs.

Receiving Water

The groundwater is discharged 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 this control point include 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 the Nevada's 2022 – 2022 WQIR, the following beneficial uses for the Las Vegas Wash above the Treatment Plants are not supported:

- The Aquatic Life beneficial use is impaired by 96-hour Iron, 1-hour Selenium, 96-hour Selenium, and TDS.
- 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 water quality standards for a water body. TMDLs are implemented during the permitting process by limiting the load of those parameters 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 TMDLs apply 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 Phosphorus 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 loads to the Las Vegas Wash.

Compliance History

The facility was in compliance during the reporting period reviewed 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 (External Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	< 0.050 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	30 Day Average	< 0.050 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Boron, total (as B)	Daily Maximum		<= 750 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Copper, dissolved (as Cu) ^[1]	Daily Maximum		<= 29 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Iron, total (as Fe)	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Lead, dissolved (as Pb) ^[1]	Daily Maximum		<= 11 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, inorganic total	Daily Maximum		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
Nitrogen, nitrate total (as N)	Daily Maximum		<= 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
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
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
Selenium, dissolved [as Se] ^[1]	Daily Maximum		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Daily Maximum		<= 3000 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Zinc, dissolved (as Zn) ^[1]	Daily Maximum		<= 382 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Analysis shall be for the dissolved fraction.

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Xylene ^[1]	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
1,1,1-Trichloroethane	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
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,2-Dichlorobenzene (O-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
1,2-Dichloropropane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,3-Dichlorobenzene (M-Dichlorobenzene)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,4-Dichlorobenzene (P-Dichlorobenzene)	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 (External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
2-Chloroethyl vinyl ether, (mixed)	Daily Maximum		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
Bromoform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Carbon Tetrachloride (Tetrachloromethane (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
Chloroform	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
Dichlorobromomethane	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
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Methyl bromide (Bromomethane)	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
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
Trichlorofluoromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Vinyl Chloride (Chloroethylene (Vinyl))	Daily Maximum		M&R Micrograms per Liter (ug/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
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Methyl tert-butyl ether	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Antimony, total (as Sb)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Arsenic, total (as As) ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Beryllium, total (as Be)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd) ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI)) ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, total (as Cr)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cyanide, total (as CN)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Manganese, total (as Mn)	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 (External Outfall) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Mercury, dissolved (as Hg) ^[2]	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Molybdenum, total (as Mo)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nickel, total (as Ni) ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Silver, total (as Ag) ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sulfide, total (as S)	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
Acrolein	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
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
4,4-DDT	Daily Maximum		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
Dieldrin	Daily Maximum		M&R 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 Average		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
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Mirex	Daily Maximum		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
Pentachlorophenol	Daily Maximum		M&R 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
Thallium, total (as TI)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

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

Summary of Changes From Previous Permit

Under Outfall 001(External Outfall) To Be Reported Quarterly the following additions and changes were made:

ADDED – Boron, total (as B), with a “Daily Maximum” Base a “<=750 Micrograms per Liter (ug/L)” Concentration Unit, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Quarterly” Measurement Frequency, and a “Discrt” Sample Type.

ADDED – Copper, total (as Cu), with a “Daily Maximum” Base a “<=29 Micrograms per Liter (ug/L)” Concentration Unit, a “Effluent Gross” Monitoring Location, a “001” Sample Location, a “Quarterly”

Measurement Frequency, and a "Discret" Sample Type.

ADDED – Iron, total (as Fe), with a "Daily Maximum" Base, a " ≤ 1000 Micrograms per Liter (ug/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Quarterly" Measurement Frequency, and a "Discret" Sample Type.

ADDED – Lead, total (as Pb), with a "Daily Maximum" Base, a " ≤ 11 Micrograms per Liter (ug/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Quarterly" Measurement Frequency, and a "Discret" Sample Type.

ADDED - Nitrogen, nitrate total, with a "Daily Maximum" Base, a " ≤ 90 Milligrams per Liter (mg/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Quarterly" Measurement Frequency, and a "Discret" Sample Type.

ADDED - Nitrogen, nitrite total, with a "Daily Maximum" Base, a " ≤ 5 Milligrams per Liter (mg/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Quarterly" Measurement Frequency, and a "Discret" Sample Type.

ADDED – Selenium, total (as Se), with a "Daily Maximum" Base a " ≤ 6.3 Micrograms per Liter (ug/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Quarterly" Measurement Frequency, and a "Discret" Sample Type.

ADDED – Zinc, total (as Zn), with a "Daily Maximum" Base a " ≤ 382 Micrograms per Liter (ug/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Quarterly" Measurement Frequency, and a "Discret" Sample Type.

CHANGED – Nitrogen, ammonia, total (as N), with a "Daily Maximum" Base, ADDED "M&R Pounds per Day (lb/d)" Quantity Unit, along with MAINTAINED "M&R Milligrams per Liter (mg/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Quarterly" Measurement Frequency, and a "Discret" Sample Type.

CHANGED – Phosphorus, total (as P), with a "Daily Maximum" Base, ADDED "M&R Pounds per Day (lb/d)" Quantity Unit, along with MAINTAINED "M&R Milligrams per Liter (mg/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Quarterly" Measurement Frequency, and a "Discret" Sample Type.

DELETED – Footnote 1. Refer to Part A.3.2 of this permit for required monitoring details.

ADDED - Footnote 1.

1. Analysis shall be for the dissolved fraction.

Under Outfall 001 (External Outfall) To Be Reported Annually, the reporting period was CHANGED to "Once During the Permit Term".

Under Outfall 001 (External Outfall) To Be Reported Once During the Permit Term, the following parameters were either added or deleted.

ADDED – The Organic Chemicals list, as defined under NAC 445.1236, associated with the toxic materials delineated for the beneficial uses associated with the Las Vegas Wash (Above the Treatment Plants) being Aquatic Life, Irrigation and Watering of Livestock.

DELETED – Copper, total (as Cu), with a "Daily Maximum" Base a "M&R Micrograms per Liter (ug/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annually" Measurement Frequency, and a "Discret" Sample Type.

DELETED – Iron, total (as Fe), with a "Daily Maximum" Base a "M&R Micrograms per Liter (ug/L)"

Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annually" Measurement Frequency, and a "Discret" Sample Type.

DELETED – Lead, total (as Pb), with a "Daily Maximum" Base a "M&R Micrograms per Liter (ug/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annually" Measurement Frequency, and a "Discret" Sample Type.

DELETED – Selenium, total (as Se), with a "Daily Maximum" Base a "M&R Micrograms per Liter (ug/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annually" Measurement Frequency, and a "Discret" Sample Type.

DELETED – Zinc, total (as Zn), with a "Daily Maximum" Base a "M&R Micrograms per Liter (ug/L)" Concentration Unit, a "Effluent Gross" Monitoring Location, a "001" Sample Location, a "Annually" Measurement Frequency, and a "Discret" Sample Type.

DELETED – Footnote 1. Refer to Part A.3.2 of this permit for required monitoring details.

ADDED - Footnote 1.

1. Analysis shall be for the dissolved fraction.

Under the Special Approvals / Conditions Table, the following items were added:

1. If DMR data shows an exceedance of Copper and/or Zinc for any 4 consecutive quarters, the Permittee shall submit to the Division, for review and approval, a treatment plan to address the exceedances. The plan shall be submitted to the Division within 90 days of DMR data having 4 consecutive exceedances for Copper and/or Zinc.

2. After the Division has reviewed and approved the proposed treatment plan to address Copper and Zinc exceedances, the Permittee shall have 180 days to install and beginning using the approved treatment method."

Technology Based Effluent Limitations

Technology based effluent limitations are not applicable to this permit.

Water Quality Based Effluent Limitations

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 *E. coli*. The discharge from the 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. 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 standards for toxic material (NAC 445A.1236) apply. Most of the toxic materials listed only have water quality criteria to protect the municipal or domestic supply beneficial uses which are not applicable to the section of the Las Vegas Wash receiving the discharge. Therefore, only the toxic materials with water quality criteria to protect the aquatic life, irrigation, and watering of livestock beneficial uses apply. The 96-hour limit for the beneficial uses for aquatic life limits was used. The applicable toxic materials shall be sampled for once a permit term. If, during the next renewal review process, the water quality data shows a reasonable potential (via a Reasonable Potential Analysis) 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.

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 2020 to 2025, the effluent TDS ranged from 1,050 mg/L to 2,530 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 4 45A.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, the proposed permit establishes a limit of 3,000 mg/L for Outfall 001 for TDS, which 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 conducting the RPA, the Division used a mass-balanced approach to determine the expected critical downstream receiving water concentration using statistics recommended in the United States Environmental Protection Agency's Technical Support Document (TSD) for Water Quality-Based Toxic 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 under 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, instream excursions above the applicable water quality criteria for Copper, Lead, Selenium, TDS, and Zinc.

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

The proposed permit establishes a daily maximum limit of 29 ug/L for Copper in accordance with the chronic criterion to protect the aquatic life beneficial use included in NAC 445A.1236 and based on findings from the RPA.

The proposed permit establishes a daily maximum limit of 11 ug/L for Lead in accordance with the chronic criterion to protect the aquatic life beneficial use included in NAC 445A.1236 and based on findings from the RPA, along with a quarterly reporting requirement.

The proposed permit establishes a daily maximum limit of 6.3 ug/L for Selenium. Based on the RPA, the discharge exhibits reasonable potential to cause, or contribute to, instream excursions above the applicable water quality criteria for Selenium. This limitation for Selenium is due to the 303(d) listing of this parameter. This Selenium limitation was established due to the impairment of Flamingo Wash by this pollutant of concern. The sampling frequency has been increased to quarterly.

The proposed permit establishes a daily maximum limit of 1,000 ug/L for Iron, as prescribed by NAC 445A.1236, along with it being on the 303(d) list, along with quarterly reporting.

The proposed permit establishes a daily maximum limit of 750 ug/L for Boron, per NAC 445A.1236, along with it being on the 303(d) list, along with a quarterly reporting requirement.

The proposed permit establishes a daily maximum limit of 90 mg/L for nitrate (as N), as per NAC 445.2156, along with a quarterly reporting requirement.

The proposed permit establishes a daily maximum limit of 5 mg/L for nitrite (as N), as per NAC 445.2156, along with a quarterly reporting requirement.

The proposed permit removes the daily maximum limit of 20 mg/L and establishes the requirement to monitor and report TIN as the RPA showed no reasonable potential for an exceedance of the water quality standard for this constituent. A quarterly reporting requirement is retained.

The proposed permit establishes a daily maximum limit of 382 ug/L for Zinc in accordance with the chronic criterion to protect the aquatic life beneficial use included in NAC 445A.1236 and based on findings from the RPA, along with a quarterly reporting requirement.

The proposed permit establishes a monitor and report daily maximum limit for organic chemicals based on the beneficial uses, associated with portions of the Las Vegas Wash above the Treatment Plants, as delineated under NAC 445A.1236 for a once a permit term reporting requirement.

Basis for Effluent Limitations

The proposed permit retains the requirement to sample for methyl tertbutyl ether (MTBE). MTBE was used as an additive for unleaded gasoline but is now banned or limited in several states. Due to the known active Bureau of Corrective Action (BCA) sites that had a release of gasoline within a one-mile radius of the Hughes Center, there is a potential for the constituent to show up in the discharge. Continued monitoring is required, even if the levels have been nondetected.

The permit retains the requirement to monitor and report VOCs to satisfy antibacksliding requirements; however, as the VOCs were reported as nondetect during the past five years, sampling has been decreased from "Annually" to "Once During the Permit Term".

The proposed permit retains the requirement to sample for TPH due to concern of potential migration of groundwater plumes located within a mile of the discharge location.

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. Based on five years of non-detect values for VOCs, Total Recoverable Metals, Base Neutral Compounds, and other pollutants originally reported annually, the reporting period was changed to a "Once A Permit Term" period, with additional parameters added as further expanded under NAC 445A.1236.

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 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 water 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.

Special Conditions

See the Special Approvals/Conditions Table below.

SA – Special Approvals / Conditions Table

Item #	Description
1	If DMR data shows an exceedance of Copper and/or Zinc for any 4 consecutive quarters, the Permittee shall submit to the Division, for review and approval, a treatment plan to address the exceedances. The plan shall be submitted to the Division within 90 days of DMR data having 4 consecutive exceedances for Copper and/or Zinc.
2	After the Division has reviewed and approved the proposed treatment plan to address Copper and Zinc exceedances, the Permittee shall have 180 days to install and beginning using the approved treatment method.

Discharges From Future Outfalls/ Planned Facility Changes

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

Corrective Action Sites

There are five (5) active BCA sites located within a one-mile radius of the permitted facility. Four (4) of the sites, with three (3) sites under 8-000542 and one site under 8-001356, being caused by the release of gasoline, via an underground storage tank to the groundwater or soil. The fifth site, H-001364, was caused by the release of solvents, from an unknown container, into the groundwater. BCA does not anticipate any impact(s) between the remediation sites and the permitted facility.

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

Item #	Description	Due Date
1	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS-2A Minimum Information for an Operations and Maintenance (O&M) Manual for Pump-and-Treat Facilities and Dewatering Operations.	8/10/2026

Deliverable Schedule:

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

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

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at <https://ndep.nv.gov/posts>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **12/15/2025**, 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: **11/4/2025**

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?
Copper, Total Recoverable	ug/L	5	2,988.9	35	Chronic Aquatic Life	Yes
Lead, Total Recoverable	ug/L	5	72.1	23	Chronic Aquatic Life	Yes
Selenium, Total Recoverable	ug/L	5	53.2	4	Chronic Aquatic Life	Yes
Zinc, Total Recoverable	ug/L	5	29,805.6	445	Acute Aquatic Life	Yes
Chloroform	ug/L	5	21.6	No Criteria		No
Nitrogen, Total (as N)	mg/L	9	19,490.85	No Criteria		No
Phosphorus, Total (as P)	mg/L	14	5,247.19	No Criteria		No
Total Dissolved Solids	mg/L	15	4,865.27	1900	RMHQ	Yes