

**FACTSHEET
(pursuant to NAC 445A.236)****Permittee Name:** UNIVERSITY OF NEVADA LAS VEGAS4505 MARYLAND PARKWAY
LAS VEGAS, NV 89154**Permit Number:** NV0023931**Permit Type:** MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL FACILITY
THAT DISCHARGES NON-PROCESS WASTEWATER**Designation:** MINOR NPDES**New/Existing:** EXISTING**Location:** MENDENHALL CENTER - UNLV, CLARK
4505 MARYLAND PARKWAY, LAS VEGAS, NV 89154
LATITUDE: 36.103889, LONGITUDE: -115.143694
TOWNSHIP: T21S, RANGE: R61E, SECTION: S22

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	DEWATERING DISCHARGE	External Outfall		36.103889	-115.143694	LAS VEGAS WASH VIA CLARK COUNTY STORM DRAIN SYSTEM

Permit History/Description of Proposed Action

The Permittee, the University of Nevada, Las Vegas (UNLV), has applied for the renewal of National Pollutant Discharge Elimination System permit NV0023931 for the Mendenhall Center located at 4505 Maryland Parkway in Las Vegas, Nevada. The Permittee proposes to continue to discharge intercepted groundwater to the Las Vegas Wash via the Clark County storm drain system. The facility operates a dewatering system designed to accumulate and remove groundwater intrusions to protect the structural integrity of the below grade structure under the UNLV Mendenhall Center.

This permit was first issued on February 10, 2011. The most recent permit was issued on August 1, 2019, and expired on July 31, 2024; the permit has been administratively continued since.

Facility Overview

The Center was completed in 2012. This building includes two (2) full size practice courts, athletic facilities, academic area, film room, strength training/conditioning, and equipment areas for use by the UNLV Runnin' Rebels men's basketball team.

The Center's sub-floor's permeable fill (3 feet thick) includes a French drain dewater system, which intercepts the shallow groundwater (approximately 12 feet below the ground surface) for collection into a dewatering sump. The sump includes a passive (gravity) stormwater drain for interception of any incident precipitation and a wet well. The wet well is pumped by duplex, 2-HP submersible pumps, and then discharged into the Clark County storm sewer. The wet well also includes a high-level alarm, which is monitored by the facility staff, and a flow meter totalizer. Once in the sump, groundwater is pumped to the County's storm drain, and eventually into the Las Vegas Wash, via a drop inlet (Outfall 001) near the

intersection of Thomas and Mack Drive and Swenson Street on the UNLV campus.

During power outages, the Mendenhall Center is powered by a dedicated standby (emergency power) generator allowing them to continue running their dewatering system.

The Center's Operation and Maintenance (O&M) Manual was last reviewed and approved on December 9, 2015. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every ten (10) years from the last approved O&M Manual, with an updated O&M Manual due three months after the permit issuance date.

Outfall Summary

Outfall 001 – This external outfall is for the discharge of untreated intercepted groundwater to a storm drain drop inlet located near the intersection of Thomas and Mack Drive and Swenson Street on the UNLV campus.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years July 2020 to June 2025, was reviewed as part of this permit renewal process. Both the reported long-term average and daily maximum discharge flow rates were 4,210 gallons per day (Gal/d), with the long-term average being permitted for a Monitor and Report (M&R) Gal/d quantity and the daily maximum flow limit being permitted for less than 10,000 Gal/d. There were no reported exceedances to this limit.

Notes:

mg/L = Milligrams per Liter

Gal/d = Gallons per Day

Ib/d = Pounds per Day

S.U.= Standard Units

MTBE = Methyl tert-butyl ether

N = Nitrogen

TDS = Total Dissolved Solids

TIN = Total Inorganic Nitrogen

TPH = Total Petroleum Hydrocarbons

VOC = Volatile Organic Compounds

Outfall 001:

Flow Rate: See breakdown above

Ammonia (as N): Below Detection

Boron: 1.43 mg/L

Nitrate (as N): 20.11 mg/L

Nitrite (as N): Below Detection

pH: 7.95 S.U.

Phosphorus: Below Detection

TDS: 2,698 mg/L

TIN: 20.15 mg/L

All the VOCs and TPH 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 Boron, Iron, Selenium, TDS, Inorganic Chemicals, Organic Chemicals, TPH, and VOCs.

Receiving Water

The intercepted groundwater is discharged into a Clark County storm drain inlet. The discharge is conveyed to Tropicana Wash, which flows into Flamingo Wash, which flows into 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. These WQSS include water quality criteria to protect the following beneficial uses: watering of livestock, irrigation, aquatic life, recreation not involving contact with the water, propagation of wildlife, and maintenance of a freshwater marsh. Standards for toxic materials applicable to designated waters (NAC 445A.1236) and the standards applicable to all surface waters (NAC 445A.121) also apply.

303 (d) Listing Status

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

- The Aquatic Life beneficial use is impaired by 96-hour Iron, 1-hour Selenium, 96-hour Selenium, and TSS.
- 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 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. An quarterly sampling frequency is deemed appropriate to monitor the loads to the Las Vegas Wash.

Compliance History

The facility has been in compliance during the period reviewed from July 2020 to June 2025.

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-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	<= 10000 Gallons per Day (gal/d)		Effluent Gross	001	Continuous	METER
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Effluent Gross	001	Continuous	METER

Discharge Limitations Table for Sample Location 001 (Dewatering Discharge-External Outfall) 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
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum	M&R Pounds per Day (lb/d) ^[1]	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		<= 90 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
pH, maximum	Daily Maximum		<= 9 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
Phosphorus, total (as P)	Daily Maximum	M&R Pounds per Day (lb/d) ^[1]	M&R Milligrams per Liter (mg/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

Notes (Discharge Limitations Table):

1. For both Ammonia (as N) and Phosphorus, the pounds per day (lb/d) are to be calculated using the following formula: Flow (gpd) ÷ 1,000,000 x Lab Analysis Concentration (mg/L) x 8.34. The milligrams per liter (mg/L) for each of these parameters needs to be sampled and lab results reported.

Discharge Limitations Table for Sample Location 001 (Dewatering Discharge-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
Arsenic, dissolved (as As) ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, total recoverable	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
Copper, dissolved (as Cu)	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
Lead, dissolved (as Pb)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Manganese, total recoverable	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-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)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Molybdenum, total recoverable	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, dissolved (as Ag)	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
Zinc, dissolved (as Zn)	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
			M&R				

Discharge Limitations Table for Sample Location 001 (Dewatering Discharge-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
Chlorpyrifos	Daily Maximum		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
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 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
			M&R				

Discharge Limitations Table for Sample Location 001 (Dewatering Discharge-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
Methoxychlor	Daily Maximum		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
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
Hydrocarbons, total petroleum ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/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
			M&R				

Discharge Limitations Table for Sample Location 001 (Dewatering Discharge-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
1,1,1-Trichloroethane	Daily Maximum		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	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	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
Bromoform	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-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
Carbon tetrachloride	Daily Maximum		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
Methyl bromide (Bromomethane)	Daily Maximum		M&R 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
			M&R				

Discharge Limitations Table for Sample Location 001 (Dewatering Discharge-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
Tetrachloroethylene	Daily Maximum		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	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

1. TPH purgeable and extractable.
2. Analysis shall be for the dissolved fraction.

Summary of Changes From Previous Permit

Under Outfall 001, To Be Reported Quarterly, the following parameters were either changed or added:

ADDED - Boron, total recoverable, with a "Daily Maximum" Base, a "<=750 Micrograms per Liter (ug/L)" Concentration, an "Effluent Gross" Monitoring Location, "001" Sample Location, and a "Discrt" Sample Type.

ADDED - Iron, total recoverable, with a "Daily Maximum" Base, a "<=1,000 Micrograms per Liter (ug/L)" Concentration, an "Effluent Gross" Monitoring Location, "001" Sample Location, and a "Discrt" Sample Type.

ADDED - Selenium, dissolved (as Se), with a "Daily Maximum" Base, a "<=6.3 Micrograms per Liter (ug/L)" Concentration, an "Effluent Gross" Monitoring Location, "001" Sample Location, and a "Discrt" Sample Type.

ADDED - Nitrogen, ammonia total (as N), with a "Daily Maximum" Base, ADDED "M&R Milligrams per Liter (mg/L)" Concentration, under the Discharge Limitations. The remaining parameters were not changed.

ADDED - Phosphorus, total (as P), with a "Daily Maximum" Base, ADDED "M&R Milligrams per Liter (mg/L)" Concentration, under the Discharge Limitations. The remaining parameters were not changed.

CHANGED - Nitrogen, nitrate total (as N), with a "Daily Maximum" Base, from a "100 Milligrams per Liter (mg/L)" Concentration to a "90 Milligrams per Liter (mg/L)" Concentration, the remaining discharge limitations and monitoring requirements were unchanged.

CHANGED - Nitrogen, inorganic total, with a "Daily Maximum" Base, from a "20 Milligrams per Liter (mg/L)" Concentration to a "M&R Milligrams per Liter (mg/L)" Concentration, the remaining discharge limitations and monitoring requirements were unchanged.

CHANGED - Nitrogen, nitrite total (as N), with a "Daily Maximum" Base, from a "10 Milligrams per Liter (mg/L)" Concentration to a "M&R Milligrams per Liter (mg/L)" Concentration, the remaining discharge limitations and monitoring requirements remained unchanged.

Under Outfall 001, To Be Reported "Annually", was changed to a "Once During the Permit Term" reporting period, with the following parameters added.

ADDED - All associated parameters, being the VOCs listed under the Annual reporting table, were updated to this new reporting period; no other changes were made to discharge limitations or monitoring requirements for these parameters.

ADDED – The Organic Chemicals listed under NAC 445A.1236, associated with the Aquatic Life, Irrigation and Watering of Livestock beneficial uses, as applicable to the Water Quality Standards for the Las Vegas Wash at the Historic Lateral, with the understanding that they may be revised during the next permit renewal based on actual levels reported.

All the Organic Chemical parameters have a "Daily Maximum" Base, a "M&R Micrograms per Liter (ug/L)" Concentration, an "Effluent Gross" Monitoring Location, "001" Sample Location, a "Once During Permit Term" Measurement Frequency, and a "Discrt" Sample Type.

ADDED – The Inorganic Chemicals listed under NAC 445A.1236, associated with the Aquatic Life, Irrigation and Watering of Livestock beneficial uses, as applicable to the Water Quality Standards for the Las Vegas Wash at the Historic Lateral, with the understanding that they may be revised during the next permit renewal based on actual levels reported.

All the Inorganic Chemical parameters have a "Daily Maximum" Base, a "M&R Micrograms per Liter (ug/L)" Concentration, an "Effluent Gross" Monitoring Location, "001" Sample Location, a "Once During Permit Term" Measurement Frequency, and a "Discrt" Sample Type.

ADDED - Footnote 2.

2. Analysis shall be for the dissolved fraction.

Technology Based Effluent Limitations

Technology based effluent limitations are not applicable.

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 *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 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. 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.

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

The proposed permit establishes the daily maximum limit of 90 mg/L for Total Nitrate (as N) as prescribed at NAC 445A.2156, in accordance with the RMHQ standard, as the RPA proved reasonable potential for Total Nitrate (as N) to cause or contribute to an instream excursion of the WQS. The prior limit was 100 mg/L, but was updated to reflect current standards of water quality criteria delineated under NAC 445A.2156.

The proposed permit removes the daily maximum limit of 10 mg/L for Total Nitrite (as N), as was previously prescribed at NAC 445A.2156, in accordance with the RMHQ standard as the RPA proved no reasonable potential for Total Nitrite (as N) to cause or contribute to an instream excursion of the WQS.

The proposed permit removes the daily maximum limit of 20 mg/L for TIN as prescribed at NAC 445A.2156 in accordance with the RMHQ standard as the RPA proved no reasonable potential for TIN to cause or contribute to an instream excursion of the WQS.

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 2,700 mg/L to 3,118 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 and 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, retaining the limit of 3,000 mg/L for Outfall 001 for TDS is deemed protective of the receiving water.

Because Las Vegas Wash, above the treatment plants, is 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. 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.

Because the Las Vegas Wash, above the treatment plants, is 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.

The proposed permit includes a daily maximum limit of 750 ug/L for Boron, per NAC 445A.1236, based on it being included in the 303(d) list in the Las Vegas Wash.

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 for TDS, nitrate, nitrite, and TIN in NAC 445A.2156 to determine if the discharge has reasonable potential to cause, or contribute to, an excursion above a State WQS. Water quality criteria relating to NAC 445A.1236 were not reviewed in this analysis as none of the applicable toxic materials were required to be sampled for in the previous permit and therefore there was no data to review.

The RPA was based on data collected from July 2020 to July 2025 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 selenium, total nitrate (as N), and TDS. Therefore, limits were included for these constituents.

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. The permit retains the requirement to monitor and report VOCs to satisfy antibacksliding requirements, even if the prior results have been nondetect during the past 5 years. However, since VOCs have been non-detect since, at least, 2020, 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 to protect the municipal or domestic supply beneficial use, which does not apply to this section of the Las Vegas Wash. Therefore, VOCs will be monitored and reported.

Continued monitoring for TPH is required, even if the levels have been non-detect. 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. All the concentration has now been updated to an M&R concentration, and the sampling period has been decreased to once during the permit term.

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 2020. 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 to protect the municipal or domestic supply beneficial use, which does 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.

The proposed permit establishes the requirement to monitor and report TIN and total nitrite (as N) in lieu of maintaining their associated limits, based on WQSSs 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.

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.

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 is one active Bureau of Corrective Actions (BCA) remediation site that falls within a one-mile radius of the permitted facility (the Center). The site (8-000571), is for the release of gasoline, via a leaking underground storage tank to groundwater. BCA does not anticipate any impact(s) between the remediation site 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	<p>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, and be prepared and wet-stamped by a licensed, qualified Nevada engineer (P.E.) or minimally prepared and reviewed by a qualified professional.</p>	6/1/2028

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	7/28/2026
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. **3/9/2026**, 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: **2/2/2026**

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	1	0.2	30	Chronic Aquatic Life	No
Selenium, Total Recoverable	ug/L	9	0.1	6.3	Chronic Aquatic Life	No
Silver, Total Recoverable	ug/L	1	0.0	41	Acute Aquatic Life	No
Boron	ug/L	12	9,874.79	750	Irrigation	Yes
Nitrate, Total (as N)	mg/L	11	39.21	90	QC to Protect Beneficial Us	No
Nitrite, Total (as N)	mg/L	12	2.29	5	QC to Protect Beneficial Us	No
Nitrogen, total inorganic	mg/L	12	40.31	20	RMHQ	Yes
Total Dissolved Solids	mg/L	12	3,861.55	1900	RMHQ	Yes