



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: VALLEY HOSPITAL MEDICAL CENTER
620 SHADOW LANE
LAS VEGAS, NV 89106

Permit Number: NV0022195

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

Designation: MINOR NPDES

New/Existing: EXISTING

Location: VALLEY HOSPITAL MEDICAL CENTER, CLARK
620 SHADOW LANE, LAS VEGAS, NV 89106
LATITUDE: 36.162778, LONGITUDE: -115.165833
TOWNSHIP: 20S, RANGE: 61E, SECTION: 33

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	VALLEY HOSPITAL PAVILION	External Outfall		36.162778	-115.165833	LAS VEGAS WASH
002	SURGICAL SUITE	External Outfall		36.16371840	-115.167077	LAS VEGAS WASH
003	SUM OF OUTFALLS 001 & 002	Sum		36.162778	-115.165833	NOT APPLICABLE

Permit History/Description of Proposed Action

The Permittee, Valley Hospital Medical Center (VHMC), has applied for the renewal of their National Pollutant Discharge Elimination System (NPDES) Permit NV0022195, for their hospital located at 620 Shadow Lane, 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 February 17, 1995. The most recent permit was issued on July 1, 2017, and expired on June 30, 2022; the permit has been administratively continued since.

Facility Overview

The VHMC is a general medical hospital located two blocks north of Charleston Boulevard and three blocks east of S. Rancho Drive in Las Vegas, Clark County, Nevada. Groundwater is drained from two of the buildings' foundations, within the hospital campus, through dewatering trenches (French drains containing perforated pipes) to dedicated collection sumps, with separate systems serving to dewater each building, being the Pavilion and the Surgical Suites Systems.

The original permit was for discharge of groundwater collected in the foundation dewatering system of the portion of the hospital known as the Pavilion, built in 1977. This dewatering system has been designated as Outfall 001. Discharge goes into the storm drain at the intersection of Shadow Lane and Pinto Lane. Samples are collected from a valved sampling port located downstream of the collection sump and upstream of the discharge point. The collection system is composed of a French drain, made up of 120 feet of 4-inch diameter cast iron pipeline which connects into a 4-inch diameter high density polyethylene

(HDPE) pipe, that continues for an additional 240-feet, flowing into a dewatering sump. The collected groundwater is then discharged to the storm drain via a drop inlet at the corner of Pinto and Shadow Lanes.

In December 2007, with the completion of the new surgical wing, which also required foundation dewatering, an additional outfall was added during the next permit renewal cycle, being designated as Outfall 002, the Surgical Suite System. Dewatering at Outfall 002 is done via a sub-grade 4-inch diameter polyvinyl (PVC) pipe system, being 190-feet in length, then into a dewatering sump, which is pumped to a storm drain within the hospital grounds, and discharging into the Clark County storm drain system.

There is no treatment done at either outfall prior to discharge into the storm drain system.

VHMC's Operation and Maintenance (O&M) Manual was last reviewed and approved on January 23, 2018. The Technical, Compliance, and Enforcement (TCE) 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 January 23, 2028.

Outfall Summary

Outfall 001 – This external outfall is for the discharge of untreated, intercepted groundwater from the Pavilion's foundation and into the storm drain at Shadow Lane and Pinto Lane.

Outfall 002 – This external outfall is for the discharge of untreated, intercepted groundwater from the Surgical Suite's foundation, into a storm drain located on the hospital's grounds, adjacent to the parking area cul-de-sac, then out to the County's storm drain system.

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

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years January 2019 to December 2024, was reviewed as part of this permit renewal process, with averages done for each parameter and stated below.

Notes:

mg/L = Milligrams per Liter

µg/L = Micrograms per Liter

Gal/d = Gallons per Day

S.U.= Standard Units

TDS = Total Dissolved Solids

TIN = Total Inorganic Nitrogen

TPH = Total Petroleum Hydrocarbons

VOC = Volatile Organic Compounds

Outfall 001 (Pavillion Dewatering System):

Flow Rate: 58 Gal/d (Daily Maximum)

Ammonia (as N): 0.28 mg/L

Boron: 0.09 mg/L

Bromodichloromethane: 5.93 µg/L

Chlorodibromomethane: 5.45 µg/L

Chloroform: 8.84 µg/L

Nitrate (as N): 2.10 mg/L

Nitrite (as N): 0.17 mg/L

TIN: 2.31 mg/L

Phosphorus: 0.26 mg/L

TDS: 1,039 mg/L

Outfall 002 (Surgical Suites Dewatering System):

Flow Rate: 8,381 Gal/d
 Ammonia (as N): 0.47 mg/L
 Boron: 1.46 mg/L
 Di-n-butyl phthalate: 170 µg/L
 Nitrate (as N): 3.53 mg/L
 Nitrite (as N): 0.70 mg/L
 TIN: 4.27 mg/L
 Phosphorus: 0.17 mg/L
 TDS: 1,926 mg/L
 Zinc: 0.09 mg/L

For both outfalls, many of the Total Inorganics, TPHs, and VOCs, apart from those listed above, reported during the same period, were below detectable levels.

Pollutants of Concern

Pollutants of concern are any pollutant, or parameters, that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological conditions of the receiving water. Pollutants of concern are boron, iron, selenium, TDS, TIN, and VOCs.

Receiving Water

The dewatering systems discharge into two separate Clark County storm drain drop inlets, then into the Las Vegas Creek, which eventually flows to the Upper Las Vegas Wash. Water quality standards for the Upper Las Vegas Wash are specified in Nevada Administrative Code (NAC) 445A.2156.

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 Las Vegas Creek are not supported:

- The Aquatic Life beneficial use is impaired by 96-hour Selenium.

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

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

TMDL

Per section 303(d)(1)(C) of the Clean Water Act (CWA), states are required to develop Total Maximum Daily Loads (TMDLs) for parameters that do not meet 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. A quarterly sampling frequency is deemed appropriate to monitor the load to the Las Vegas Wash.

Compliance History

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

Proposed Effluent Limitations

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

Discharge Limitations Table for Sample Location 001 (Valley Hospital Pavilion) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Effluent Gross	001 ^[1]	Continuous	METER
Flow rate	Daily Maximum	M&R Gallons per Day (gal/d)		Effluent Gross	001 ^[1]	Continuous	METER

Notes (Discharge Limitations Table):

1. Discharge from Valley Hospital Pavilion dewatering system (discharge from collection sump to storm drain at corner of Pinto and Shadow Lane)

Discharge Limitations Table for Sample Location 001 (Valley Hospital Pavilion) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Boron, total recoverable	Daily Maximum		<= 0.75 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Iron, total recoverable	Daily Maximum		<= 1 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, inorganic total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
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] ^[2]	Daily Maximum		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Solids, total dissolved ^[2]	Daily Maximum		<= 1900 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Discharge from Valley Hospital Pavilion dewater system (discharge from collection sump to storm drain at corner of Pinto and Shadow Lanes).
2. Analysis shall be for the dissolved fraction.

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Arsenic, total (as As) ^[1]	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) ^[1]	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)) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Copper, dissolved (as Cu) ^[1]	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) ^[1]	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 (Valley Hospital Pavilion) 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) ^[1]	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) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Silver, total (as Ag) ^[1]	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) ^[1]	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 (Valley Hospital Pavilion) 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 (Supplementary)	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 (Valley Hospital Pavilion) 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	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1,2-Trichloroethane	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,2-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
1,2-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
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
Dichlorobromomethane	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 (Valley Hospital Pavilion) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Bromoform	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Methyl bromide (Bromomethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Carbon tetrachloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chloroform	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
cis-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Dibromochloromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Ethylbenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Methylene chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 001 (Valley Hospital Pavilion) 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. Analysis is for the dissolved fraction.

Discharge Limitations Table for Sample Location 002 (Surgical Suite) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Gallons per Day (gal/d)		Effluent Gross	002 ^[1]	Continuous	METER
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Effluent Gross	002 ^[1]	Continuous	METER

Notes (Discharge Limitations Table):

1. Discharge from Surgical Suite dewatering system (discharge from collection sump to storm drain within hospital grounds)

Discharge Limitations Table for Sample Location 002 (Surgical Suite) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Boron, total recoverable	Daily Maximum		<= 0.75 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Iron, total recoverable	Daily Maximum		<= 1 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, ammonia total (as N)	Daily Maximum	M&R Pounds per Day (lb/d)	M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, inorganic total	Daily Maximum		<= 20 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
Phosphorus, total (as P)	Daily Maximum	M&R Pounds per Day (lb/d)	M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Selenium, dissolved [as Se] ^[2]	Daily Maximum		<= 6.3 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Solids, total dissolved ^[2]	Daily Maximum		<= 1900 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Discharge from the Surgical Suite dewater system (discharge from collection sump to storm drain within hospital grounds).
2. Analysis shall be for the dissolved fraction.

Discharge Limitations Table for Sample Location 002 (Surgical Suite) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Arsenic, total (as As) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI)) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Copper, dissolved (as Cu) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cyanide, total (as CN)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Manganese, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (Surgical Suite) 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) ^[1]	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Molybdenum, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nickel, total (as Ni) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver, total (as Ag) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfide, total (as S)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Acrolein	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
.alpha.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (Surgical Suite) 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	002	Once Per Permit Term	DISCRT
4,4-DDT	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Diazinon	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Dieldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Endrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross (Supplementary)	002	Once Per Permit Term	DISCRT
Heptachlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Heptachlor epoxide	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lindane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Malathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (Surgical Suite) 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	002	Once Per Permit Term	DISCRT
Mirex	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nonylphenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Pentachlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Toxaphene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (Surgical Suite) To Be Reported Once During The Permit Term

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

Discharge Limitations Table for Sample Location 002 (Surgical Suite) To Be Reported Once During The Permit Term

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

Discharge Limitations Table for Sample Location 002 (Surgical Suite) 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	002	Once Per Permit Term	DISCRT
Toluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
trans-1,2-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
trans-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Trichlorofluoromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Vinyl chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

1. Analysis is for the dissolved fraction.

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Effluent Gross	003	Monthly	CALCTD ^[1]
Flow rate	Daily Maximum	<= 50000 Gallons per Day (gal/d)		Effluent Gross	003	Monthly	CALCTD ^[1]

Notes (Discharge Limitations Table):

1. Measure and report the sum of the total flow for the specific base (30-Day Average and Daily Maximum) between Outfall 001 and Outfall 002.

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Phosphorus, total (as P)	Daily Maximum	M&R Pounds per Day (lb/d)		Effluent Gross	003	Quarterly	CALCTD ^[1]
Nitrogen, ammonia total (as N)	Daily Maximum	M&R Pounds per Day (lb/d)		Effluent Gross	003	Quarterly	CALCTD ^[1]

Notes (Discharge Limitations Table):

1. The calculation for reporting each outfall is: Flow (gpd) ÷ 1,000,000 x Lab Analysis Concentration (mg/L) x 8.34 = pounds per day.

Summary of Changes From Previous Permit

Under Outfall 001 (The Pavilion) and Outfall 002 (Surgical Suites) To Be Reported Quarterly the following changes, additions, or deletions were made:

CHANGED - All the VOCs originally listed under this reporting period for both outfalls were moved to a "Once During the Permit Term" reporting period for each associated outfall, due to their non-detect results during the past five years.

CHANGED – Solids, total dissolved, with a "Daily Maximum" base, was changed FROM a "M&R Milligrams per Liter (mg/L)" Concentration TO a "1,900 Milligrams per Liter (mg/L)" concentration.

ADDED – Boron, total recoverable, with a "Daily Maximum" Base, a " ≤ 0.75 Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, a "001" or "002" Sample Location, a "Quarterly" Measurement Frequency, and a "Discrt" Sample Type.

ADDED – Iron, total recoverable, with a "Daily Maximum" Base, a " ≤ 1 Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, a "001" or "002" Sample Location, a "Quarterly" Measurement Frequency, and a "Discrt" Sample Type.

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

ADDED – Selenium, dissolved (as Se), with a "Daily Maximum" Base, a " ≤ 6.3 Micrograms per Liter (ug/L)" Concentration, an "Effluent Gross" Monitoring Location, a "001" or "002" Sample Location, a "Quarterly" Measurement Frequency, and a "Discrt" Sample Type.

ADDED – Nitrogen, nitrate total (as N), with a "Daily Maximum" Base, a "M&R Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, a "001" or "002" Sample Location, a "Quarterly" Measurement Frequency, and a "Discrt" Sample Type.

ADDED – Nitrogen, nitrite total (as N), with a "Daily Maximum" Base, a "M&R Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, a "001" or "002" Sample Point, a "Quarterly" Measurement Frequency, and a "Discrt" Sample Type.

Added Footnote 1.

1. Analysis shall be for the dissolved fraction.

CHANGED - Outfall 001 (The Pavilion) and Outfall 002 (Surgical Suites) To Be Reported “Annually” was changed to a “Once During the Permit Term” reporting period.

All associated parameters, being the VOCs listed under the Annual reporting table, were updated to this new reporting period; except for Boron, Iron, and Selenium, which were moved to the quarterly reporting period (see the Boron, Iron, Selenium listings above for additional information); no other changes were made to discharge limitations or monitoring requirements for these parameters.

The daily maximum limit for total phosphorous and total ammonia for Outfalls 001 and 002 has been changed from 1.0 lbd/day to monitor and report. Per a memo dated May 24, 2024, from the BWQP, dewatering discharge activities within the general Las Vegas area are, "...assumed to be part of the base phosphorous load recognized in the 1989 Lake Vegas Wash Total Phosphorous TMDL Load Allocation." Therefore, there is no WLA limit for total phosphorous associated with this permit. Using the same rationale, total ammonia, both concentration and mass, will be monitored and reported. The Division has determined that the previous requirement to limit total phosphorous and total ammonia to 1.0 bd/day was mistakenly applied and therefore, the removal of this requirement is consistent with the anti-backsliding conditions specified at CWA section 402(o)(2)(B)(ii).

Under Outfall 001 (The Pavilion) and Outfall 002 (Surgical Suites) To Be Reported Once During the Permit Term” the following parameters were added:

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 “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Outfall SUM to be the total of the flow rate total of both Outfalls 001 and 002.

ADDED – Flow rate, with a “30-Day Average” Base, a “M&R Million Gallons per Day (Mgal/d)” Quantity, an “Effluent Gross” Monitoring Location, a “SUM” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

ADDED – Flow rate, with a “Daily Maximum” Base, a “M&R Million Gallons per Day (Mgal/d)” Quantity, an “Effluent Gross” Monitoring Location, a “SUM” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

Technology Based Effluent Limitations

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

Water Quality Based Effluent Limitations

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

Per NAC 445A.2156, sampling is required for temperature, dissolved oxygen (D.O.), total suspended solids (TSS), fecal coliform, and *Escherichia coli* (*E. coli*). The discharge from this facility will travel many miles through the Clark County storm drain system before finally reaching the Las Vegas Wash; therefore,

sampling the discharge for temperature and D.O. is irrelevant in this instance. TSS is also not required to be sampled as groundwater, typically, has low suspended solids. Also, as there are no sources of *E. coli* or fecal coliform in the intercepted groundwater, sampling of these constituents are not required.

The proposed permit retains the daily maximum limit of 20 mg/L for TIN, under Outfall 002, as prescribed at NAC 445A.2156 in accordance with the requirement to maintain higher existing quality (RMHQ) standard as the Reasonable Potential Analysis (RPA) proved reasonable potential for TIN to cause or contribute to an instream excursion of the WQS. The limit for TIN was removed for Outfall 001 due to there being no reasonable potential for it to cause, or contribute to an excursion above any State water quality standard. Therefore, TIN will be M&R for Outfall 001.

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

The proposed permit retains the requirement to monitor and report VOCs, which were part of the priority pollutant list parameters in the previous permit, to satisfy antibacksliding requirements, even if the prior results have been non-detect during the past five (5) years, the Permittee is still only required to sample for VOCs once per permit term. There are no numerical limits for VOCs as these constituents either have a maximum contaminant level (MCL), or are regulated through NAC 445A.1236 for municipal or domestic supply, both of which do not apply to this section of the Las Vegas Wash; therefore, VOCs will be monitored and reported due to the multiple Bureau of Corrective Actions (BCA) remediation sites located around the discharge facility.

The proposed permit retains the requirement to sample for TDS based on the water quality standards stated under NAC 445A.2156, which includes a TDS requirement of 95% of the single value samples being less than or equal to 1900 mg/L. This updated concentration was inserted to adhere to current WQSs for the Las Vegas Wash; whereas, the previous permit had a monitor and report (M&R) reporting requirement. This limit was established as based on the RPA, due to the levels of TDS to cause the discharge to exhibit reasonable potential to cause, or contribute to, instream excursions above the applicable water quality criteria for TDS at both outfalls.

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

Based on the RPA, the discharge exhibits reasonable potential to cause, or contribute to, instream excursions above the applicable water quality criteria for TDS at both outfalls. Therefore, limits were included for TDS at Outfalls 001 and 002, and the limit for TIN has been retained for Outfall 002.

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

The proposed permit establishes effluent limits for toxic materials listed in NAC 445A.1236. Effluent limits in this permit were based on toxic materials criteria to protect the aquatic life, irrigation, and watering of livestock beneficial uses. Municipal or domestic supply is not a designated beneficial use for the Las Vegas Wash; therefore, effluent limits to protect this beneficial use were not included in this permit. Additionally, based on the average flow rate, the 96-hour limit was used. The proposed permit establishes once per permit term sampling of toxic materials as these constituents are listed in NAC 445A.1236. If, during the next renewal review process, the water quality data shows a reasonable potential (via a RPA) for any constituent, the Division will retain that constituent with a limit and may increase its sampling frequency. Toxic constituents that prove no reasonable potential may remain in future permits; however, a limit may not be associated with said constituent. The sampling frequency may remain once during the term of the permit, unless new information proves otherwise.

The permit establishes a concentration for Boron, being 0.75 milligrams per liter (mg/L), with a 96-hour average, 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. 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 proposed permit establishes a concentration for Iron, being 1.0 milligram per liter (mg/L), with a 96-hour average, based on the EPA's National Recommended Water Quality Criteria, published May 2009.

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

Because Flamingo Wash and the Las Vegas Wash at the Historic Lateral are impaired by Iron (i.e. on the 303(d) List), the proposed permit establishes a discharge limitation for Iron, Total (as Fe) of ≤ 1 mg/L in accordance with NAC 445A.1236.

Because the Flamingo Wash and the Las Vegas Wash at the Historic Lateral are impaired by Boron (i.e. on the 303(d) List), a limit for Boron has been added to this permit, with it being 0.75 mg/L, as established for the Las Vegas Wash.

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 requirement to monitor and report nitrate and nitrite has been established based on the RPA findings.

Basis for Effluent Limitations

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 per permit term.

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

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, with the exception of the VOCs and TPH, these limits have not changed.

The previous permit included the requirement to sample for TPH on a quarterly basis. After review of the DMR data, it was noted that TPH had been reported as non-detect, or below detection levels, since 2020. Due to the consistent non-detect values, the requirement to sample TPH on a quarterly basis has been changed to an once during the permit term basis.

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 for the municipal or domestic supply, both of which do not apply to this section of the Las Vegas Wash, the requirement to sample VOCs once a year has been changed to once a permit term. Refer to the Water Quality Based Effluent Limitations section.

The daily maximum limit for total phosphorous and total ammonia for Outfalls 001 and 002 have been changed from 1.0 lbd/day to monitor and report. Per a memo dated May 24, 2024, from the BWQP, dewatering discharge activities within the general Las Vegas area are, "...assumed to be part of the base phosphorous load recognized in the 1989 Lake Vegas Wash Total Phosphorous TMDL Load Allocation." Therefore, there is no WLA limit for total phosphorous associated with this permit. Using the same rationale, total ammonia, both concentration and mass, will be monitored and reported. The Division has determined that the previous requirement to limit total phosphorous and total ammonia to 1.0 bd/day was mistakenly applied and therefore, the removal of this requirement is consistent with the anti-backsliding conditions specified at 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

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 currently no planned discharges from future outfalls or facility changes.

Corrective Action Sites

Notes:

UST - Underground Storage Tank

(XXX, XXX) = (Container, Contaminant)

There are six (6) active Bureau of Corrective Action (BCA) remediation sites located within a one-mile radius of the permitted facility. The remediation sites are made up of the following cases: 8-001122 (UST, Gasoline), H-000038 (Unknown, Unknown Contaminant), H-000557 (Unknown, Diesel and Other), H-001337 (Other, Solvents), and H-001371 (Unknown, Solvents). BCA does not anticipate any impact(s) between the remediation sites and the permitted facility.

Wellhead Protection Program

The outfalls are 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 public water system (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 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 prepared and stamped by a licensed, qualified Nevada engineer (P.E.) or minimally prepared and reviewed by a qualified professional.	1/23/2028

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMR	Quarterly	4/28/2026
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. **12/8/2025**, 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: **10/29/2025**

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?
Zinc, Total Recoverable	ug/L	1	0.8	445	Acute Aquatic Life	No
Chlorodibromomethane	ug/L	1	71.9	No Criteria		No
Chloroform	ug/L	1	116.7	No Criteria		No
Dichlorobromomethane	ug/L	1	78.3	No Criteria		No
Ammonia, Total (as N)	mg/L	9	1.31	No Criteria		No
Boron	ug/L	2	0.76	750	Irrigation	No
Nitrate, Total (as N)	mg/L	8	13.32	No Criteria		No
Nitrite, Total (as N)	mg/L	8	0.57	No Criteria		No
Nitrogen, total inorganic	mg/L	8	15.28	20	RMHQ	No
Phosphorus, Total (as P)	mg/L	8	2.36	No Criteria		No
Total Dissolved Solids	mg/L	8	8,791.29	1900	RMHQ	Yes

Summary of Reasonable Potential Analysis

Parameter	Units	No. of Effluent Samples	Critical Effluent Concentration	Most Stringent Criterion	Criterion Basis	Does RP Exist?
Zinc, Total Recoverable	ug/L	1	1.1	445	Acute Aquatic Life	No
Di-N-Butyl Phthalate	ug/L	1	2243.469546	34000	Municipal or Domestic	No
Ammonia, Total (as N)	mg/L	8	2.67	No Criteria		No
Boron	ug/L	2	11.24	750	Irrigation	No
Nitrate, Total (as N)	mg/L	9	14.91	No Criteria		No
Nitrite, Total (as N)	mg/L	9	5.65	No Criteria		No
Nitrogen, total inorganic	mg/L	9	20.79	20	RMHQ	Yes
Phosphorus, Total (as P)	mg/L	8	1.05	No Criteria		No
Total Dissolved Solids	mg/L	8	9,457.30	1900	RMHQ	Yes