



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: LAS VEGAS CONVENTION AND VISITORS AUTHORITY
3150 PARADISE ROAD
LAS VEGAS, NV 89109

Permit Number: NV0023841

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

Designation: MINOR NPDES

New/Existing: EXISTING

Location: FORMER HUDSON CLEANERS, CLARK
252 CONVENTION CENTER DRIVE, LAS VEGAS, NV 89109
LATITUDE: 36.132995, LONGITUDE: -115.160731
TOWNSHIP: T21S, RANGE: R61E, SECTION: S9

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	001 - INFLUENT GROUNDWATER SAMPLING PORT & TOTALIZING FLOW METER	Internal Outfall		36.132366	-115.161021	LAS VEGAS WASH VIA CLARK COUNTY STORM DRAIN SYSTEM
002	002 - MIDFLUENT - SAMPLING PORT BETWEEN CARBON VESSELS	Internal Outfall		36.133650	-115.160194	LAS VEGAS WASH VIA CLARK COUNTY STORM DRAIN SYSTEM
003	003 - TREATED EFFLUENT DISCHARGE - FINAL DISCHARGE TO STORM DRAIN DROP INLET	External Outfall		36.132424	-115.161033	LAS VEGAS WASH VIA CLARK COUNTY STORM DRAIN SYSTEM

Permit History/Description of Proposed Action

The Permittee, Las Vegas Convention and Visitors Authority (LVCVA), has applied for the renewal of their National Pollutant Discharge Elimination System Permit NV0023841, for the Former Hudsons Cleaners located at 252 Convention Center Drive, in Las Vegas, within Clark County, Nevada. The Permittee proposes to continue to discharge treated, intercepted groundwater to the Las Vegas Wash via the Clark County storm drain system.

This permit was first issued on October 1, 2010. The most recent permit was issued on May 30, 2017, and expired on May 29, 2022; the permit has been administratively continued since.

Facility Overview

The historical operations at the former Hudson Cleaners were identified as a Recognized Environmental Condition (REC), during a Phase I Environmental Site Assessment, conducted in May 2007. Subsequent subsurface investigations conducted by others in 2007 and 2008 identified tetrachloroethylene (PCE) concentrations, in the temporary monitoring wells, exceeding the regulatory maximum contaminant level (MCL) of 5 ug/L. The discovered solvent plume (Bureau of Corrective Actions (BCA) Case No. H000708) was determined to be commingling with an offsite, downgradient chlorinated solvent plume already being

remediated (BCA Case No. 8000841).

In 2018, the LVCVA purchased the property and continued groundwater monitoring and corrective actions at the site. The LVCVA plans to continue their pump & treat groundwater remediation system associated with the Hudson Dry Cleaners contamination plume, located under the Somerset Shopping Center. The remediation system, under normal operational and maintenance conditions, is designed to remove the PCE and Trichloroethylene (TCE) to below 5 micrograms/liter concentration levels each from the affected groundwater. The remediation goals and effectiveness of this project are closely monitored by the NDEP's Bureau of Corrective Actions (BCA site #8-000708).

The project site currently has 16 Soil Vapor Points (SVPs), 16 Air Sparge Points (ASPs), and 5 Groundwater Extraction Wells (GWEs) which also can be used as additional SVPs. Currently these are cycled through utilizing only 6 to 7 SVPs and up to 2 ASPs at any time.

The PCE and TCE impacted groundwater and soil vapor are extracted from the remediation wells via a groundwater pump and treat system and vapor extraction system installed at the subject site. The recovered vapor stream and groundwater stream is piped through flexible tubing to the top of the wellhead and is connected to solid two-inch polyvinyl chloride (PVC) piping, which runs underground to the remediation compound. At the remediation compound, the piping rises above ground and discharges into the dual phase extraction system (DPE) air/water separator. From the DPE air/water separator, the extracted vapor stream is routed through a vacuum then directed to a 500 cubic feet per second blower. The on-site vacuum blower provides the extraction forces for the DPE system. The air effluent stream is discharged from the atmosphere under a Certificate of Non-applicability from the Clark County Department of Air Quality and Environmental Management based on the potential to emit below the applicable threshold.

From the air/water separator, the separated groundwater stream is first pumped via a transfer pump through polyvinyl tubing to a batch tank. Groundwater is then polished by two 2,000-pound aqueous carbon vessels loaded with granulated activated carbon (GAC) connected in series. The two GAC units can be interchanged as necessary and when operation warrants for optimum efficiency of the treatment system. From the aqueous GAC vessels, the treated groundwater effluent stream is then pumped through a flow totalizer and subsurface conveyance piping prior to discharge to a Clark County storm drain system (Outfall 003) located west of the intersection of Kishner Drive and Convention Center Drive, which outlets to the Flamingo Wash and into the Las Vegas Wash.

The LVCVA's Operation and Maintenance (O&M) Manual was last reviewed and approved on February 8, 2018. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every ten (10) years, with an updated O&M Manual due on March 1, 2028.

Outfall Summary

Outfall 001 This internal outfall is for measuring and monitoring of the incoming influent prior to it entering the GAC canister system, being a sample port located on the influent line.

Outfall 002 This internal monitoring point, being the midpoint sampling, is for the measuring and monitoring of the partially-treated, effluent prior to entering the second GAC canister.

Outfall 003 This external outfall is for the discharge of treated, intercepted groundwater to the storm drain.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from the years July 2020 to August 2025, was reviewed as part of this permit renewal process. Discharge flow rates, under Outfall 003 (Treated Effluent), were not required to be reported under the last permit but will be added during this renewal cycle.

Notes:

mg/L = Milligrams per Liter

Mgal/d = Million Gallons per Day
 ug/L = Micrograms per Liter
 N = Nitrogen
 S.U. = Standard Units
 TDS = Total Dissolved Solids
 TIN = Total Inorganic Nitrogen
 TPH = Total Petroleum Hydrocarbons

Outfall 001 (Influent Sampling Port and Totalizing Flow Meter):

Flow Rate, Daily Maximum: 0.03 Mgal/d
 Flow Rate, 30-Day Average: 0.02 Mgal/d
 pH: 7.22 S.U.
 TDS: 1,943 mg/L
 TPH: 0.09 mg/L
 Tetrachloroethylene: 170 ug/L
 Trichloroethylene: 1.6 ug/L

Outfall 002 (Mid-fluent Sampling Port)

TPH: 0.08 mg/L
 Tetrachloroethylene: 25 ug/L
 Trichloroethylene: 0.08 ug/L

Outfall 003 (Treated Effluent):

Alkalinity, bicarbonate: 150 mg/L
 Alkalinity, total: 150 mg/L
 Ammonia as N: 2.10 mg/L
 Beryllium: 0.2 ug/L
 Chloroform: 6.2 ug/L
 Chromium: 19 ug/L
 Fluoride: 440 ug/L
 Iron: 8.25 ug/L
 Manganese: 8 ug/L
 Methyl Chloride: 2 ug/L
 pH: 7.25 S.U.
 Phosphorus: 0.016 mg/L
 Selenium: 8.75 ug/L
 TDS: 2,065 mg/L
 TIN: 5.70 mg/L
 TPH: non-detect
 Tetrachloroethylene: non-detect
 Trichloroethylene: non-detect
 Zinc: 13.93 ug/L

Note: The remaining volatile organic chemicals (VOCs), heavy metals, and toxic materials 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 Ammonia (as N), Boron, Copper, Iron, Phosphorus, Selenium, TDS, TIN, PCE, TCE, and the toxic materials listed under Nevada Administrative Code (NAC) 445A.1236.

Receiving Water

The treated groundwater is discharged into a Clark County storm drain inlet, and into the Flamingo Wash, which eventually discharges to the Upper Las Vegas Wash above the Treatment Plants.

Applicable Water Quality Standards/Beneficial Uses

The WQSs for the nearest downstream control point, “Las Vegas Wash at the Historic Lateral” (NAC 445A.2156) apply. WQSs for the Las Vegas Wash at the Historic Lateral includes beneficial uses for watering of livestock, irrigation, aquatic life, recreation not involving contact with the water, propagation of wildlife, and maintenance of a freshwater marsh. Additional WQSs applicable to this section of the Las Vegas Wash include toxic materials (NAC 445A.1236). Furthermore, water quality narrative standards applicable to all surface waters (NAC 445A.121) apply.

303 (d) Listing Status

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

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

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

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

TMDL

Per Section 303(d)(1)(C) of the Clean Water Act (CWA), states are required to develop Total Maximum Daily Loads (TMDLs) for parameters that do not meet water quality standards for a water body. TMDLs are implemented during the permitting process by limiting the load of 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 TMDLs apply to the downstream segment - Las Vegas Wash at Lake Mead (NAC 445A.2158).

Waste Load Allocation

The Las Vegas Wash at Lake Mead (NAC 445A.2158) has established TMDLs for total ammonia (as N) and total phosphorus. Per the Bureau of Water Quality Planning (BWQP) memo dated May 16, 2024, “For NPDES permitting purposes, total phosphorus discharge loads associated with groundwater dewatering activities in the Las Vegas area can be assumed to be part of the base phosphorus load recognized in the 1989 Las Vegas Wash Total 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 loads to the Las Vegas Wash.

Compliance History

The facility has been in compliance with the permit during the period reviewed being July 2020 through August 2025.

Proposed Effluent Limitations

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

Discharge Limitations Table for Sample Location 001 (Influent Groundwater Sampling Port And Totaling Flow Meter) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	<= 0.50 Million Gallons per Day (Mgal/d)		Internal Monitoring Point	001	Continuous	METER
Flow rate	Daily Maximum	<= 0.50 Million Gallons per Day (Mgal/d)		Internal Monitoring Point	001	Continuous	METER

Discharge Limitations Table for Sample Location 001 (Influent Groundwater Sampling Port And Totalizing Flow Meter) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Hydrocarbons, total petroleum	Daily Maximum		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	001	Quarterly	DISCRT
pH	Value		M&R Standard Units (SU)	Internal Monitoring Point	001	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	001	Quarterly	DISCRT
Tetrachloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Internal Monitoring Point	001	Quarterly	DISCRT
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Internal Monitoring Point	001	Quarterly	DISCRT

Discharge Limitations Table for Sample Location 002 (Midfluent - Sampling Port Between Carbon Vessels) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Hydrocarbons, total petroleum	Daily Maximum		M&R Milligrams per Liter (mg/L)	Internal Monitoring Point	002	Monthly	DISCRT
Tetrachloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Internal Monitoring Point	002	Monthly	DISCRT
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Internal Monitoring Point	002	Monthly	DISCRT

Discharge Limitations Table for Sample Location 003 (Treated Effluent Discharge - Final Discharge To Storm Drain Drop Inlet) 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 Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER

Discharge Limitations Table for Sample Location 003 (Treated Effluent Discharge - Final Discharge To Storm Drain Inlet) 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	003	Quarterly	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 29 Micrograms per Liter (ug/L)	Effluent Gross	003	Quarterly	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
Iron, total recoverable	Daily Maximum		<= 1000 Micrograms per Liter (ug/L)	Effluent Gross	003	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	003	Quarterly	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		<= 5 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
Nitrogen, inorganic total	Daily Maximum		<= 20 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	003	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.5 Standard Units (SU)	Effluent Gross	003	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	003	Quarterly	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		<= 6.3 Micrograms per Liter	Effluent Gross	003	Quarterly	DISCRT

Discharge Limitations Table for Sample Location 003 (Treated Effluent Discharge - Final Discharge To Storm Drain Inlet) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
			(ug/L)				
Solids, total dissolved	Daily Maximum		<= 3000 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
Tetrachloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	003	Quarterly	DISCRT
Trichloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	003	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Loading (lbs/day) = Flow (Mgal/d) x Concentration (mg/L) x 8.34.

Discharge Limitations Table for Sample Location 003 (Treated Effluent Discharge - Final Discharge To Storm Drain Inlet) 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)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Chromium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI)) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III)) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Cyanide, total (as CN)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Manganese, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 003 (Treated Effluent Discharge - Final Discharge To Storm Drain Inlet) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Molybdenum, total recoverable	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Nickel, total (as Ni) ^[1]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Sulfide, total (as S)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Acrolein	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Aldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
.alpha.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Chlorpyrifos	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 003 (Treated Effluent Discharge - Final Discharge To Storm Drain Inlet) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
4,4-DDT	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Diazinon	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Dieldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Endrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Heptachlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Heptachlor epoxide	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Lindane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Malathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Methoxychlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 003 (Treated Effluent Discharge - Final Discharge To Storm Drain Inlet) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Mirex	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Nonylphenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Pentachlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Toxaphene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	003	Once Per Permit Term	DISCRT

Notes (Discharge Limitations Table):

1. Analysis to be done to the dissolved fraction.

Summary of Changes From Previous Permit

Under the permit the following change was made to the Discharge Locations Table:

CHANGED – Under Outfall 001, the location type was changed from “External Outfall” to an “Internal Outfall” based on Division naming standards for influent outfalls.

Under Outfall 001, To Be Reported Monthly, the following deletions were made:

DELETED - Hydrocarbons, total petroleum, with a “Daily Maximum” Base.

DELETED – pH, with a “Daily Maximum” Base.

DELETED – Solids, total dissolved, with a “Daily Maximum” Base.

DELETED – Tetrachloroethylene, with “Daily Maximum” Base.

DELETED – Trichloroethylene, with a “Daily Maximum” Base.

ADDED – Outfall 001, To be Reported Quarterly, with the following associated parameters:

ADDED – Hydrocarbons, total petroleum, with a “Daily Maximum” Base, a “M&R Milligrams per Liter (mg/L)” Concentration, a “Internal Monitoring Point” Monitoring Location, a “001” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – pH, with a “Value” Base, a “M&R Standard Units (S.U.)” Concentration, a “Internal Monitoring Point” Monitoring Location, a “001” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Tetrachloroethylene, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Internal Monitoring Point” Monitoring Location, a “001” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Trichloroethylene, with a “Daily Maximum” Base, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Internal Monitoring Point” Monitoring Location, a “001” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

CHANGED - Under Outfall 002, both Reported Monthly and Quarterly, the Monitoring Location was changed from "Internal Monitoring Point" to "Internal Monitoring Location" to be consistent with other similar system naming conventions.

Under Outfall 003, To Be Reported Monthly, the following parameters were added or deleted:

ADDED – Flow Rate, with a “30-Day Average” Base, a “M&R Million Gallons Per Day (Mgal/d)” Quantity, a “Effluent Gross” Monitoring Location, a “003” Sample Location, a “Continuous” Measurement Frequency, and a “Meter” Sample Type.

ADDED – Flow Rate, with a “Daily Maximum” Base, a “M&R Million Gallons Per Day (Mgal/d)” Quantity, a “Effluent Gross” Monitoring Location, a “003” Sample Location, a “Continuous” Measurement Frequency, and a “Meter” Sample Type.

DELETED – Hydrocarbons, total petroleum, with a “Daily Maximum” Base.

DELETED – pH, Maximum, with a “Daily Maximum” Base.

DELETED – pH, Minimum, with a “Daily Minimum” Base.

DELETED – Solids, total dissolved, with a “Daily Maximum” Base.

DELETED – Tetrachloroethylene, with a “Daily Maximum” Base.

DELETED – Trichloroethylene, with a “Daily Maximum” Base.

Under Outfall 003, To Be Reported Quarterly, the following parameters were added:

ADDED – Boron, total recoverable, with a “Daily Maximum” Base, a “≤750 Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Copper, dissolved (as Cu), with a “Daily Maximum” Base, a “≤29 Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Hydrocarbons, with a “Daily Maximum” Base, a “ ≤ 1 Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Iron, total recoverable, with a “Daily Maximum” Base, a “ $\leq 1,000$ Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Nitrogen, ammonia total (as N), with a “Daily Maximum” Base, a “M&R Pounds per Day (lb/d)” Quantity, a “M&R Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Nitrogen, nitrate total (as N), with a “Daily Maximum” Base, a “ ≤ 90 Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Nitrogen, nitrate total (as N), with a “Daily Maximum” Base, a “ ≤ 5 Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Nitrogen, inorganic total, with a “Daily Maximum” Base, a “ ≤ 20 Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – pH, Maximum, with a “Daily Maximum” Base, a “ ≤ 9.0 Standard Units (S.U.)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – pH, Minimum, with a “Daily Minimum” Base, a “ ≥ 6.5 Standard Units (S.U.)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Phosphorus (as P), with a “Daily Maximum” Base, a “M&R Pounds per Day (lb/d)” Quantity, a “M&R Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Selenium, dissolved (as Se), with a “Daily Maximum” Base, a “ ≤ 6.3 Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Solids, total dissolved, with a “Daily Maximum” Base, a “ $\leq 3,000$ Milligrams per Liter (mg/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Tetrachloroethylene, with a “Daily Maximum” Base, a “ ≤ 5 Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

ADDED – Trichloroethylene, with a “Daily Maximum” Base, a “ ≤ 5 Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Type, a “Quarterly” Measurement Frequency, and a “Discret” Sample Type.

Along with Footnote 1:

1. Loading (lbs/day) = Flow (Mgal/d) x Concentration (mg/L) x 8.34.

Under Outfall 003, To Be Reported Once During the Permit Term, the following parameters were either added or deleted:

DELETED – Priority pollutants that were reported as non-detect during the past five years and found to be not applicable to the plumes being treated.

ADDED – Toxic materials, as described under NAC 445A.1236, with a “Daily Maximum”, a “M&R Micrograms per Liter (ug/L)” Concentration, a “Effluent Gross” Monitoring Location, a “003” Sample Location, a “Once During the Permit Term” Measurement Frequency, and a “Discret” Sample Type.

Under Special Approvals / Conditions Table, the terms were changed to reflect a clearer order of required items and are listed below:

1. Every precaution must be taken in the application of the Best Management Practices to prevent and control transport of pollutants into the Clark County Storm Drain during the groundwater remediation project.
2. The Permittee shall report all events of Activated Carbon Medium replacements in the carbon canisters. The quantity of carbon replaced shall be reported in units of pounds per event (lb/event).
3. Spent carbon shall be replaced when breakthrough has been detected, with the fresh carbon being placed in the final vessel and the oldest carbon being placed in the first vessel.
4. The LVCVA bears the sole responsibility to ensure that the requirements of this permit are fully satisfied.

Technology Based Effluent Limitations

Technology based effluent limitations are not applicable to this permit.

Water Quality Based Effluent Limitations

The following water quality based effluent limit (WQBEL) requirements, based on NAC 445A.2156, are included in the proposed permit to ensure that the discharge does not cause WQS violations. In addition, the proposed permit requires monitoring and reporting of constituents that are subject of WQSS and may be present in the discharge. Per NAC 445A.2156, sampling is required for temperature, dissolved oxygen (D.O.), total suspended solids (TSS), fecal coliform, and *E. coli*. The discharge from 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. Since the discharge is not associated with treated wastewater, sampling of fecal coliform and *E. coli* are not required.

The proposed permit retains a daily maximum limit of 9.0 standard units (S.U.) and a daily minimum limit of 6.5 S.U. for pH as prescribed at NAC 445A.2156 to protect the aquatic life designated beneficial use, along with establishing a quarterly reporting requirement.

NAC 445A.2156 includes an requirement to maintain existing high quality (RMHQ) for TDS in the Las Vegas Wash at the Historic Lateral of 1,900 mg/L with at least 95 percent of samples being equal to or less than the single value. NAC 445A.2156 also includes water quality criterion for TDS of 3,000 mg/L, as a single value, to protect the watering of livestock beneficial use.

From July 2020 to August 2025, the effluent TDS ranged from 1,700 mg/L to 2,300 mg/L for Outfall 003. The current project, by design, does not alter the background TDS, as such the TDS concentration in the effluent is the same as that of the influent. The results of the RPA determined that there is reasonable potential for TDS to exceed the RMHQ and beneficial use standards, therefore, a limit for this constituent was added to the permit address this.

The TDS in the intercepted groundwater is consistent with the assumptions for the natural background water per NAC 445A.120(2), “Natural water conditions may, on occasion, be outside the limits established by

standards. The standards adopted in NAC 445A.070 to 445A.2234, inclusive, related to the condition of waters as affected by discharges relating to human activities. It also follows that the intercepted groundwater is consistent with NAC 445A.121(8), which states, "The specified standards are not considered violated when the natural conditions of the receiving water are outside the established limits, including periods of extreme high or low flow."

Therefore, a limit of 3,000 mg/L for TDS is deemed protective of the receiving water and sufficient to continue to maintain the RMHQ for the Las Vegas Wash along with establishing a quarterly reporting requirement.

Reasonable Potential Analysis (RPA)

Section 301(b)(1)(c) of the CWA requires effluent limitations necessary to meet WQSs, and Title 40 of the Code of Federal Regulation (CFR) Section 122.44(d) requires permits to include conditions that are necessary to achieve WQSs established under Section 303 of the CWA, including state narrative criteria for water quality. Federal regulations at 40 CFR 122.44(d)(1)(i) state, "Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." The process to determine whether a WQBEL is required as described in 40 CFR 122.44(d)(1)(i) is referred to as a reasonable potential analysis, or RPA. Furthermore, NAC 445A.243 requires the Division to consider the establishment of effluent limitations necessary to meet WQSs.

For conducting the RPA, the Division used a mass balanced approach to determine the expected critical downstream receiving water concentration using statistics recommended in the United States Environmental Protection Agency's Technical Support Document (TSD) for Water Quality Based Toxic Control for statistically calculating the projected maximum effluent concentration (i.e., Table 31 of the TSD using the 99 percent probability basis and 99 percent confidence interval). For purposes of the RPA, the critical receiving water flow was assumed to be zero (i.e., no dilution); therefore, the critical effluent pollutant concentrations were compared with the most restrictive water quality criteria under NAC 445A.1236 and NAC 445A.2156 to determine if the discharge has reasonable potential to cause, or contribute to, an excursion above a State WQS. The RPA was based on data collected from July 2020 to August 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 Copper, Selenium, and TDS at Outfall 003. Therefore, limits were included for Copper, Selenium, and TDS for Outfall 003.

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

Per NAC 445A.1236, the standards for toxic materials apply. Most of the toxic materials listed only have water quality criteria to protect the municipal or domestic supply beneficial use which is not applicable to the section of the Las Vegas Wash receiving the discharge. Therefore, only the toxic materials with water quality criteria to protect the aquatic life, irrigation, and watering of livestock beneficial uses apply.

The proposed permit establishes a daily maximum limit of M&R Micrograms per Liter (ug/L) for the toxic materials, referenced above, to be reported on a once during the permit term basis. If, during the next renewal review process, the water quality data shows a reasonable potential (via a Reasonable Potential Analysis) for any constituent, the Division will retain that constituent, and may increase the associated sampling frequency, during the next permit renewal cycle.

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

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

The proposed permit establishes a daily maximum limit of 1,000 ug/L for Iron, as prescribed by NAC 445A.1236 and based on it being included in the 303(d) list, to be reported quarterly.

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

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

The proposed permit establishes a daily maximum limit of 20 mg/L for TIN, as per NAC 445.2156, along with a quarterly reporting requirement.

The proposed permit establishes a daily maximum limit of 6.3 ug/L for Selenium. This limitation for Selenium is due to the 303(d) listing of this parameter being a pollutant of concern for the Flamingo Wash, being as it is the receiving water, along with the Las Vegas Wash. The sampling frequency has increased from once during the permit term to quarterly.

Basis for Effluent Limitations

The proposed permit retains the requirement to sample TPH due to concern of potential migration of groundwater plumes located within a mile of the discharge location. TPH is a mixture of chemicals found in crude oil and petroleum productions like gasoline, diesel, and motor oil. Due to the known active BCA remediation sites that had a release of gasoline within a one-mile radius of the former Hudson Cleaner remediation site, there is potential for the constituent to show up in the discharge. Continued monitoring is required, even if the levels have been below detection during the past five years, with the limit of 1 milligram per liter (mg/L) being maintained. A quarterly reporting requirement has been established based on non-detect levels being reported for the past five years.

The proposed permit retains the requirement to sample trichloroethylene (TCE), which is commonly used as an industrial solvent, was added to the initial permit due to its presence in the intercepted groundwater. Although TCE has not been detected for past five years, the proposed permit retains the requirement to sample for TCE and retains a limit of 5.0 micrograms per liter (ug/L), along with a quarterly reporting requirement based on non-detect levels being reported for the past five years.

The proposed permit retains the requirement to sample tetrachloroethylene (PCE), a chlorinated solvent used as a solvent and degreaser, in the case of the associated plume as discussed in the Facility Description Section, specifically for historical drycleaning applications. Although PCE has been non-detect for the past five years, the proposed permit retains the requirement to sample for PCE and retains a limit of 5.0 micrograms per liter (ug/L), along with establishing a quarterly reporting requirement.

Anti-backsliding

Sections 303(d) 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. CWA Regulation 402(0)(2), provides specific exceptions for the relaxation of the permit's effluent limitations under certain circumstances, in this case being the current information now available for this permit was not available at the time of permit issuance, with WQSs becoming more exact to ensure that water quality is maintained in the both the Flamingo Wash and the Las Vegas Wash.

Due to pollutants of concern being non-detect during the past five years, the monthly reporting requirement for both the incoming influent and the treated effluent were changed from monthly to quarterly reporting.

Antidegradation

The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 565 and is consistent with the federal antidegradation policy found at Title 40 in

the CFR section 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface water and maintain the unique attributes and special characteristics and water quality associated with high-quality waters. This objective is achieved through the implementation of procedures to ensure that water is protected from regulated activities that have the potential to degrade the water quality.

The regulation uses four (4) tiers of antidegradation protection. Tier 1 protects water quality for beneficial uses of the water on a parameter-by-parameter basis. Tier 2 protects high-quality waters where data show the water quality is better than levels needed to protect beneficial uses (on a parameter-by-parameter basis). Tier 2.5 and Tier 3 protect water quality and the special characteristics of waterbodies designated with the beneficial uses of "extraordinary, ecological, aesthetic or recreation value" (NAC 445A.122). The Division will conduct an antidegradation review only when a permit application is submitted for a new or expanding point source discharge to a surface water or for a new or altered zone of mixing.

Since the proposed renewal of this permit does not include a new, or expanding, point source discharge; or, a new or altered zone of mixing, the antidegradation review is not required.

Special Conditions

See the Special Approvals / Conditions Table below.

SA – Special Approvals / Conditions Table

Item #	Description
1	Every precaution must be taken in the application of the Best Management Practices to prevent and control transport of pollutants into the Clark County Storm Drain during the groundwater remediation project.
2	The Permittee shall report all events of Activated Carbon Medium replacements in the carbon canisters. The quantity of carbon replaced shall be reported in units of pounds per event (lb/event).
3	Spent carbon shall be replaced when breakthrough, between the vessels, has been detected, with the fresh carbon being placed in the final vessel and the oldest carbon being placed in the first vessel.
4	The LVCVA bears the sole responsibility to ensure that the requirements of this permit are fully satisfied.

Discharges From Future Outfalls/ Planned Facility Changes

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

Corrective Action Sites

There are five (5) active BCA sites located within a one-mile radius of the permitted facility. The discovered solvent plume (Case No. H-000708) was determined to be commingling with an off-site, downgradient chlorinated solvent plume already being remediated (Case No. 8-000841) with treatment systems being installed at the permitted site to treat the plumes, while the three (3) other active cases being for leaking underground storage tanks (8-000753 and 8-001471, gasoline and benzene, along H-000511, solvents). BCA doesn't feel that the renewal of this permit will cause any issues with the active cleanup areas.

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 PWS well.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS-2A Minimum Information for an Operations and Maintenance (O&M) Manual for Pump-and-Treat Facilities and Dewatering Operations.	3/28/2028

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 and Reports	Annually	1/28/2027

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at <https://ndep.nv.gov/posts>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **4/28/2026**, 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: **3/19/2026**

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	3	106.8	30	Chronic Aquatic Life	Yes
Iron, Total Recoverable	ug/L	3	48.9	1,000	Chronic Aquatic Life	No
Manganese, Total Recoverable	ug/L	3	45.0	200	Irrigation	No
Selenium, Total Recoverable	ug/L	3	51.2	6.3	Chronic Aquatic Life	Yes
Zinc, Total Recoverable	ug/L	3	185.5	388	Acute Aquatic Life	No
Nitrogen, total inorganic	mg/L	2	45.10	20	RMHQ	Yes
Total Dissolved Solids	mg/L	69	5,047.04	1900	RMHQ	Yes