



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: CAESARS PALACE HOTEL AND CASINO
ONE CAESARS PALACE DRIVE
LAS VEGAS, NV - 89109

Permit Number: NV0023191

Location: CAESARS PALACE HOTEL AND CASINO, CLARK
3570 SOUTH LAS VEGAS BOULEVARD, LAS VEGAS, NV - 89109
LATITUDE: 36.116219, LONGITUDE: -115.174572
TOWNSHIP: T21S, RANGE: R61E, SECTION: S17

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	001,TREATMENT SYSTEM EFFLUENT	External Outfall		LAS VEGAS	NV	89109	CLARK	36.116219	-115.174572	FLAMINGO WASH
002	002,TREATMENT SYSTEM EFFLUENT	External Outfall		LAS VEGAS	NV	89109	CLARK	36.116219	-115.174572	FLAMINGO WASH

General:

The Permittee, Caesars Palace Hotel and Casino, has applied for the renewal of its United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permit to discharge groundwater (from dewatering) to the Clark County storm drain system. The facility is Caesars Palace Hotel and Casino, which is located at 3570 South Las Vegas Boulevard, Las Vegas, Nevada.

The site has been dewatering for over 13 years to protect the structural integrity of the parking garage and Forum Shops. The water is collected via passive drains at each location and discharged to the municipal storm drain system. Treatment is required due to the presence of organic contaminants, including tetrachloroethylene (PCE) and trichloroethylene (TCE). Historical records indicate a portion of the site was previously occupied by a gas station and dry cleaning facility. Treatment is via sediment filtration and carbon adsorption.

Discharge Characteristics:

Since the original issuance of this permit in 2002, the majority of reported discharged flow rates of groundwater from the parking garage (Outfall 001) and the Forum Shops (Outfall 002) were less than 30,000 gallons per day (gpd) and less than 4,000 gpd, respectively. The maximum reported discharge rates from the parking garage and the Forum Shops were approximately 135,000 gpd and 15,000 gpd, respectively. Discharge Monitoring Reports (DMRs) from July 2008 through December 2014 listed no exceedances of the permit limits.

Receiving Water:

The treated groundwater is discharged to the Flamingo Wash (tributary of Las Vegas Wash) via the Clark County storm drain system. The Nevada Administrative Code (NAC) 445A.2156 sets the standards of water quality for the body of water known as Las Vegas Wash from the confluence of the discharges from the City of Las Vegas and Clark County wastewater treatment plants to Telephone Line Road.

Summary of Changes From Previous Permit:

- The previous permit showed the incorrect facility street address of 3750 Las Vegas Boulevard South. This permit reflects the correct facility street address of 3570 South Las Vegas Boulevard.
- The dewatering treatment system has a capacity of 288,000 gpd (parking garage) and 144,000 gpd (Forum Shops). However, the permittee applied for reduced flow rate limits of less than 182,000 gpd (parking garage) and less than or equal to 68,000 gpd (Forum Shops) because the greatest observed total discharge rate from both outfalls has always been below 250,000 gpd.
- Required monitoring locations for influent to the treatment system and final carbon canister have been removed. This change was to make this permit consistent with other NPDES dewatering permits issued by NDEP.
- Quarterly reporting for Priority Pollutant metals has been reduced to annually. This change was to make this permit consistent with other NPDES dewatering permits issued by NDEP. The shallow groundwater with these naturally occurring constituents would flow to Las Vegas Wash were it not intercepted by the dewatering system. This parameter will be monitored and reported annually to allow NDEP the opportunity to review and ensure concentrations remain consistent with background levels and degradation of waters does not occur.
- Quarterly monitoring and reporting of nitrate plus nitrite concentrations has been removed from this permit because it is redundant (used to calculate the total inorganic nitrogen concentration).

Proposed Effluent Limitations:

The water discharged from the dewatering treatment systems to the Clark County storm drain system shall be monitored and reported by the Permittee as specified below.

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	< 182,000 Gallons per Day (gal/d)		Effluent Gross	001	Continuous	METER
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Effluent Gross	001	Continuous	METER

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
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
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
1,1,2-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
1,1-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
1,2-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
1,2-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
1,2-Dichloropropane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
1,3-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter	Effluent Gross	001	Quarterly	DISCRT

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
			(ug/L)				
1,4-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
2-Chloroethyl vinyl ether, (mixed)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Benzene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Dichlorobromomethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Bromoform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Methyl bromide (Bromomethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Carbon tetrachloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Chlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Chloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Chloroform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Methyl chloride (Chloromethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
cis-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Dibromochloromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Ethylbenzene	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Methylene chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Tetrachloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Toluene	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
trans-1,2-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
trans-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Trichloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Trichlorofluoromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Vinyl chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
			<= 200				

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Xylene ^[2]	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, inorganic total	Daily Maximum		<= 20 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Nitrogen, ammonia, total (as NH3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Methyl tert-butyl ether	Daily Maximum		<= 20 Micrograms per Liter (ug/L)	Effluent Gross	001	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Refer to Part A.3.2 of this permit for required monitoring details.
2. Total xylenes.

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Mercury, total (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nickel, total (as Ni)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Selenium, total (as Se)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Antimony, total (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Arsenic, total (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Beryllium, total (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Chromium, total (as Cr)	Daily Minimum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Copper, total (as Cu)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Lead, total (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Silver, total (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Thallium, total (as Tl)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Zinc, total (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT

Notes (Discharge Limitations Table):

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

Discharge Limitations Table for Sample Location 002 (External Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 68,000 Gallons per Day (gal/d)		Effluent Gross	002	Continuous	METER
Flow rate	30 Day Average	M&R Gallons per Day (gal/d)		Effluent Gross	002	Continuous	METER

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,1,2-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,1-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,2-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,2-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,2-Dichloropropane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,3-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
1,4-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
2-Chloroethyl vinyl ether, (mixed)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
			<= 5				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Benzene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Dichlorobromomethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Bromoform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Methyl bromide (Bromomethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Carbon tetrachloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Chlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Chloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Chloroform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Methyl chloride (Chloromethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
cis-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Dibromochloromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
			<= 100				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Ethylbenzene	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Methylene chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Tetrachloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Toluene	Daily Maximum		<= 100 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
trans-1,2-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
trans-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Trichloroethylene	Daily Maximum		<= 5 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Trichlorofluoromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Vinyl chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Xylene ^[2]	Daily Maximum		<= 200 Micrograms per Liter (ug/L)	Effluent Gross	002	Quarterly	DISCRT
Hydrocarbons, total petroleum	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
			<= 20				

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Methyl tert-butyl ether	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	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
Nitrogen, inorganic total	Daily Maximum		<= 20 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, ammonia, total (as NH ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT

Notes (Discharge Limitations Table):

1. Refer to Part A.3.2 of this permit for required monitoring details.
2. Total xylenes.

Discharge Limitations Table for Sample Location 002 (External Outfall) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Antimony, total (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Arsenic, total (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Beryllium, total (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Chromium, total (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Copper, total (as Cu)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Lead, total (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Mercury, total (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nickel, total (as Ni)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Selenium, total (as Se)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Silver, total (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

Discharge Limitations Table for Sample Location 002 (External Outfall) To Be Reported Annually^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Thallium, total (as Tl)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Zinc, total (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT

Notes (Discharge Limitations Table):

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

Proposed Technology Based Effluent Limitations:

Various volatile organic compounds (VOCs) have limits that are either technology-based or risk-based.

Rationale for Permit Requirements:

Monitoring and reporting is required to assess the quality of the discharge water and to ensure that the treated groundwater will not impact the beneficial uses of the Las Vegas Wash.

pH: Quarterly monitoring and reporting is required to verify that pH of effluent samples collected does not exceed water quality standards stipulated in NAC 445A.2156 for the beneficial uses designated in NAC 445A.2142.

Total Petroleum Hydrocarbons (TPH) : Quarterly monitoring and reporting of TPH is required to verify concentrations of TPH in effluent are below the Division's technology-based remediation standard of 1.0 mg/L.

Volatile Organic Compounds (VOCs): Quarterly monitoring and reporting of Priority Pollutant VOCs concentrations in the effluent has been retained from the previous permit because it allows NDEP the opportunity to review and ensure degradation of waters does not occur. The Division's technology-based remediation standards for benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) are 5 µg/L, 100 µg/L, 100 µg/L, 200 µg/L, and 20 µg/L, respectively.

Total Dissolved Solids (TDS) : NAC 445A.2156 includes a TDS requirement of 95% of the single value samples being less than or equal to 1900 mg/L. Naturally occurring elevated TDS levels would flow to the Las Vegas Wash if it were not intercepted by the dewatering system, therefore, the TDS standard is not applied to remediation discharges in this area. This permit is for the interception and passage of groundwater and thus is exempted under the Colorado River Basin Salinity Control Forum's policy on groundwater interception. The requirement to monitor and report quarterly has been retained from the previous permit.

Selenium: Annual monitoring and reporting for selenium has been retained for this permit due to the 303(d) listing of this parameter as a pollutant of concern for Las Vegas Wash. The shallow groundwater with this naturally occurring constituent would flow to Las Vegas Wash were it not intercepted by the dewatering system. This parameter will be monitored and reported annually to allow NDEP the opportunity to review and ensure concentrations remain consistent with background levels and degradation of waters does not

occur.

Total Ammonia as Nitrogen: Point source discharges into the Las Vegas Wash include City of Las Vegas, Clark County Sanitation District, TIMET, Kerr-McGee and Stauffer. Kerr-McGee discharges non-contact cooling water and stormwater and Stauffer discharges stormwater. The discharges from both these facilities are intermittent and have been relatively uncommon in the past. TIMET discharges approximately 4 million gallons per day (MGD) and the total ammonia concentration found in these discharges is approximately 0.01 mg/L or less. Therefore, only the discharge from the City of Las Vegas and Clark County treatment plants were used to estimate the total monthly average point source load discharged to Las Vegas Wash.

In consideration of the permit application, NDEP has determined that the permitted discharge limits are consistent with the assumptions for the relevant Waste Load Allocations (WLAs) and do not warrant more restrictive limits to implement the applicable WLAs. Based on the DMRs submitted by the Permittee, concentrations of total ammonia as nitrogen in the treated groundwater samples from December 2011 through June 2014 were non-detectable except for four samples. Two samples were collected from the parking garage discharge and the other two samples were collected from the Forum Shops discharge. The parking garage samples contained concentrations of 0.62 mg/L and 0.3 mg/L for the 4th quarter of 2012 and 1st quarter of 2013, respectively. The Forum Shops discharge samples contained concentrations of 0.73 mg/L and 0.096 mg/L for the 1st and 3rd quarters of 2013, respectively. In conjunction with the proposed maximum flow of 250,000 gallons per day, NDEP has determined the load to be an insignificant or negligible contributor of total ammonia. However, the parameter will be monitored quarterly to allow NDEP the opportunity to review and ensure concentrations remain consistent with background levels and degradation of waters does not occur.

Total Phosphorus (TP): Point source discharges into the Las Vegas Wash include City of Las Vegas, Clark County Sanitation District, TIMET, Kerr-McGee and Stauffer. Kerr-McGee discharges non-contact cooling water and stormwater and Stauffer discharges stormwater. The discharges from both these facilities are intermittent and have been relatively uncommon in the past. TIMET discharges approximately 4 MGD and the total phosphorus concentration found in these discharges is approximately 0.01 mg/L or less. Therefore, only the discharge from the City of Las Vegas and Clark County treatment plants were used to estimate the total monthly average point source load discharged to Las Vegas Wash.

In consideration of the permit application, NDEP has determined that the permitted discharge limits are consistent with the assumptions for the relevant WLAs and do not warrant more restrictive limits to implement the applicable WLAs. Based on the DMRs submitted by the Permittee, concentrations of TP in the treated groundwater samples collected from December 2011 through June 2014 were non-detectable except for two samples collected from the Forum Shops discharge. Both samples collected from the Forum Shops discharge contained concentrations of 0.03 mg/L for the 2nd and 3rd quarters of 2013, respectively. In conjunction with the proposed maximum flow of 250,000 gpd, NDEP has determined the load to be an insignificant or negligible contributor of TP. However, the parameter will be monitored quarterly to allow NDEP the opportunity to review and ensure concentrations remain consistent with background levels and degradation of waters does not occur.

Special Conditions:

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Flow:

Flow data is necessary for determining potential impacts to the receiving water from the various constituents present. The limits are below the capacities of the structural dewatering treatment system.

Corrective Action Sites:

This site is a NDEP Bureau of Corrective Actions (BCA) site (8-000064). In addition, there are three other BCA sites (8-000019, 8-001467, and H-001063) located within a 1-mile radius of this facility. The BCA case officers for these sites do not expect the dewatering discharge associated with this permit to have adverse effects on their on-going remediation sites.

Wellhead Protection Program:

A wellhead protection plan has not been established for this area. Furthermore, this site is not located within a drinking water protection area.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies of an updated Operations and Maintenance (O&M) Manual for review by the Division. The O&M Manual shall be prepared by a qualified person.	10/28/2015

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Annual Reports	Annually	1/28/2016
2	Quarterly Reports	Quarterly	10/28/2015

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to surface waters of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Las Vegas Review Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **7/15/2015**, 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 to 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: **Kenneth Greene**

Date: **6/10/2015**

Title: **P.E.**