



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: BRE/HC LAS VEGAS PROPERTY HOLDINGS, L.L.C., C/O EQUITY OFFICE
3800 HOWARD HUGHES PARKWAY, SUITE 150
LAS VEGAS, NV - 89169

Permit Number: NV0023604

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

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	GROUNDWATER COLLECTION DISCHARGE	External Outfall		LAS VEGAS	NV	89109	CLARK	36.118220	-115.157240	LAS VEGAS WASH

General:

The Permittee has applied for a renewal of its United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permit to continue its discharge of untreated groundwater from a sub-grade dewatering system serving the underground portion of the Hughes Center Parking Garage. The Hughes Center is located at 3883 Howard Hughes Parkway, Las Vegas, Nevada. The site has been dewatering for approximately seven years to protect the structural integrity of the parking garage. The groundwater is discharged to the Clark County storm drain system located on Howard Hughes Parkway.

Discharge Characteristics:

The original NPDES permit was issued on July 08, 2008. Since issuance of the permit, the Permittee has reported the maximum daily discharge flow and average daily discharge flow as 9,723 gallons and 5,313 gallons, respectively. Discharge Monitoring Reports (DMRs) listed no exceedances of the permitted discharge limits. Furthermore, the DMRs showed no concentrations of constituents of concern (COCs) that exceeded the water quality standards for the receiving body of water and that would adversely impact waters of the United States.

Receiving Water:

The untreated 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 know 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 had a maximum 30-day average discharge rate of 36,000 gallons per day. This permit has increased the maximum 30-day average discharge rate to less than 50,000 gallons per day and has added a daily maximum discharge rate parameter with a limit of less than 50,000 gallons per day. This change was made to make this permit consistent with other NPDES dewatering permits issued by NDEP in this area.

- Quarterly reporting for Priority (Volatile Organic Compounds) VOCs has been reduced to annual reporting. In addition, discharge concentration limits for VOCs (if in place) were modified to M&R because data shown in DMRs indicated no contamination of groundwater. However, annual monitoring and reporting of Priority Pollutant VOCs concentrations in the untreated groundwater will allow NDEP the opportunity to review and ensure degradation of waters does not occur.
- 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 untreated groundwater discharged 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	< 0.050 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	30 Day Average	< 0.050 Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, ammonia, total (as NH ₃)	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
Nitrogen, inorganic total	Daily Maximum		<= 20 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
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	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 001 (External Outfall) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Xylene ^[2]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1,2,2-Tetrachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1,2-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,2-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,2-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,2-Dichloropropane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,3-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
1,4-Dichlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/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
2-Chloroethyl vinyl ether, (mixed)	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Benzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Dichlorobromomethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Bromoform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methyl bromide (Bromomethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Carbon tetrachloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Chloroform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methyl chloride (Chloromethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
cis-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/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
Dibromochloromethane	Daily Maximum		Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Ethylbenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Methylene chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Tetrachloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Toluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
trans-1,2-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
trans-1,3-Dichloropropene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Trichlorofluoromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Vinyl chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Effluent Gross	001	Annual	DISCRT
Hydrocarbons, total petroleum	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
Methyl tert-butyl ether	Daily Maximum		Micrograms per Liter (ug/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 Maximum		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
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
			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
Silver, total (as Ag)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Thallium, total (as Tl)	Daily Maximum		M&R 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.
2. Total xylenes.

Rationale for Permit Requirements:

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

pH: Quarterly monitoring and reporting is required to verify that pH of groundwater 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): Monitoring and reporting of TPH concentrations in the untreated groundwater has been retained from the previous permit because it allows NDEP the opportunity to review and ensure degradation of waters does not occur.

VOCs: Monitoring and reporting of Priority Pollutant VOCs concentrations in the untreated groundwater has been retained from the previous permit because it allows NDEP the opportunity to review and ensure degradation of waters does not occur.

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 concentrations 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 quarterly DMRs submitted by the Permittee, concentrations of total ammonia as nitrogen in the discharge water from the 4th quarter of 2008 to the 4th quarter December 2014 were non-detectable except for three samples. The three discharge samples contained concentrations of 0.036 mg/L, 0.12 mg/L, and 0.11 mg/L for the 3rd quarter of 2008, 4th quarter of 2008, and 4th quarter of 2013, respectively. In conjunction with the proposed maximum flow of less than 50,000 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 TP concentrations 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 quarterly DMRs submitted by the Permittee, concentrations of TP in the discharge water samples collected from the 4th quarter of 2008 to the 4th quarter December 2014 were non-detectable. In conjunction with the proposed maximum flow of less than 50,000 gallons per day, 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. The flow is limited to a daily maximum of 50,000 gallons per day.

Corrective Action Sites:

There are six NDEP Bureau of Corrective Actions (BCA) sites (H-001063; 8-001467; H-000708; 8-001345; 8-000020; and 8-000019) located within a one-mile radius of this facility. The BCA officers for these sites stated it was unlikely the renewal of this discharge permit would have an adverse impact on the ongoing remediation activities.

Wellhead Protection Program:

This site is located within 6,000 feet of two community drinking water wells. At this time, a wellhead protection plan has not been established for this 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	Quarterly DMRs	Quarterly	10/28/2015
2	Annual DMRs	Annually	1/28/2016

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. **7/27/2015**, 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: **6/22/2015**

Title: **P.E.**