



STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

FACT SHEET (pursuant to NAC 445A.236)

Applicant: Nevada Property 1 LLC, dba The Cosmopolitan of Las Vegas
3708 Las Vegas Boulevard South
Las Vegas, NV 89109

Permit Number: NV0023515

Facility Location: The Cosmopolitan of Las Vegas is located in Clark County, Nevada.

Discharge Outfall: The water is collected in a system of sumps, connected to a discharge piping system, and conveyed to the Clark County storm drain system that discharges to the Flamingo Wash.

Outfall 001: NW corner of E. Harmon and S. Las Vegas Blvd
Latitude: 36° 06' 35" N, Longitude: 115° 10' 30" W
NE ¼ S ½ Section 20, T21S, R61E MDB&M

General: The Permittee has applied for renewal of a National Pollutant Discharge Elimination System (NPDES) permit, NV0023515, to discharge shallow groundwater encountered in the below-grade parking structure associated with the hotel/casino complex. The permit was originally issued April 2007, and the dewatering system was fully operational in November 2008. The parking structure includes five stories below grade which must be dewatered to protect structural integrity. Groundwater is intercepted at the outer walls of each of the five floors and below the lowest floor (Level 5), and piped to six sumps installed at Level 5. Groundwater collects in the six sumps and cycles the duplex pumps at 30 gallons per minute (gpm) each, on and off at set water levels to pump the groundwater into the dewatering system force mains that tie in with the facility's roof drains before discharging into the Clark County storm drain system. The force mains exit the facility at Harmon Avenue, along the south property line, and at South Las Vegas Blvd, along the east property line. The force mains connect to the Clark County storm drain system and discharge to one common outfall at the northwest corner of East Harmon Avenue and Las Vegas Boulevard South.

The NPDES permit is proposed for renewal for a period of five years. The discharge is untreated based on a lack of organic contamination, validated by data collected since 2007.

Flow: The facility's total maximum daily discharge from the facility dewatering will be permitted at 0.049 million gallons per day (MGD) for the maximum daily flow rate and the 30-day average. The previous permit allowed for discharge up to 0.25 MGD. The flow rate was requested to be lowered to reflect actual dewatering discharge rates, validated by data collected over the past five years. The requested flow rate was exceeded only once during the past 5 years, during the first full quarter the dewatering system was operational.

Discharge Flow and Characteristics: During the period from November 2008 through December 2011, the following discharge characteristics were reported in the quarterly Discharge Monitoring Reports:

Table 1. Discharge Water Quality Data from November 2008 through December 2011

Parameter		Permit Limit	Average	Maximum	Minimum	# of Exceedances
Flow	30-Day Avg (MGD)	0.25	.0228	.0753	.0025	0
TIN	Quarterly (mg/l)	20	10.32	12	9.1	0
Ammonia	Quarterly (mg/l)	M&R	ND	ND	ND	0
TP	Quarterly (mg/l)	M&R	ND	ND	ND	0
TDS	Quarterly (mg/l)	M&R	2092	2200	1900	0
pH	Quarterly (S.U.)	6.5-9.0	7.78	8.12	7.21	0
Profile I	Annual (mg/l)	M&R	Most were ND, none exceeded MCLs or standards			0
TPH	Annual (mg/l)	1.0	ND	ND	ND	0
PCE	Annual (µg/l)	5	ND	ND	ND	0
Benzene	Annual (µg/l)	5	ND	ND	ND	0
Toluene	Annual (µg/l)	100	ND	ND	ND	0
Ethylbenzene	Annual (µg/l)	100	ND	ND	ND	0
Total xylenes	Annual (µg/l)	200	ND	ND	ND	0
MTBE	Annual (µg/l)	20	ND	ND	ND	0
VOC (8260B)	Annual (µg/l)	100	ND	ND	ND	0

MGD: million gallons per day
 TIN: Total Inorganic Nitrogen
 TP: Total Phosphorus
 S.U.: Standard units
 MTBE: Methyl tert-butyl ether
 Profile I: All Nevada Profile I parameters (total recoverable metals, plus inorganics)
 TPH: Total Petroleum Hydrocarbons, purgeable and extractable, full range C6-C40
 VOC: Volatile Organic Compounds, using EPA Method 8260B

M&R: Monitor & Report
 mg/l: milligrams per liter
 TDS: Total Dissolved Solids
 PCE: Tetrachloroethylene
 µg/L: micrograms per liter

Site Groundwater: Within the project area the groundwater elevation is generally quite shallow, approximately 12-25 feet below grade. The local groundwater flow direction is northeast.

Well Head and Drinking Water Supply Protection: The facility is within 6000' of a Drinking Water Protection Area (DWPA), but outside the 3000' radius of the DWPA. Two public supply wells, located at the Tropicana complex, are within the 6000' of the facility and discharge location, and are ranked as moderately vulnerable to VOC contamination. The facility water quality data records for the past 5 years shows non-detect for all hydrocarbons, so the wells should not be affected by the dewatering and untreated discharge.

Corrective Actions Sites: There are five Bureau of Corrective Actions (BCA) hydrocarbon

remediation sites within a one-mile radius of the facility. The BCA has stated that the dewatering and discharge will not impact or be impacted by the dewatering and discharge.

Receiving Water Characteristics: The storm drain system discharges to the Flamingo Wash, a concrete-lined channel. The Flamingo Wash is a minor tributary to the Las Vegas Wash, which is the primary wastewater and stormwater drainage outlet for the Las Vegas Valley and surrounding watershed. The shallow groundwater encountered in the below-grade facility sumps is representative of Flamingo Wash water quality. Monitoring of the discharge is required to ensure that surface waters are not degraded as a result of the dewatering discharge. Water quality standards for the beneficial uses designated in NAC 445A.2142 for the Las Vegas Wash are specified in NAC 445A.2156.

Discharge Limitations and Requirements: Representative discharge samples and measurements taken in compliance with the monitoring requirements specified in Table 2 shall be taken prior to discharge to the storm drain system.

Table 2. Discharge Limitations, Sampling and Monitoring Requirements

Parameters	Units	Discharge Limits		Monitoring Requirements		
		30-Day Average	Daily Maximum	Sampling Locations	Monitoring Frequency	Monitoring Type
Flow Rate ¹	MGD	0.049	---	001	As discharge occurs	Flow meters, calculation
pH	S.U.	6.5 ≤ pH ≤ 9.0		001	Quarterly ²	Discrete
TDS	mg/l	---	M&R	001	Quarterly ²	Discrete
TP	mg/l	---	M&R	001	Quarterly ²	Discrete
Ammonia	mg/l	---	M&R	001	Quarterly ²	Discrete
TIN	mg/l	---	20	001	Quarterly ²	Discrete
TPH	mg/l	---	1.0	001	Annually ³	Discrete
PCE	µg/l	---	5.0	001	Annually ³	Discrete
Benzene	µg/l	---	5.0	001	Annually ³	Discrete
Toluene	µg/l	---	100	001	Annually ³	Discrete
Ethylbenzene	µg/l	---	100	001	Annually ³	Discrete
Total xylenes	µg/l	---	200	001	Annually ³	Discrete
MTBE	µg/l	---	20	001	Annually ³	Discrete
VOC	µg/l	---	M&R	001	Annually ³	Discrete
Profile I	mg/l	---	M&R	001	Once ⁴	Discrete

Definitions and Footnote Explanations are provided in Table 3.

Table 3. Table Definitions and Footnote Explanations

Term/ Footnote	Definitions/ Explanations
MGD	million gallons per day
S.U.	Standard pH units
TDS	Total Dissolved Solids

mg/l	milligrams per liter
M&R	Monitor and report
TP	Total Phosphorus as Phosphorus
TIN	Total Inorganic Nitrogen as Nitrogen
TPH	Total Petroleum Hydrocarbons, purgeable and extractable, full range C ₆ -C ₄₀ . Also report: MTBE, benzene, toluene, ethylbenzene, total xylenes, on separate rows.
PCE	Tetrachloroethylene
µg/l	micrograms per liter
MTBE	Methyl tertiary-butyl ether
VOC	Volatile Organic Compounds: sample and analyze for all VOC using Method 8260B. For those parameters with detectable concentrations report on separate rows, individually. For MTBE, PCE, and TCE report all data on separate rows, individually.
Profile I	All parameters on the Nevada Profile I list, including cations, anions, inorganics and metals. Metals shall be total recoverable.
Footnote 1	Monitor as discharge occurs and report quarterly the 30-day average discharge to the storm drain system for each 30-day DMR reporting period.
Footnote 2	Sample and analyze once per quarter, and report quarterly.
Footnote 3	Sample and analyze annually in the 4 th quarter, and report in January each year.
Footnote 4	Sample and analyze for all Profile I parameters once per permit cycle, every 5 years, within 6 months of permit expiration, and report in applicable quarterly DMR and with renewal application. Report all parameters on separate rows of the DMR form.

Rationale for Permit Requirements: The Division has established the monitoring requirements in Table 2 to ensure that water quality is not degraded as a result of project activities.

Flow: The flow rate limits were explained in the Flow section of the Fact Sheet.

pH: 6.5 - 9.0, standard units. pH is required monitoring per standards stipulated in NAC 445A.2156 for the beneficial uses designated in NAC 445A.2142. Monitor and report quarterly.

TDS: M&R. The shallow groundwater with naturally occurring elevated TDS levels would flow to the Wash if it was not intercepted by the dewatering system. Therefore, the TDS standard is not applied to dewatering 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.

TPH: 1.0 mg/L. Sample and report annually in 4th quarter. The limit is the State standard for remediation projects.

VOC: M&R. Sample the dewatering discharge and report annually in 4th quarter.

Profile I: M&R. The requirement is to sample the dewatering discharge once per permit cycle, within 6 months of permit expiration.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance:

- The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit.

Proposed Determination: The Division has made the tentative determination to re-issue the NPDES permit for a period of five (5) years.

Procedures for Public Comment: The Notice of the Division's intent to re-issue a NPDES permit for a five-year period, authorizing this facility to discharge to the Flamingo Wash via dewatering sumps and the Clark County storm drain system, 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 for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **June 4, 2012 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator 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 determines 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.

Prepared by: Jeryl R. Gardner, P.E.
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