

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET
 (pursuant to NAC 445A.236)

Permittee Name: Sky Las Vegas Master Association
 2700 South Las Vegas Blvd.
 Las Vegas, NV 89109

Permit Number: NV0023477

Location: Sky Las Vegas Condominiums
 West Side of Las Vegas Boulevard
 Between Circus Circus Drive and East Sahara Avenue
 Las Vegas, Clark County, NV 89109

Latitude: 36° 08' 27"N
 Longitude: 115° 09' 39"W
 Township 21S, Range 61E, Section 09

Bureau of Corrective Actions: The Sky Las Vegas Condominium development is within one mile of seven (7) Nevada Division of Environmental Protection (NDEP) Bureau of Corrective Actions (BCA) remediation sites, as listed below. The BCA has indicated that no adverse effects to the ongoing remediation projects are expected due to dewatering and discharge activities as the Sky Las Vegas development.

Project ID #	Site Number	Facility Name	Corrective Action Type (Media/Contaminant)
1389	8-000180	Texaco Station 61-529-0402	Groundwater/Gasoline
5480	H-000471	Stratosphere Corporation	Groundwater/Other
5729	8-000841	Las Vegas Convention and Visitors Authority	Groundwater/Solvents
2739	8-000753	Unocal SS 3846	Soil & Groundwater/Gasoline
3795	8-001540	Riviera Hotel & Casino	Soil/Diesel
5599	H-000625	Gaming Partners International USA Inc.	Soil/TPH
1980	H-000402	TDI/Sahara Center: Pastor/Foxy's	Soil & Groundwater/Gasoline

TPH: Total Petroleum Hydrocarbons

Well Head and Drinking Water Supply Protection: The permitted facility is not within a 6000 foot Drinking Water Protection Area (DWPA) around any public water supply well. There is no Well Head Protection Area (WHPA) established for the facility location.

General: Sky Las Vegas Condominiums is a condominium development in Las Vegas, Clark County, Nevada. The site is approximately 3 acres in size, is generally level, and slopes very slightly toward the east. Initial investigation indicates groundwater over the extent of the property at 10 feet

below ground surface. Construction of the condominium development required excavation over the entire site to at least 17 feet below ground surface. A system of 39 dewatering wells was installed to depress the local water table during construction, and convey water from the site. During construction, a permanent foundation dewatering system of French drains was installed, with the drains reporting to four (4) collection sumps. Level controlled sump pumps are installed in the collection sumps, where individual flow meters record the discharge. The four discharge lines report to a common manifold, from which discharge samples are collected. Extracted groundwater is discharged to the Las Vegas Wash via the Clark County stormdrain system adjacent to the development.

Discharge Flow and Characteristics: At the time of the original permit issuance, analytical testing of groundwater below the site indicated the following background results. Total Petroleum Hydrocarbons, (TPH), Tetrachloroethene, Benzene, Toluene, Ethylbenzene, Xylenes, MTBE, and the hydrocarbon analytes assessed by EPA Method 8260 were not detected. Water quality characteristics are the following: Total Phosphorus, 0.03 mg/L; Total Inorganic Nitrogen N, 8.4 mg/L; Nitrate as N, 8.3 mg/L; Total Dissolved Solids, 3900 mg/L; Chloride, 910 mg/L; and Sulfate, 1400 mg/L. Samples were tested for various metals with the following results: Calcium, 240 mg/L; Magnesium, 210 mg/L; Sodium, 540 mg/L; Chromium 27.5 µg/L; Lead, 0.2 µg/L; Selenium, 13 µg/L; and Zinc, 38.8 µg/L. A secondary round of analytical testing was requested to assess the slightly elevated levels of Selenium (typically found in shallow desert groundwaters) and Chromium. Follow-up testing for Chromium and Selenium gave the following results: Total Chromium, 12 µg/L; Chromium III, Non-Detect at detection limit of 10 µg/L; Chromium VI, 12 µg/L; and Selenium, Non-Detect at detection limit of 20 µg/L.

During the period from August 2006 to September 2010, the following discharge flow volumes and characteristics were reported in the Discharge Monitoring Reports:

Parameter	Permit Limit	Average	Maximum	Minimum
Flow (MGD)	0.23	0.0164	0.16	0.00028
Total Dissolved Solids (lbs./day)	M&R	117.5	970.8	3.93
Total Inorganic Nitrogen (mg/L)	20	4.76	14.08	0.25
Total Phosphorus as P (lbs./day)	1.0	0.011	0.081	<0.0001
Total Ammonia as N (lbs./day)	1.0	0.014	0.12	<0.003
pH (Standard Units)	6.5 – 9.0	7.44	8.3	7
Total Petroleum Hydrocarbons (TPH), (mg/L)	1.0	0.59	1.93	<0.45
Volatile Organic Compounds (VOC and MTBE), (µg/L)	M&R	<0.5	See Below	<0.5
Chromium (VI) (µg/L)	11	3.7	6.9	<0.2
Total Chromium (µg/L)	M&R	19.2	51	6.1
Lead (µg/L)	M&R	34.5	150	<5
Selenium (µg/L)	M&R	16.6	43	<10
Zinc (µg/L)	M&R	771	3800	<10
Hardness as CaCO ₃ (mg/L)	M&R	1330	1700	750

From August 2006 through November 2008, minimal amounts of volatile organic compounds were

detected. The detected compounds are listed below. All compounds were below the toxic materials limits listed in Nevada Administrative Code (NAC) 445A.144 or the BCA Action Level. No volatile organic compounds have been detected in the discharge since November 2008.

Compound	NAC 445A.144 Limit or Action Level	Date	Detected Concentration (µg/L)
Tetrachloroethene (PCE)	5 µg/L (Action Level)	August, 2006	1.1
		November 2006	1.4
		November 2007	1.3
		November 2008	1.7
Trihalomethanes	100 µg/L (NAC Limit)	August, 2006	4.5 (Chloroform)
		November 2006	3.8 (Chloroform)
		November 2007	2.1 (Chloroform)
			0.9 (Chloromethane)
		November 2008	2.9 (Chloroform) 2.0 (Chloromethane)

Trihalomethanes = Sum of Bromodichloromethane, Dibromochloromethane, Bromoform and Chloroform

Receiving Water Characteristics: The dewatering system discharges into the Las Vegas Wash via a Clark County stormdrain drop inlet. Water quality standards for the Las Vegas Wash are specified in NAC 445A.199. The requirements to maintain existing higher quality waters apply.

Proposed Effluent Limitations and Special Conditions: The following discharge limits and monitoring requirements are proposed for the permit renewal:

Table I.A: Permit Limits and Monitoring Requirements

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	---	0.23	Continuous	Flow Meter
Total Dissolved Solids (TDS), (lbs/day)	Monitor & Report		Quarterly	Discrete
Total Inorganic Nitrogen as N, (mg/L)	20		Quarterly	Discrete
Total Phosphorus as P (lbs/day)	1.0		Quarterly	Discrete
Ammonia as N (lbs/day)	1.0		Quarterly	Discrete
pH (Standard Units)	6.5 – 9.0		Quarterly	Discrete
Total Petroleum Hydrocarbons ¹ (TPH), (mg/l)	1.0		Semi-Annually ²	Discrete
Volatile Organic Compounds ³ (VOC and MTBE), (µg/)	Monitor & Report		Annually ⁴	Discrete
Chromium (VI) (µg/l)	11		Quarterly	Discrete
Total Chromium (µg/l)	Monitor & Report		Quarterly	Discrete
Lead, Selenium, Zinc (µg/l)	Monitor & Report		Annually ²	Discrete

Hardness as CaCO ₃ (mg/l)	Monitor & Report	Annually ²	Discrete
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1. EPA Methods 8015B and 8260B, extractable and purgable, C6-C40.
2. Semi-Annual sampling will be performed in the second and fourth quarters, and results will be submitted with the second and fourth quarter DMRs.
3. EPA Method 8260 B. Report all analytes
4. Annual sampling results will be submitted with the fourth quarter DMR.

Rationale for Permit Requirements: The monitoring requirements for the site are consistent with the requirements for maintaining higher water quality, as stated in NAC445A.199. Initial samples suggest that the groundwater collected from the facility does not contain significant amounts of phosphorus or ammonia; these parameters have been considered de minimus, and limits have been set at 1.0 lb/day accordingly. The selenium evident in the first round of groundwater sampling is typical of shallow groundwater in desert soils, and is not expected to significantly impact the water quality of the Las Vegas Wash. The chromium (VI) evident in the first and second rounds of sampling is not typically found in undisturbed desert soils, and so will be limited in the discharge. Permittee is required to monitor discharge on quarterly, semi-annual, and annual bases to ensure that the receiving water is not degraded from dewatering at the Sky Las Vegas site, which has the potential to capture possible offsite groundwater contamination.

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.

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. **By MMM DD, 2011**, the Permittee shall submit for review and approval any necessary updates to the Operations & Maintenance (O&M) Manual for the dewatering system. If no updates or revisions are required, the Permittee shall submit a letter stating this condition by the above due date. The document or letter shall be submitted to the Division at the following address:

**Department of Conservation and Natural Resources
Nevada Division of Environmental Protection
Bureau of Water Pollution Control
ATTN: Compliance Coordinator
901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701**

Procedures for Public Comment: The Notice of the Division's intent to issue an NPDES permit authorizing this facility to discharge to the Las Vegas Wash for a five-year period, 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 **April 7, 2011 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.

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

Prepared by: Janine O. Hartley, P.E.
Draft: March 2011
Final: