

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(Pursuant to NAC 445A.236)

Permittee Name: Mirage Hotel & Casino
3400 Las Vegas Blvd. South
Las Vegas, NV 89109

Facility: Mirage Hotel & Casino
3400 Las Vegas Blvd. South
Las Vegas, NV 89109

Permit Number: NEV91055

Location: Latitude: 36° 07' 30" N Longitude: 115° 10' 00" W
Township 21 South, Range 61 East, Sections 16 and 17

The Mirage Hotel Casino valet groundwater sump is located in the underground tunnel for valet parking at the Mirage Hotel Casino property at 3400 Las Vegas Boulevard South, in Las Vegas.

Flow:
The design flow for the facility is 0.084 MGD. Permit limit is 0.081 MGD 30-day average. Flow is measured by a continuous flow meter. Average current daily flow is about 0.030 MGD but may increase up to 0.080 MGD depending on use and season.

Characteristics:
The reverse osmosis treatment plant is designed to treat high Total Dissolved Solids (TDS) laden water, from a level of 1700 to 2700 mg/L to less than 17 mg/L.

Corrective Actions Sites: The subject facility is within 1 mile of the following Bureau of Corrective Actions (BCA) sites. The BCA case officers in charge of these sites have indicated that adverse effects of the proposed project on the ongoing corrective activities are not anticipated.

Project ID #	Site Number	Facility Name	Correction Action Type
778	8-000064	Ceasars Palace	Unknown/Solvents
779	8-000064	Ceasars Palace	UST/Gasoline
1484	8-000299	Deluca Liquors	UST/Gasoline
2081	8-001467	Venetian Hotel & Casino	Unknown/Other
3321	H-001063	Harrah's Hotel and Casino	Solvents
3706	H-001356	Al Phillips the Cleaner	Other/Solvents
4518	8-001467	Venetian Hotel & Casino	UST/Gasoline
5662	8-000019	ARCO 1903	UST/Gasoline

Well Head and Drinking Water Supply Protection:

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The Facility is within 3000 Feet of Drinking Water Protection Areas (DWPAs) for two Public Water (NTNC) Wells: NV0004072 New Frontier Hotel. Source Water Assessment Program (SWAP) rankings are not available for this system.

General:

The treatment plant treats high TDS groundwater from a well sump located just west of Las Vegas Boulevard, north of the Volcano water feature. The water pumped from the sump in to the water treatment plant where the water is passed through a multi-media filter and two carbon filters, and then through a Reverse Osmosis treatment system. The treated water is then used in the Mirage “Volcano Lake” and in hotel indoor water features and for landscape irrigation; this reuse of water is in support of water conservation. TDS is lowered to an average of 17 mg/L by the treatment system. The water processed in the Mirage and Treasure Island systems can be blended for use in either system. A Supervisory Control and Data Acquisition (SCADA) system controls the highly flexible system which can feed water into either system, monitor it, and run the fully automated system. The reject water is disposed to the Clark County Water Reclamation district sewer system under terms of their pretreatment program permit. The discharge will not have any adverse affects on ground water.

Receiving Water Characteristics:

Disposal of treated groundwater (effluent) is to the groundwaters of the State via land application for irrigation at both the Mirage and Treasure Island properties, and via evaporation in the water features at the two hotel properties. Depth to groundwater is 23 feet.

Proposed Effluent Limitations and Monitoring Requirements

Samples taken in compliance with the monitoring requirements specified in Table I. shall be taken at the following locations: **Prior to discharge to any outfall from the water treatment plant.**

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

TABLE I. Discharge Limitations

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow Influent (MGD)	M & R	M & R	Continuous	Flow meter
Flow Effluent (MGD)	0.081	0.082	Continuous	Flow meter
Effluent Total Dissolved Solids (mg/L)	Monitor and Report mg/L		Quarterly	Composite
Effluent Fecal Coliform: MPN or CFU/100 ml *	2.2	23	Quarterly	Composite

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Notes: * MPN = Most Probable Number; CFU = Colony Forming Unites; ml = milliliter

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. 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.
- b. The Permittee, or its representative, shall submit an Operations and Maintenance (O & M) Manual, prior to the permit renewal effective date, for review and approval. The O & M must be stamped by a PE and be assembled according to the Water Technical Sheet (WTS)-2; <http://ndep.nv.gov/bwpc/fact01.htm>
- c. All compliance deliverables shall be submitted to both addresses listed below:

Mr. Nadir Sous
Nevada Division of Environmental Protection
Protection
Las Vegas Office
2030 East Flamingo Road, Suite 230
Las Vegas, NV 89119

Compliance Coordinator
Nevada Division of Environmental
Bureau of Water Pollution Control
901 South Stewart Street, Suite 4001
Carson City, NV 89701

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater 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 emailed to interested persons on our email list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. **All comments must be received by NDEP by 5:00 pm, January 18, 2010.**

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

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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 reissue the permit for a period of five (5) years, subject to effluent and monitoring limitations.

Rationale for Permit Requirements

The limitations and monitoring requirements are intended to provide for appropriate reuse of treated effluent, to minimize the possibility of adverse impact to ground waters of the State, and to alert those persons who might have contact with treated effluent to its presence at the facility.

Prepared by: Michele Reid
December 2009