

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

Permittee Cosmopolitan Resort and Casino
101 Convention Center Dr Tower Ste 100
Las Vegas NV 89109

Permit No. NV0023515

Facility Cosmopolitan Resort and Casino
101 Convention Center Dr
NW corner of intersection of Harmon Ave and Las Vegas Blvd
Clark County
Latitude: 36° 06' 21" N
Longitude: 115° 10' 18.6" W
T21S R61E S½NE¼S20

General The Cosmopolitan property will include five stories below grade which must be dewatered to protect structural integrity. Perforated pipe will be placed at depths of 2.5 ft and 5 ft below the lowest floor. The pipes will report to six sumps which are expected to produce between 20 to 30 gpm each, giving a total flow of 120 to 180 gpm for a 4 hr period each day, or 43,200 gpd. Discharge will be to the adjacent Clark County storm drain, which discharges to Flamingo Wash. The discharge is untreated based on a lack of organic contamination. The site is currently being dewatered for construction purposes under temporary permit TNEV2006469.

Receiving Water Characteristics Flamingo Wash discharges to Las Vegas Wash, and the standards set at the nearest downstream control point, "Las Vegas Wash at Telephone Line Road" (NAC 445A.199), apply. In addition, the state wide standards for toxic materials, NAC445A.144, are applicable, and Total Maximum Daily Loads (TMDLs) for Las Vegas Wash have been established for total phosphorus and ammonia.

Rational for Permit Requirements Table I.A.1 below is taken from the permit.

Table I.A.1 Discharge Limitations (Outfall 001)

Parameter mg/l except as noted	Discharge Limitations	Monitoring Requirements	
		Measurement Frequency	Sample Type
Flow rate ¹ , gpd	monitor & report	continuous	meter
TPH ²	1	annual	discrete
Tetrachloroethene ³	0.005	annual	discrete
Benzene	0.005	annual	discrete
Toluene	0.1	annual	discrete
Ethylbenzene	0.1	annual	discrete
Xylenes (total)	0.2	annual	discrete
MTBE ⁴	0.02	annual	discrete
Total Inorganic Nitrogen	20	quarterly	discrete
pH, standard units	6.5 to 9	quarterly	discrete
EPA 8260 ⁵ (full range)	monitor & report	annual	discrete
Ammonia as N	monitor & report	quarterly	discrete
Total Phosphorus	monitor & report	quarterly	discrete
TDS	monitor & report	quarterly	discrete
Metals ⁶	monitor & report	quarterly	discrete

Notes

1. Report average gpd for each month
2. Total petroleum hydrocarbons, purgable plus extractable ranges (C6 - C36)
3. Tetrachloroethene = perchloroethene = PCE = perc
4. Methyl tert-butyl ether
5. Report all parameters. This will include the organic parameters listed above.
6. Analyses shall include antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, copper, fluoride, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, zinc, and hardness as calcium carbonate. Analyses shall be for total metals.

FLOW , monitor & report: Flow data is necessary for determining impacts to the receiving waters from the various constituents present.

TPH, 1 mg/l: This technology based limit is included so that migration of any on or off site organic contaminates to the capture zone of the dewatering system would be detected. Nothing was detected in the sample analyzed for the permit application, and there are no known sources in the area.

EPA 8260 (FULL RANGE), monitor and report: Similar in purpose to the TPH analysis described above, but with much lower detection limits. This will include the other organic parameters in the table, which are described further below. The only detection in the sample analyzed for the permit application was for 2-butanone at 27 µg/l; there is no standard for that parameter.

- TETRACHLOROETHENE, 0.005 mg/l: This is a technology based limit.
- BENZENE, 0.005 mg/l: From the toxic standards (NAC 445A.144), for the municipal and domestic supply beneficial use.
- TOLUENE, 0.1 mg/l: This technology based limit is used instead of the toxic standard (14.3 mg/l) since it's easily achievable.
- ETHYLBENZENE, 0.1 mg/l: This is a technology based limit.
- TOTAL XYLENES, 0.2 mg/l: This is a technology based limit.
- MTBE, 0.02 mg/l: This is a risk based limit developed under the Corrective Action program, based on taste and odor considerations.

TOTAL INORGANIC NITROGEN (TIN), 20 mg/l: This limit is taken from the water quality standards at NAC 445A.199, and is based on existing water quality. Total inorganic nitrogen is determined from the sum of separate analyses for nitrate, nitrite, and ammonia. A value of 15 mg/l was given in the data report accompanying the application. The source may be the golf course (Dunes) that was previously at that location.

AMMONIA, monitor & report: This is included due to the TMDL mentioned above, and is part of the TIN analysis.

TOTAL PHOSPHORUS, monitor & report: This is included due to the TMDL mentioned above.

TDS AND METALS, monitor & report: Based on the analyses submitted with the application, some of these parameters will be discharged at concentrations in excess of the water quality standards. The following table compares those detections to the lowest applicable standards, and shows the effect of dilution on those concentrations.

Inorganic Discharge Constituents in Excess of Water Quality Standards

Parameter	Discharge Concentration, mg/l	Resulting FW ¹ Concentration, mg/l	Resulting LVW ¹ Concentration, mg/l	Standard, mg/l
Cr (6)	0.012	0.0000865	0.0000418	0.010 ²
Fe	17	0.122	0.0593	1 ²
Pb	0.024 ³	0.000173	0.0000837	0.011 ²
Mn	0.260	0.00187	0.000907	0.2 ²
TDS	2330	16.8	8.12	1900 ⁴

1. Flamingo Wash and Las Vegas Wash below Flamingo Wash. Diluted concentrations based on stream flows of 9.21 and 19.1 cfs, respectively (USGS 2003), a discharge flow of 43,200 gpd, and background concentrations of 0 mg/l.
2. NAC 445A.144
3. Based on a hardness of 793 mg/l as CaCO₃.
4. NAC 445A.199

Permit limits have not been used for these parameters based on dilution, natural occurrence, and difficulty of treatment. The data is being collected for the purpose of assessing cumulative impacts on a watershed basis should that become necessary in the future. Total metals analytical procedures are sufficient for this purpose. Additional considerations follow.

- CHROMIUM (6): The chronic aquatic life standard is given in the table above. Total chromium was also analyzed, with a result of 0.017 mg/l, vs a standard of 0.1 mg/l for municipal and domestic supply. Cr (3) was not analyzed. This element is most likely from a previous industrial source.
- IRON: The aquatic life standard is given in the table.
- LEAD: The chronic aquatic life standard is given in the table, based on a discharge hardness of 793 mg/l as CaCO₃. Actual hardness in the washes is probably a little lower.
- MANGANESE: The irrigation standard given is the only one in effect for surface water.
- TDS: The standard is based on existing water quality. This parameter is routinely monitored for all discharges to Las Vegas Wash based on salinity issues in the Colorado River basin.

PH, 6.5 - 9 standard units: The permit limit is the water quality standard at NAC 445A.199.

Procedures for Public Comment Notice of the Division's intent to issue discharge permit NV0023515, authorizing a dewatering discharge to the storm drain at Cosmopolitan Resort & Casino, is being sent to the **Las Vegas Review Journal** for publication. The notice is being mailed to interested persons on our

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mailing list. Anyone wishing to comment on the proposed permit must submit written comments to the Division within (30) days of the publication date. The comment period can be extended at the discretion of the Administrator. The deadline for comments is 5:00 P.M. Monday December 18, 2006, although letters postmarked on that date will also be accepted.

A public hearing on the proposed determination can be requested by the applicant, any affected state or interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted. Public hearings granted by the Division are conducted in accordance with NAC 445A.238.

The final determination of the Division 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 discharge permit for a five year term.

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