

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: National Park Service - Echo Bay WWTP
Lake Mead National Recreation Area

Permit Number: NEV50014

Description of Discharge

Location: The Echo Bay wastewater treatment facility is located near Echo Bay on Buckhorn Ridge Road, in the Lake Mead National Recreation Area in T. 18 S., R. 67 E., Section 6, MDB&M; Latitude: 36° 18' 48"N.; Longitude: 114° 26' 14"W.

Characteristics: Sanitary wastes from small residential, commercial and recreational facilities are collected in a system of force mains and collection systems, then pumped via three lift stations to the wastewater treatment facilities. The treatment plant serves the Echo Bay area. The wastewater treatment plant consists of facultative lagoons which are designed to treat domestic sewage in compliance with secondary treatment standards. Wastewater influent generated in the service area is discharged into an aerated 1.08 acre asphalt lined and sealed primary oxidation pond for treatment. A second aerated .39 acre asphalt lined, secondary pond provides additional treatment. A third, 1.34 acre soil lined pond receives effluent for final settling, evaporation and percolation. Two unlined 1.55 acre ponds are available for additional water management. No effluent discharge to surface waters is allowed.

Flow: The facility is designed to treat a volume of domestic sewage with an influent flow of 0.036 MGD for a 30-day average and 0.082 MGD for a daily maximum. Flow is monitored continuously.

Effluent Limitations: Outfall 001: distribution box manhole
 Outfall 002: discharge from the secondary pond

FLOW: 0.036 MGD 30-day average
 0.082 MGD daily maximum

pH: between 6.0 & 9.0 Standard Units Outfall 002

BOD₅: no limits at Outfall 001
 30 mg/l 30-day ave. at Outfall 002
 45 mg/l daily max. at Outfall 002

TSS: no limits at Outfall 001
 90 mg/l daily max. at Outfall 002

D.O.: no limits, Monitor & Report Outfall 002

General: The Echo Bay wastewater treatment facility(EBWWTF) serves small residential, commercial and recreational facilities and a fish cleaning station at Echo Bay. The EBWWT facilities consist of a collection system, 3 lift stations and force main, a concessioner collection system and export pumping system (which serves their facility and the watercraft sanitary wastes they service), and the treatment lagoons.

System upgrades completed during the past permit period include the relining of the primary and secondary ponds with asphalt, the construction and installation of two new lift stations, the demolition of one lift station, the installation of a monitoring well, the installation of new aerators in the lagoons along with new cables and anchor posts.

The applicant has applied for renewal of the discharge permit. The treatment plant lagoons are operated in series, with disposal by evaporation/percolation. Ponds 4 and 5 allow flexibility to manage water if repairs or other conditions warrant.

Receiving Water Characteristics: The effluent is disposed to groundwater through the soils beneath the percolation lagoon. Groundwater at the Echo Bay facility is reported to be at 36 feet. Groundwater is typical of shallow desert aquifers, with elevated mineral (TDS) concentrations. A new downgradient monitoring well east of the lagoons is used to determine any adverse effects are detected in the groundwater. No discharge to surface waters is allowed.

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** and **Boulder City News** 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 30 days following the date of publication 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 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 reissue the proposed permit for a

period of five (5) years.

Monitoring Well Sampling Requirements - MW-1

PARAMETERS

Frequency

TOTAL DISSOLVED SOLIDS:	Monitor and Report	Quarterly
NITRATE as N:	See Part I.A.15	Quarterly
TOTAL NITROGEN as N: 10 mg/l		Quarterly
CHLORIDE:	Monitor and Report	Quarterly
GROUNDWATER ELEVATION:	Monitor and Report	4 th Quarter
DEPTH TO GROUNDWATER:	Monitor and Report*	Quarterly

* If dry, report as "Dry".

Rationale for Permit Requirements

Monitoring is required to assess the level of treatment being provided and to ensure that groundwater quality is not degraded.