

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

Permittee Name: Tonopah Public Utilities
P.O. Box 151
Tonopah, NV 89049

Permit Number: NEV10018

Location: Tonopah Airport Wastewater Treatment Facility
2 mi. S of Hwy 6 & 8 miles ESE of Tonopah, Nye County, Nevada
Latitude: 38° 02' 32"N, Longitude: 117° 05' 03"W
Township 2N, Range 44E, Section 7

Drinking Water Protection Area / Wellhead Protection Area:

There are no public water supply wells within 6000 feet of the Tonopah Airport Wastewater Treatment Facility (WWTF). The WWTF is not located within a Drinking Water Protection Area (DWPA) or a Wellhead Protection Area (WHPA)

General:

The Tonopah Airport WWTF is located at the south end of the Tonopah Airport, approximately eight miles east-southeast of Tonopah, Nye County, Nevada. The airport facility dates from the early 1940's, when the Army Air Corp operated the Tonopah Army Air Field for air warfare training. After the base was deactivated in 1945, the airfield was transferred to Tonopah Public Utilities, and is currently used as the Tonopah airport/industrial park.

The original WWTF consisted of two Imhoff tanks, which treated an estimated peak flow of 0.4 MGD. Imhoff tanks are open at the water surface to the atmosphere but function essentially the same as a below-grade septic tank. In an Imhoff tank, scum and sludge traps remove floatable (scum/grease) and settleable (sludge) materials from the wastewater. The accumulated sludge partially liquefies and gasifies through anaerobic digestion and the non-digested solids are periodically pumped out to the sand drying beds. At this facility, there are four (4) 8,100 ft² sludge/septage drying beds and six (6) 20,000 ft² rapid infiltration basins (RIBs). In 1981, renovations/repairs were made to one of the two Imhoff tanks. Currently, this Imhoff tank (i.e., West Tank) remains operational. There are no plans to rehabilitate the East Tank, which remains inoperable due to its poor structural integrity and the minimal flow demand.

The permitting files indicate that in the 1980's through early 1990's, the facility was receiving an industrial wastewater flow of up to 0.02 MGD from a nearby Petro Source Refinery operation, which has since ceased operation and been dismantled. The Division's concern regarding industrial wastewater discharged to the WWTF was that the refinery's wastewater contained detectable petroleum hydrocarbon levels, and wastewaters of this type would not be adequately treated in an Imhoff system. The Division notes that Imhoff tanks provide only primary treatment and are no longer approved for treating non-domestic wastewater flows. This condition has been added to the permit language should any industrial operation commence activity at this airport location and request use of the sewer from the facility.

In 1998, the Division approved this facility to receive domestic septage. Septage is dried in sand beds and may remain on-site for two years until the residuals are removed and disposed at the Tonopah Municipal Landfill. This facility accepts septage to defray operating costs, and to provide local residents savings on septage hauling costs. The Tonopah facility estimates, that on average, it receives one load (\approx 1,000 gals/load) of domestic septage per week. All beds used for drying of Imhoff tank sludge and domestic septage are unlined. Since the Imhoff tank receives minimal flow, the RIBs are essentially inactive. Only the septage drying beds are currently in active use. As part of the Schedule of Compliance for the 2007 permit renewal, the Permittee is required to submit a plan for drying and storage of septage and sludge in some fashion other than the unlined drying beds.

As stated, there is minimal flow at this facility. The facility currently serves only the airport's resident caretaker (one household) and three nearby residences. Aviation activity at the airport is minimal in regards to wastewater production. Facility influent is received via gravity flow in a 15-inch vitrified clay pipe (VCP) interceptor sewer line. The residences and caretaker are located approximately one mile from the headworks, and daily wastewater flow is estimated at less than 0.001 MGD from these sources. This flow is not sufficient to fully fill the sewer and reach the plant. The liquid portion of the domestic wastewater in this sewer is likely evaporated in the manhole vents and lost through seepage (exfiltration) in the VCP joints and cracks. The Permittee indicates that the Imhoff tank only receives any measurable flow twice per year when the sewer lines are flushed out with potable water to remove solids and grease buildup. Since daily flow is negligible, representative influent/effluent sampling has not been practical for many years.

Effluent Flow and Characteristics:

The treatment facility is permitted for a wastewater influent flow of 0.095 MGD on both a 30-day average and daily maximum flow period basis. As previously noted, actual flows are well below this limit. Therefore, the existing wastewater flow limit of 0.095 MGD should be more than adequate for the foreseeable future. The proposed permit conditions do not limit the septage disposal volume. However, the facility will be required to track the septage volume via logbook and report this value in the quarterly Discharge Monitoring Reports.

Receiving Water Characteristics:

Treated effluent flow from the Imhoff tank would be discharged to the groundwater via percolation in the RIBs. In addition, liquid from the applied septage could also infiltrate through the beds and potentially percolate to the groundwater. Given the existing minimal flow, most of the liquid is likely dissipated through evaporation and does not reach the groundwater.

According to the Division of Water Resources (DWR), there are no recorded well logs for any of the 36 sections in Township 2N, Range 44E of Nye County. DWR files indicate that the nearest well (livestock well) to this site was installed in Section 16 of Township 3N, Range 44E, located approximately 5½ miles northeast of the airport. This well log indicates a depth to groundwater of 480 ft. bgs in 1949. The airport's potable water is supplied from the Tonopah Water Supply Pumping Station (Rye Patch) located 10 miles north on Hwy 376.

Based on the DWR data for this area, the Division presumes the depth to groundwater at this site to be in excess of 200 ft. bgs. Facility flows are not appreciable and the Division does not propose groundwater monitoring for this renewal. At this time, the Division does not require installation of lined septage drying beds provided that septage disposal remains at current low use levels. For future planning purposes, the Division may reevaluate the requirement for the installation of lined septage drying beds at this facility if there is a marked growth in sewer flows or septage disposal activity at this location.

Rationale for Permit Requirements:

Given the minimal flow demand on this facility, representative influent/effluent flow monitoring at this facility will not be feasible until new residential/commercial connections are established and daily flow is received at the headworks in measurable quantity. In the event that flow demand eventually increases, the Division proposes the following monitoring conditions:

Proposed Effluent Limitations and Special Conditions:

Table 1: Plant Discharge Limitations

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30 - Day Average	Daily Maximum	Measurement Frequency	Sample Type
Imhoff Tank Flow, MGD ¹	0.095	Monitor & Report	Continuous	Flow Meter
Imhoff Tank Influent BOD ₅ , mg/L	Monitor & Report		Quarterly	Discrete
Imhoff Tank Effluent BOD ₅ , mg/L	Monitor & Report		Quarterly	Discrete
Imhoff Tank % BOD ₅ Removal	Calculate & Report (minimum removal of 20% required)		Quarterly	Calculation
Imhoff Tank Influent TSS, mg/L	Monitor & Report		Quarterly	Discrete
Imhoff Tank Effluent TSS, mg/L	Monitor & Report		Quarterly	Discrete
Imhoff Tank % TSS Removal, mg/L	Calculate & Report (minimum removal of 50% required)		Quarterly	Calculation
Septage discharged to drying beds, gallons ²	Monitor & Report		Quarterly	Volumetric Determination
Maximum Population Count, Number of Persons Served	Monitor & Report		Quarterly	Discrete
Industrial Park Use	Monitor & Report		Quarterly	Discrete

1. If discharge flow into the Imhoff tank is negligible (i.e., not measurable), indicate “zero discharge” condition on the Discharge Monitoring Report.
2. Septage volume shall be tracked via logbook maintained at the facility.

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 July 1, 2008**, the Permittee is required to submit to NDEP for review and approval a plan for design and installation of an alternative to the unlined septage/sludge drying beds.

Procedures for Public Comment:

The Notice of the Division's intent to issue a discharge permit to the applicant, subject to the conditions contained within the permit is being sent to the **Tonopah Times-Bonanza & Goldfield News** and the **Reno Gazette-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 **January 7, 2008 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 (renew) the discharge permit for a period of five (5) years.

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