

Department of Conservation & Natural Resources

Joe Lombardo, *Governor* James A. Settelmeyer, *Director* Jennifer L. Carr, *Administrator* 

# FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: TONOPAH PUBLIC UTILITIES

PO BOX 151

TONOPAH, NV 89049

Permit Number: NS0010018

**Permit Type:** GROUNDWATER DISCHARGE

**Designation:** GROUNDWATER

New/Existing: EXISTING

Location: TONOPAH AIRPORT WASTEWATER TREATMENT PLANT, NYE

TONOPAH AIRPORT, TONOPAH, NV 89049

LATITUDE: 38.041111, LONGITUDE: -117.087778 TOWNSHIP: T2N, RANGE: R44E, SECTION: S07

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	INFLUENT	Internal Outfall		38.041111	-117.087778	N/A
002	EFFLUENT	External Outfall		38.04104330	-117.088575	GROUNDWATER
003	SEPTAGE DRYING BEDS	External Outfall		38.041389	-117.088333	GROUNDWATER

# **Permit History/Description of Proposed Action**

The Permittee, Tonopah Public Utilities, has applied for the renewal of Permit NS0010018 for the Tonopah Airport Wastewater Treatment Plant (TAWWTP), at 1 Airport Road, located outside of Tonopah, within Nye County, Nevada. The Permittee proposes to continue to discharge treated effluent to groundwaters of the State via multiple rapid infiltration basins (RIBs).

This permit was first issued on March 27, 1992. The most recent permit was issued on March 1, 2014, and expired on February 28, 2019; the permit has been administratively continued since.

#### **Facility Overview**

Tonopah Public Utilities operates the TAWWTP, a domestic sewage treatment system located in Nye County, approximately 7.5 miles southeast of the town of Tonopah. The treatment plant was originally constructed in the early 1940s, with a portion of the plant being renovated in 1981.

TAWWTP now consists of one Imhoff primary treatment tank, two sludge drying/emergency overflow basins, nine RIBs, and six concrete-lined septage drying beds. Treated effluent is discharged to groundwater of the State via percolation in the RIBs.

TAWWTP is currently permitted for influent flows up to 0.095 million gallons per day (Mgal/d); however, there are fewer than 10 service connections, and influent flows to the treatment system have averaged less than 1,000 gallons per day (or 0.001 Mgal/d). This facility is also permitted to receive up to 200,000 gallons per year of domestic septage and/or sewage sludge. The septage and/or sludge is dried in the concrete-lined drying beds prior to disposal. Tonopah Public Utilities limits usage of these beds for drying domestic

septage and/or sewage sludge to Nye County-based haulers.

The original treatment facility consisted of two Imhoff tanks, the West tank and East tank, which treated an estimated average peak flow of 0.4 Mgal/d. Imhoff tanks are open to the atmosphere, but function essentially the same as a septic tank. In an Imhoff tank, scum and sludge traps remove floating (scum/grease) and settleable (sludge) materials from the wastewater. The sludge digestion process is carried on in the sludge digestion compartment, or lower story, at a slow rate, creating treated wastewater and sludge. The accumulated sludge partially liquefies and gasifies through anaerobic digestion, with non-digested solids accumulating in the bottom of the tank, which are periodically wasted to one of the sludge drying beds. The sludge is wasted by means of a progressive cavity pump, in the mechanical building, discharging to a diversion box, then to the sludge drying beds. This pump pulls sludge from a series of six-inch diameter sludge suction lines, which penetrate the tank sidewalls, and terminate at the bottom of it. Each line is individually valved to allow for removal of accumulated well digested residue. Dried sludge is occasionally removed and disposed of at the Tonopah Landfill. Treated Effluent discharged from the Imhoff tank is directed to the RIBs to either evaporate or percolate into the ground.

In 1981, renovations/repairs were made to the West Imhoff tank. There are no plans to rehabilitate the East Imhoff tank, which remains inoperable, due to its poor structural integrity, and the minimal flow demand. Imhoff tanks provide primary treatment only and are no longer approved for treating nondomestic (industrial) wastewater flows.

In 1998, the Division approved this facility to receive domestic septage. The septage is dried in six concrete-lined, drying beds and may remain onsite for up to two years, after which it is taken to the Nye County Landfill for disposal. During the previous permit cycle, TAWWTP accepted an average of 12,501 gallons of septage per year. Domestic septage haul trucks occasionally discharge septage at this location when hauling it from the nearby Tonopah Conservation Camp.

# **Outfall Summary**

Outfall 001 - This internal outfall is for measuring the incoming influent entering the treatment plant.

Outfall 002 - This external outfall is for measuring the effluent discharged from the treatment plant.

Outfall 003 - This external outfall is for measuring the septage and/or sewage sludge delivered to the drying beds.

# **Facility Upgrades since last issued permit**

There have been no facility upgrades since the last issued permit.

#### **Solids Handling**

Solids are taken to the Tonopah Landfill for disposal.

#### **Effluent Management and Reuse**

Treated effluent is discharged into the RIBs, where it will either evaporate or percolate into the ground. There is no reuse associated with this permit.

# Design Flow (and basis) and Measurement & Current Capacity

The permitted 30-Day Average design flow rate is limited to 0.095 million gallons per day (Mgal/d).

The permitted Daily Maximum design flow rate is limited to 0.095 Mgal/d.

#### **Pretreatment Program**

The facility does not meet the federal Environmental Protection Agency's (EPA's) guidelines requiring them to have a pretreatment program.

#### Operations & Maintenance (O&M) Manual status

The TAWWTs' Operation and Maintenance Manual (O&M Manual) was received and reviewed by the Division on June 18, 2014. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals be updated every two (2) permit cycles which equates to every ten (10) years. An updated O&M Manual is due within 3 months from the permit issuance date.

#### **Effluent Characterization**

TAWWTP currently serves fewer than 10 service connections and daily wastewater flows are estimated to be less than 0.001 Mgal/d from these sources. This flow is not sufficient to fully fill the sewer line with enough flow to reach the treatment plant. The Permittee indicates that the Imhoff tank only receives 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.

#### **Pollutants of Concern**

Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Common pollutants of concern from wastewater treatment facilities are Total Nitrogen and pH.

# **Receiving Water**

Groundwater has been reported to be greater than 200 feet below ground surface. Groundwater monitoring is not required at this time.

### **Compliance History**

The facility has been in substantial compliance during the period reviewed with no deficiencies noted during the facility inspections.

# **Proposed Effluent Limitations**

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

# WWTP Discharge Limitations Table for Sample Location 001 (Influent-Internal Outfall) To Be Reported Monthly $^{[1]}$

Discharge Limitations			Monitoring Requirements				
Parameter	Base	Quantity	Concentration	•	_	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 0.095 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER
Flow rate	30 Day Average	<= 0.095 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER

# Notes (WWTP Discharge Limitations Table):

1. If no discharge takes place from this outfall during the reporting period, enter "No Discharge" on the DMR for this outfall.

# NS OTHER - Discharge Limitations Table for Sample Location 003 (Septage Drying Beds-External Outfall) To Be Reported Quarterly<sup>[1]</sup>

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Septage discharged to treatment fac.	Quarterly Total	M&R Gallons (gal)		Other Treatment, Process Complete	003	Continuous	CALCTD

Notes (NS OTHER - Discharge Limitations Table):

1. Septage volume shall be tracked via logbook entry maintained on-site at the facility.

# NS OTHER - Discharge Limitations Table for Sample Location 003 (Septage Drying Beds-External Outfall) To Be Reported Annually $^{[1]}$

Discharge Limitations			Monitoring Requirements				
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Septage discharged to treatment fac.	Annual Total	<= 200000 Gallons (gal)		Other Treatment, Process Complete	003	Continuous	CALCTD

Notes (NS OTHER - Discharge Limitations Table):

1. Septage volume shall be tracked via logbook entry maintained on-site at the facility.

# Ponds / Rapid Infiltration Basins for Sample Location 002 (Effluent-External Outfall) To Be Reported Quarterly<sup>[1]</sup>

	Discharge Limitations Monitoring Requirements							
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type	
BOD, 5-day	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT	
BOD, 5-day	Quarterly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly <sup>[1]</sup>	DISCRT	
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly <sup>[1]</sup>	DISCRT	
pH, maximum	Daily Maximum <sup>[2]</sup>		<= 9.0 Standard Units (SU)	Effluent Gross	002	Quarterly <sup>[1]</sup>	DISCRT	
pH, minimum	Daily Minimum <sup>[2]</sup>		>= 6.0 Standard Units (SU)	Effluent Gross	002	Quarterly <sup>[1]</sup>	DISCRT	
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly <sup>[1]</sup>	DISCRT	
Solids, total suspended	Quarterly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT	

#### Notes (Ponds / Rapid Infiltration Basins):

- When discharging to the RIBs.
- 2. If fewer than two samples are taken during the monitoring period, enter the single result as both the minimum and maximum value.

#### **Summary of Changes From Previous Permit**

Based on current Division standards the following items were added to the Permit or associated Fact Sheet:

Technology based effluent limitations (TBELs) as promulgated by the United States (U.S.) Environmental Protection Agency (EPA) for Publicly Owned Treatment Works (POTWs) with limits based on secondary treatment standards as allowed by the Code of Federal Regulation (CFR) Title 40, Section 133, and which has been adopted by the State of Nevada.

Basis for Effluent Limitations were inserted to discuss the basis for the monitoring required and to assess the quality of effluent being discharged.

Current Division standards have been requiring Profile 1 pollutants to be reported minimally Once during the Permit Term. Based on little to no influent flow rates, and it being composed of only domestic sewage, this requirement was waived.

The coordinates were revised for Outfall 002 to the actual location being: Lat. 38.0410433, Long. -117.085759.

The location type description for Outfall 003, the Septage Drying Beds, was updated from "Internal Outfall" to "External Outfall".

The footnote for the SOC - Schedule of Compliance Table stating, "O&M Manuals prepared.." was removed.

Additional parameters were added to Outfall 002, Effluent:

BOD, 5-day, with a base of "Daily Maximum", with a "Monitor & Report (M&R) Milligrams per Liter" concentration, a "Effluent Gross" monitoring location, a "Quarterly" measurement frequency, and a "Discrt" sample type.

Solids, total suspended, with a base of "Daily Maximum", with a "Monitor & Report (M&R) Milligrams per Liter" concentration, a "Effluent Gross" monitoring location, a "Quarterly" measurement frequency, and a "Discrt" sample type.

The following parameters under Outfall 002, Effluent were revised:

BOD, 5-day, with a base of "Value" was revised to a "Quarterly Average" base.

Solids, total suspended, with a base of "Value" was revised to a "Quaterly Average" base.

### **Technology Based Effluent Limitations**

TBELs are required as promulgated by the U.S. EPA for POTWs. The following limits are based on secondary treatment standards as allowed by the 40 CFR 133, and which has been adopted by the State of Nevada.

U.S. EPA published federal secondary treatment standards at 40 CFR 133 based on an evaluation of performance data for POTWs practicing a combination of physical and biological treatment. Performance is measured by monitoring biodegradable organics and suspended solids in the effluent, and the ability to maintain pH. Federal secondary treatment standards are defined under 40 CFR 133 for BOD5 as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L and for TSS as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L. The Division has adopted these standards for groundwater dischargers and applied the 7-day average thresholds as daily maximum effluent limits for BOD5 and TSS.

The following performance standards for POTWs with secondary treatment standards have been included in the permit:

BOD5: Quarterly average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

TSS: Quarterly average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

pH: Daily Maximum: <= 9.0 Standard Units.

pH: Daily Minimum >=6.0 Standard Units.

Limits Based on Facility's Design Criteria Review:

30-day average flow rate for influent is limited to <= 0.095 Mgal/d.

Daily maximum flow rate for influent is limited to <= 0.095 Mgal/d.

#### **Water Quality Based Effluent Limitations**

Water quality based effluent limitations are not applicable to this permit.

# Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)

Water quality based effluent limitations are not applicable to this permit.

#### **Basis for Effluent Limitations**

Monitoring is required to ensure that the treatment plant capacity is not exceeded and to assess the quality of the effluent being discharged.

### Influent and Effluent Monitoring Requirements:

Quarterly influent and effluent monitoring for BOD5 and TSS are included to assess the treatment performance of WWTP. A quarterly sampling frequency for BOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations. Some wastewater treatment processes can increase or decrease wastewater pH; therefore, quarterly monitoring for pH is included in assessing compliance with effluent limits of 6.0 S.U. as a daily minimum and 9.0 S.U. as a daily maximum.

Flow rate: 0.095 million gallons per day – This is the maximum capacity of this treatment system.

Septage discharged: ≤200,000 gallons per year – This is the annual capacity of the septage drying beds.

### **Anti-backsliding**

None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit.

# Antidegradation

The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at Nevada Revised Statutes (NRS) 445A.520 and 445A.565 and is consistent with the federal antidegradation policy found at 40 CFR § 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable.

### **Special Conditions**

See the Special Approvals/Conditions Table below.

#### SA – Special Approvals / Conditions Table

Iten #	Description
1	The wastewater and septage treatment facility, including the septage drying beds, are approved for domestic wastewater and septage only. The discharge of industrial wastewater or septage to the treatment facility is prohibited. Any proposed industrial discharger will be required to utilize a separate wastewater treatment facility.

# **Discharges From Future Outfalls/ Planned Facility Changes**

There are currently no planned future outfalls or facility changes.

### **Corrective Action Sites**

There are no NDEP Bureau of Corrective Actions remediation sites within a one-mile radius of this facility.

# **Wellhead Protection Program**

The outfalls are not located within a Wellhead Protection Area, which represents an approximate 10-year

capture zone of a well, or within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well.

# **Schedule of Compliance:**

# SOC – Schedule of Compliance Table

Item #	Description	Due Date
	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant and be prepare and wet-stamped by a licensed, qualified Nevada engineer (P.E.).	10/1/2025

#### **Deliverable Schedule:**

DLV- Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Discharge Monitoring Reports	Quarterly	10/28/2025
2	Annual Reports	Annually	1/28/2026

#### **Procedures for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at <a href="https://ndep.nv.gov/posts">https://ndep.nv.gov/posts</a>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. 5/26/2025, a period of 30 days following the date 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 of EPA Region IX 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 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/re-issue the proposed 5-year permit.

Prepared by: Melissa Hanson

Date: 4/18/2025

Title: Staff II Engineer