# FACTSHEET
## (pursuant to NAC 445A.236)

**Permittee Name:** TONOPAH PUBLIC UTILITIES
102 BURRO AVENUE
TONOPAH, NV - 890490151

**Permit Number:** NS0000026

**Location:** TONOPAH PUBLIC UTILITIES WASTEWATER TREATMENT PLANT, NYE CEMETERY ROAD, TONOPAH, NV - 89049
LATITUDE: 38.0725, LONGITUDE: -117.266667
TOWNSHIP: 3N, RANGE: 42E, SECTION: 33

| Outfall / Well Num | Outfall / Well Name | Location Type | Well Log Num | Outfall City | Outfall State | Outfall Zip | Outfall County | Latitude | Longitude | Receiving Water |
|---|---|---|---|---|---|---|---|---|---|---|
| 001 | INFLUENT | Influent Structure | | TONOPAH | NV | 89049 | NYE | 38.0725 | -117.266389 | GROUNDWATER |
| 002 | EFFLUENT | External Outfall | | TONOPAH | NV | 89049 | NYE | 38.0725 | -117.266389 | GROUNDWATER |
| 003 | PRETREATMENT POND | Surface Disposal Site | | TONOPAH | NV | 89049 | NYE | 38.072124 | -117.266032 | GROUNDWATER |
| 004 | FACULTATIVE TREATMENT POND 1 | Surface Disposal Site | | TONOPAH | NV | 89049 | NYE | 38.071588 | -117.266385 | GROUNDWATER |
| 005 | FACULTATIVE TREATMENT POND 2 | Surface Disposal Site | | TONOPAH | NV | 89049 | NYE | 38.071663 | -117.267454 | GROUNDWATER |
| 006 | FACULTATIVE TREATMENT POND 3 | Surface Disposal Site | | TONOPAH | NV | 89049 | NYE | 38.072302 | -117.267243 | GROUNDWATER |
| 007 | WATER TRUCK FILL STAND | External Outfall | | TONOPAH | NV | 89049 | NYE | 38.074938 | -117.249569 | GROUNDWATER |

### General:

The Permittee, Tonopah Public Utilities (TPU), has applied for the renewal of permit NS0000026 for the TPU Wastewater Treatment Plant (WWTP), located in Esmeralda County, approximately 1.75 miles northwest of Tonopah, Nevada. The WWTP uses an Advanced Integrated Wastewater Pond System (AIWPS) to treat domestic and light commercial wastewater received from approximately 2,800 residents and 1,200 sewer connections. The AIWPS consists of a grit removal chamber, a self-cleaning auger screen, a Parshall flume, one anaerobic pretreatment pond (APP), and three aerated facultative treatment ponds (AFPs). The APP has a surface area of approximately 0.4 acres and each AFP has a surface area of approximately 1.1 acres. The APP and the AFPs are lined with 60-mil high-density polyethylene.

Wastewater travels through the ponds in series, beginning with primary settling and digestion in the APP. Continued clarification and additional biochemical oxygen demand removal are achieved in the three AFPs. Waste sludge from the APP is discharged to four on-site sludge drying beds prior to disposal in a landfill. Secondary-treated effluent is discharged from the AFPs to eight on-site rapid infiltration basins (RIBs) for disposal via percolation. The WWTP has a design treatment capacity of 0.60 million gallons per day (MGD).

Several WWTP improvements were completed in March 2013; improvements included the addition of a filtration pump station, a chlorine contact basin, a 100-micron mesh sieve for filtration, up to 7,750 feet of 6 and 8 inch PVC piping, a 4,500 gallon holding tank, and a water truck fill stand. Treated effluent from the truck fill stand meets secondary treatment standards in accordance with NAC 445A.275 and Category D quality in accordance with NAC 445A.276. The treated effluent is used for dust control, construction-related activities, and other Category D approved uses.

This permit renewal authorizes TPU to discharge portable toilet waste to a manhole connected to the TPU sewer system. The manhole is located offsite, approximately 0.5 miles east of the WWTP, and is fenced, gated, and locked.

**Discharge Characteristics:**

Effluent discharged to the RIBs is disinfected and meets secondary treatment standards for pond systems. Average values calculated from concentrations reported from 2013 through 2015 are listed below.

Carbonaceous Biochemical Oxygen Demand (CBOD): 41 mg/L
Total Suspended Solids (TSS): 48 mg/L
Total Nitrogen: 51 mg/L

Effluent from the truck fill stand, which became operational in June 2015, is disinfected and meets secondary treatment standards in accordance with NAC 445A.275 and Category D quality in accordance with NAC 445A.276. Average values calculated from concentrations reported from June 2015 through December 2015 are listed below.

CBOD: 11 mg/L
TSS: 21 mg/L
pH: 8.0 standard units
Fecal Coliform: 34.1 MPN/100mL*

The Permittee is considered to be in substantial compliance with the current permit.

*34.1 MPN/100mL is the geometric mean of the fecal coliform concentrations reported from June 2015 through December 2015.

**Receiving Water:**

The receiving water is groundwater of the State. The groundwater in the area is reportedly more than 200 feet below ground surface and flows west. Based on the depth to groundwater, the permitted discharges are not expected to negatively impact the groundwater.

**Summary of Changes From Previous Permit:**

Authorization to discharge portable toilet waste to a manhole connected to the TPU sewer system has been added; monitoring and reporting of the discharge flow rate is required.

The requirement to electronically submit Discharge Monitoring Reports (DMRs) within 1 year of permit issuance has been added. The Bureau of Water Pollution Control's Nevada NetDMR system is a website that allows for electronic submission of DMRs. By using Nevada NetDMR, Permittees will save time, see a reduction in paperwork burden, and data will automatically error-check and validate the information prior to submission. The system also allows for electronic submittal of attachments and supplemental documentation and provides instant confirmation of submission.

Due to the new naming conventions at the Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control, the permit number has been changed from NEV0000026 to NS0000026. This change does not reflect a change in the type of permit being issued.

**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) To Be Reported Monthly

| Discharge Limitations | | | | Monitoring Requirements | | | |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Base** | **Quantity** | **Concentration** | **Monitoring Loc** | **Sample Loc** | **Measurement Frequency** | **Sample Type** |
| Flow rate | Daily Maximum | M&R Million Gallons per Day (Mgal/d) | | Raw Sewage Influent | 001[1] | Continuous | METER |
| Flow rate | 30 Day Average | <= 0.499 Million Gallons per Day (Mgal/d) | | Raw Sewage Influent | 001[1] | Continuous | METER |
| BOD, carbonaceous, 05 day, 20 C | Daily Maximum | | M&R Milligrams per Liter (mg/L) | Raw Sewage Influent | 001[1] | Monthly | DISCRT |
| BOD, carbonaceous, 05 day, 20 C | 30 Day Average | | M&R Milligrams per Liter (mg/L) | Raw Sewage Influent | 001[1] | Monthly | DISCRT |
| Solids, total suspended | Daily Maximum | | M&R Milligrams per Liter (mg/L) | Raw Sewage Influent | 001[1] | Monthly | DISCRT |
| Solids, total suspended | 30 Day Average | | M&R Milligrams per Liter (mg/L) | Raw Sewage Influent | 001[1] | Monthly | DISCRT |

Notes (WWTP Discharge Limitations Table):

1. Parshall Flume

**WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Monthly**

| Discharge Limitations | | | | Monitoring Requirements | | | |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Base** | **Quantity** | **Concentration** | **Monitoring Loc** | **Sample Loc** | **Measurement Frequency** | **Sample Type** |
| BOD, carbonaceous, 05 day, 20 C | 30 Day Average | | <= 45 Milligrams per Liter (mg/L) | Effluent Gross | 002[1] | Monthly | COMPOS |
| BOD, carbonaceous, 05 day, 20 C | Daily Maximum | | <= 45 Milligrams per Liter (mg/L) | Effluent Gross | 002[1] | Monthly | COMPOS |
| Solids, total suspended | Daily Maximum | | <= 90 Milligrams per Liter (mg/L) | Effluent Gross | 002[1] | Monthly | COMPOS |
| Solids, total suspended | 30 Day Average | | <= 90 Milligrams per Liter (mg/L) | Effluent Gross | 002[1] | Monthly | COMPOS |

Notes (WWTP Discharge Limitations Table):

1. Flow Control Structure No. 5

## WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Quarterly

| Discharge Limitations | | | | Monitoring Requirements | | | |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Base** | **Quantity** | **Concentration** | **Monitoring Loc** | **Sample Loc** | **Measurement Frequency** | **Sample Type** |
| Nitrogen, total | 30 Day Average | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 002[1] | Quarterly | COMPOS |
| Nitrogen, total | Daily Maximum | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 002[1] | Quarterly | COMPOS |

Notes (WWTP Discharge Limitations Table):

1. Flow Control Structure No. 5

**Re-use Discharge Limitations Table for Sample Location 007 (Water Truck Fill Stand) To Be Reported Monthly**

| Discharge Limitations | | | | Monitoring Requirements | | | |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Base** | **Quantity** | **Concentration** | **Monitoring Loc** | **Sample Loc** | **Measurement Frequency** | **Sample Type** |
| BOD, carbonaceous, 05 day, 20 C | 30 Day Average | | <= 30 Milligrams per Liter (mg/L) | Effluent Gross | 007[1] | Monthly | DISCRT |
| pH, maximum | Maximum | | <= 9.0 Standard Units (SU) | Effluent Gross | 007[1] | Monthly | DISCRT |
| Coliform, fecal, colony forming units | Daily Maximum | | <= 400 Colony Forming Units per 100ml T (CFU/100mL) | Effluent Gross | 007[1] | Monthly | DISCRT |
| pH, minimum | Minimum | | >= 6.0 Standard Units (SU) | Effluent Gross | 007[1] | Monthly | DISCRT |
| Flow rate | Daily Maximum | M&R Million Gallons per Day (Mgal/d) | | Effluent Gross | 007[1] | Daily | CALCTD |
| Flow rate | 30 Day Average | M&R Million Gallons per Day (Mgal/d) | | Effluent Gross | 007[1] | Daily | CALCTD |
| BOD, carbonaceous, 05 day, 20 C | Daily Maximum | | <= 30 Milligrams per Liter (mg/L) | Effluent Gross | 007[1] | Monthly | DISCRT |
| Solids, total suspended | Daily Maximum | | <= 30 Milligrams per Liter (mg/L) | Effluent Gross | 007[1] | Monthly | DISCRT |
| Solids, total suspended | 30 Day Average | | <= 30 Milligrams per Liter (mg/L) | Effluent Gross | 007[1] | Monthly | DISCRT |

Notes (Re-use Discharge Limitations Table):

1. Sampling port at the Water Truck Fill Station.

## Ponds / Rapid Infiltration Basins for Sample Location 003 (Pretreatment Pond) To Be Reported Monthly

| Discharge Limitations | | | | Monitoring Requirements | | | |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Base** | **Quantity** | **Concentration** | **Monitoring Loc** | **Sample Loc** | **Measurement Frequency** | **Sample Type** |
| Freeboard | Minimum | | >= 2 Feet (ft) | See Footnote[1] | 003 | Weekly | VISUAL |

Notes (Ponds / Rapid Infiltration Basins):

1. Freeboard shall be monitored at the Pretreatment Pond staff gauge.

## Ponds / Rapid Infiltration Basins for Sample Location 004 (Facultative Treatment Pond 1) To Be Reported Monthly

| | Discharge Limitations | | | Monitoring Requirements | | | |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Base** | **Quantity** | **Concentration** | **Monitoring Loc** | **Sample Loc** | **Measurement Frequency** | **Sample Type** |
| Freeboard | Minimum | | >= 3 Feet (ft) | See Footnote[1] | 004 | Weekly | VISUAL |

Notes (Ponds / Rapid Infiltration Basins):

1. Freeboard shall be monitored at the Facultative Treatment Pond 1 staff gauge.

## Ponds / Rapid Infiltration Basins for Sample Location 005 (Facultative Treatment Pond 2) To Be Reported Monthly

| | Discharge Limitations | | | Monitoring Requirements | | | |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Base** | **Quantity** | **Concentration** | **Monitoring Loc** | **Sample Loc** | **Measurement Frequency** | **Sample Type** |
| Freeboard | Minimum | | >= 3 Feet (ft) | See Footnote[1] | 005 | Weekly | VISUAL |

Notes (Ponds / Rapid Infiltration Basins):

1. Freeboard shall be monitored at the Facultative Treatment Pond 2 staff gauge.

**Ponds / Rapid Infiltration Basins for Sample Location 006 (Facultative Treatment Pond 3) To Be Reported Monthly**

| | Discharge Limitations | | | Monitoring Requirements | | | |
|---|---|---|---|---|---|---|---|
| **Parameter** | **Base** | **Quantity** | **Concentration** | **Monitoring Loc** | **Sample Loc** | **Measurement Frequency** | **Sample Type** |
| Freeboard | Minimum | | >= 3 Feet (ft) | See Footnote[1] | 006 | Weekly | VISUAL |

Notes (Ponds / Rapid Infiltration Basins):

1. Freeboard shall be monitored at the Facultative Treatment Pond 3 staff gauge.

**Rationale for Permit Requirements:**

Flow rate is limited based on the requested flow limit in the permit renewal application.

CBOD5 is limited based on the secondary treatment standards in NAC 445A.275 and 40 Code of Federal Regulations (CFR) § 133.102.

TSS are limited based on the secondary treatment standards in NAC 445A.275 and 40 CFR § 133.102.

pH is limited based on the secondary treatment standards in NAC 445A.275 and 40 CFR § 133.102.

Fecal coliform is limited in accordance with NAC 445A.276. Total nitrogen is limited to prevent degradation of the receiving water.

Freeboard is limited to reduce the potential for overflow.

**Fecal Coliform:**

Daily Maximum ≤ 400 CFU/100mL

**Special Conditions:**

Substantial compliance with the current permit is a condition of permit renewal.

SA – Special Approvals / Conditions Table

| |
|---|
| There are no Special Approval / Condition items |

**Flow:**

30-Day Average Flow Rate ≤ 0.499 MGD

**Corrective Action Sites:**

There are no Bureau of Corrective Actions (BCA) remediation sites located within one mile of the WWTP or water truck fill stand.

**Wellhead Protection Program:**

The WWTP and water truck fill stand are not located within a Wellhead Protection Area or a Drinking Water Protection Area.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

| Item # | Description | Due Date |
|---|---|---|
| 1 | The Permittee shall submit two copies of an updated Operations and Maintenance (O&M) Manual to the Division. The O&M Manual shall be prepared by a qualified person in accordance with guidance document *WTS-2: Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant*. The updated O&M Manual shall include a description of the O&M procedures and Best Management Practices used for the discharge of portable toilet fluids into the manhole connected to the TPU sewer system. | 10/28/2016 |
| 2 | The Permittee shall submit two copies of an updated Effluent Management Plan (EMP) to the Division. The EMP shall be prepared and wet-stamped by a Nevada Registered Professional Engineer in accordance with guidance document *WTS-1B: General Criteria for Preparing an Effluent Management Plan* and shall address operation and maintenance of equipment associated with the water truck fill stand. If the Permittee determines that no updates to the EMP are necessary, the Permittee shall submit, in lieu of an updated EMP, a letter to the Division stating that no changes to the existing EMP have been made. | 10/28/2016 |
| 3 | Within 1 year of permit issuance, all Discharge Monitoring Reports shall be submitted electronically through the Nevada NetDMR website (https://netdmr.ndep.nv.gov/netdmr/public/home.htm). | 7/1/2017 |

**Deliverable Schedule:**

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

| Item # | Description | Interval | First Scheduled Due Date |
|---|---|---|---|
| 1 | Discharge Monitoring Report | Quarterly | 10/28/2016 |
| 2 | Annual Report | Annually | 1/28/2017 |

**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 sent to the **Reno Gazette Journal, Tonopah Times-Bonanza & Goldfield 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 until 5:00 P.M. **6/10/2016** , 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 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 issue / re-issue the proposed 5-year permit.

Prepared by: **Alan Pineda**
Date: **4/25/2016**
Title: **Staff I Associate Engineer**