



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT
1220 SWEETWATER RD
INCLINE VILLAGE, NV - 89451

Permit Number: NS0030009

Location: INCLINE VILLAGE GENERAL IMPROVEMENT DISTRICT WATER RESOURCE RECOVERY FACILITY, WASHOE
1250 SWEETWATER ROAD, INCLINE VILLAGE, NV - 894519214
LATITUDE: 39.238611, LONGITUDE: -119.746667
TOWNSHIP: 16 N, RANGE: 18 E, SECTION: 23, 24

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	Internal Outfall		INCLINE VILLAGE	NV	89451	WASHOE	39.238611	-119.924490	GROUNDWATER
002	EFFLUENT	External Outfall		INCLINE VILLAGE	NV	89451	WASHOE	39.238611	-119.924490	GROUNDWATER
003	WETLANDS	External Outfall		MINDEN	NV	89423	DOUGLAS	39.066944	-119.746667	GROUNDWATER
004	MONITORING WELL - MW1	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.0615	-119.7438	GROUNDWATER
005	MONITORING WELL - MW2	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.0654	-119.7599	GROUNDWATER
006	MONITORING WELL - MW3	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.0624	-119.7608	GROUNDWATER
007	MONITORING WELL - MW4	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.0605	-119.7597	GROUNDWATER
008	MONITORING WELL - MW5	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.0592	-119.7633	GROUNDWATER
009	MONITORING WELL - MW6	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.0539	-119.7622	GROUNDWATER
010	MONITORING WELL - MW8	Monitoring Well		MINDEN	NV	89423	DOUGLAS	39.0562	-119.7561	GROUNDWATER

General:

The Permittee, Incline Village General Improvement District, has applied for the renewal of permit NS0030009, which authorizes the Incline Village General Improvement District Water Resource Recovery Facility to discharge treated effluent to Waters of the State. The facility treats residential and commercial wastewater generated within Incline Village and Crystal Bay, in Lake Tahoe, Nevada. Treated wastewater is pumped out of Lake Tahoe Basin to Carson Valley via a 21 mile pipeline that terminates at a constructed wetlands in Douglas County, with laterals supplying effluent for irrigation purposes at Schneider Ranch in Jacks Valley (permit NS0098013) and Clear Creek Tahoe Golf Course (permit NS2010509) in Clear Creek Valley near the south end of Carson City.

The Incline Village General Improvement District Water Resource Recovery Facility uses an activated sludge process with a rotating fine screen ahead of the aeration basins. Other process units include an aerated grit chamber, two secondary clarifiers, and sludge dewatering centrifuges. Sodium hypochlorite is used for disinfection prior to delivery into the export line.

Effluent is stored in a 0.5 million gallon steel storage tank prior to being pumped into the export line. Two reservoirs with capacities of 2.4 and 13.5 million gallons provide additional effluent storage in the event of

malfunctions or maintenance of the export line. The smaller reservoir is accessed via gravity flow from the steel tank and is monitored by two vadose zone wells intended to intercept any leaks; none have been found.

Discharge Characteristics:

Most of the water discharged to the wetlands is lost to evapotranspiration, with minor amounts of infiltration occurring in the more elevated areas. The facility is considered to be in substantial compliance with its permit.

Receiving Water:

The receiving water is Groundwater of the State. Groundwater at the Wetlands Enhancement Facility is monitored by seven wells. Recent data shows total dissolved solids ranging from 800 to 2100 mg/l, and nitrate from non-detect to 0.8 mg/l. The depth to groundwater in the monitoring wells ranges from 3 feet to 46 feet below ground surface.

Summary of Changes From Previous Permit:

There are no substantial changes to this permit from its previous version.

Proposed Effluent Limitations:

The proposed effluent limitations can be found in the following tables.

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
Solids, total suspended	Monthly Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Weekly	COMPOS
Solids, total suspended	Monthly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Weekly	COMPOS
BOD, 5-day	Monthly Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Weekly	COMPOS
BOD, 5-day	Monthly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Weekly	COMPOS
Flow rate	Daily Maximum	<= 3.0 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER
Flow rate	30 Day Average	<= 2.5 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER

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

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Phosphorus, total (as P)	Monthly Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Phosphorus, total (as P)	Monthly Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Nitrogen, total	Monthly Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Nitrogen, total	Monthly Average		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
pH, maximum	Monthly Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Weekly	DISCRT
pH, minimum	Monthly Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	002	Weekly	DISCRT
Coliform, fecal general	Monthly Maximum		<= 240 Most Probable Number per 100ml T (MPN/100mL)	Effluent Gross	002	Weekly	DISCRT
Coliform, fecal general	Monthly Geometric Mean		<= 23 Most Probable Number per 100ml T (MPN/100mL)	Effluent Gross	002	Weekly	DISCRT
Solids, total suspended	Monthly Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
Solids, total suspended	Monthly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
BOD, 5-day	Monthly Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS
BOD, 5-day	Monthly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Weekly	COMPOS

Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well - Mw1) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Water level relative to mean sea level	Quarterly Maximum	M&R Feet (ft)		Groundwater	004	Quarterly	DISCRT
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	004	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well - Mw2) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Water level relative to mean sea level	Quarterly Maximum	M&R Feet (ft)		Groundwater	005	Quarterly	DISCRT
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	005	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 006 (Monitoring Well - Mw3) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Water level relative to mean sea level	Quarterly Maximum	M&R Feet (ft)		Groundwater	006	Quarterly	DISCRT
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	006	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 007 (Monitoring Well - Mw4) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	007	Quarterly	DISCRT
Water level relative to mean sea level	Quarterly Maximum	M&R Feet (ft)		Groundwater	007	Quarterly	DISCRT
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	007	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 008 (Monitoring Well - Mw5) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	008	Quarterly	DISCRT
Water level relative to mean sea level	Quarterly Maximum	M&R Feet (ft)		Groundwater	008	Quarterly	DISCRT
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	008	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 009 (Monitoring Well - Mw6) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	009	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	009	Quarterly	DISCRT
Water level relative to mean sea level	Quarterly Maximum	M&R Feet (ft)		Groundwater	009	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 010 (Monitoring Well - Mw8) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	010	Quarterly	DISCRT
Water level relative to mean sea level	Quarterly Maximum	M&R Feet (ft)		Groundwater	010	Quarterly	DISCRT
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	010	Quarterly	DISCRT

Ponds / Rapid Infiltration Basins for Sample Location 003 (External Outfall - Wetlands) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Oxygen, dissolved (DO)	Monthly Minimum		≥ 2.0 Milligrams per Liter (mg/L)	Effluent Gross	003	Monthly	DISCRT

Rationale for Permit Requirements:

The BOD and TSS limits are secondary standards applicable to the plant. Fecal coliform, phosphorus, nitrogen species, and total dissolved solids concentrations are tracked to facilitate effluent reuse, and the dissolved oxygen limit is intended to protect aquatic life in the wetlands.

Fecal Coliform:

Fecal coliform is limited to a 30-day average concentration of 23 MPN (most probable number)/100 ml and a daily maximum concentration of 240 MPN/100 ml.

Special Conditions:

SA – Special Approvals / Conditions Table

Item #	Description
1	The operations staff shall check the two vadose zone wells installed near the upper storage pond at the treatment plant if and when the ponds are used. The level of water in the wells shall be reported into a log book that is kept at the treatment plant.
2	The Permittee shall continue to submit discharge monitoring reports through the NDEP NetDMR system.
3	<p>If the Total Nitrogen as N level in any of the groundwater monitoring wells reaches above of 7.0 mg/l for two consecutive quarters, The Permittee shall take corrective actions pursuant to prescribed procedures in the revised Operation and Maintenance Manual to prevent further groundwater contamination. This shall include:</p> <ol style="list-style-type: none"> 1. Assessment of Wetland basins lining integrity; 2. Feasibility plan for resealing the basins. <p>If the total Nitrogen as N levels reaches and maintains above 10.0 mg/l or above for two consecutive quarters, the Permittee shall implement the construction of a relining project on the wetland basins.</p>

Flow:

Flow is limited to a 30-day average of 2.5 million gallons per day and a daily maximum of 3.0 million gallons per day.

Corrective Action Sites:

There are no corrective actions sites within one mile of the discharge location.

Wellhead Protection Program:

The discharge location is not within a Wellhead Protection Area, nor is it within a Drinking Water Protection Area.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	An updated Operations and Maintenance Manual for the facility shall be submitted to the Division for review. If no changes have been made to the Operations and Maintenance Manual, submit a letter stating so.	8/1/2016

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	7/28/2016
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, North Lake Tahoe Bonanza, The Record Courier** 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. **5/31/2016**, 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: **Peter Lassaline**

Date: **4/21/2016**

Title: **Environmental Scientist**