NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET
(Pursuant to NAC 445A.148)

Permittee Name: Incline Village General Improvement District
893 Southwood Blvd
Incline Village NV 89451

Permit No. NEV30009

Facility: Incline Village Wastewater Reclamation Facility
1250 Sweetwater Rd
Incline Village NV 89451
Latitude: 39° 14' 19"
Longitude: 119° 55' 25"
Township 16N - Range 18E - Sections 23 & 24

General: The Incline Village Wastewater Reclamation Facility treats residential and commercial wastewater generated within Incline Village and Crystal Bay. Treated wastewater is pumped out of Lake Tahoe Basin to Carson Valley via a 21 mile pipeline that terminates at a constructed wetlands near Hot Springs Mountain, with laterals supplying effluent for irrigation purposes at Schneider Ranch in Jacks Valley (NEV98013) and Bently Agrowdynamics' Kirman Tract (NEV2002505) near the wetlands. Prior to 1970, effluent was used for irrigation at the Incline Village Golf Course and at the plant site. The export line was constructed in 1970, and originally discharged to the Carson River. The pipeline was subsequently extended across the river to the newly constructed Wetlands Enhancement Facility, which allowed elimination of the river discharge in 1984. Most of the water discharged to the wetlands is lost to evapotransporation, with minor amounts of infiltration occurring in the more elevated areas. Douglas County's North Valley Wastewater Treatment Plant (NEV60025) also discharges to the wetlands.

The plant uses an activated sludge process with a rotating fine screen instead of primary sedimentation. Other process units include an aerated grit chamber, two secondary clarifiers, and sludge dewatering centrifuges. Sodium hypochlorite is used for disinfection. The digester is no longer used as the sludge is now trucked to Bently Agrowdynamics for production of Class B biosolids via composting under permit NEV97012.

Effluent is stored in a 0.5 MG steel storage tank prior to being pumped into the export line. Two clay-lined earthen reservoirs with capacities of 2.4 and 13.5 MG 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. Effluent must be pumped to the larger reservoir, which has not been used since the flood of 1986.

Receiving Water Characteristics: Groundwater at the Wetlands Enhancement Facility is monitored by seven wells. Recent data shows TDS ranging from 800 to 2800 mg/l, and nitrate from non-detect to 0.78 mg/l. Three of these wells tap a geothermal reservoir with recent temperatures ranging from 74 to 104 °F.

Rational for Permit Requirements: The BOD and TSS limits are secondary standards applicable to the plant. Fecal coliform, total chlorine residual, 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. The effluent limitations and monitoring requirements from the permit are reprinted below.

Table I.A.1

Parameter	**Discharge Limitations**		**Monitoring Requirements**		
	30 Day Average	Daily Maximum	Sample Locations	Measurement Frequency	Sample Type
Flow (influent), MGD	2.14		(1)	continuous	meter
BOD_5 (influent), mg/l	m&r	m&r	(2)	weekly	composite
BOD_5, mg/l	30	45	(3)	weekly	composite
TSS (influent), mg/l	m&r	m&r	(2)	weekly	composite
TSS, mg/l	30	45	(3)	weekly	composite
Fecal Coliform Bacteria, MPN/100 ml	23 (6)	240	(4)	weekly	discrete
Total Chlorine Residual, mg/l		m&r	(5)	weekly	discrete
Total Phosphorus (as P), mg/l		m&r	(3)	monthly	composite
Ammonia as N, mg/l		m&r	(3)	monthly	composite
Nitrate as N, mg/l		m&r	(3)	monthly	composite
Total Nitrogen as N, mg/l		m&r	(3)	monthly	composite
Total Dissolved Solids, mg/l		m&r	(3)	monthly	composite
Dissolved Oxygen, mg/l		≥ 2.0	(5)	monthly	discrete
pH, standard units		6 ≤pH≤ 9	(3)	monthly	discrete

Notes: All samples are collected from effluent except as indicated.
m&r = monitor and report

(1) Influent Parshall flume
(2) Between influent Parshall flume and head works
(3) Between chlorination chamber and effluent Parshall flume
(4) Spooner pump station
(5) Pipeline outfall at Wetlands Enhancement Facility
(6) Geometric mean

Two vadose zone monitoring wells have been installed near the upper effluent storage pond at the plant site with the intention of intercepting any leaks that may develop; none have been found. 7 groundwater monitoring wells have been installed at the Wetlands Enhancement facility to detect any changes in nitrate concentrations; no impacts have been detected.

The groundwater monitoring requirements from the permit are reprinted below.

Part I.A.2 of Draft Permit NEV30009:

The two vadose zone monitoring wells installed near the upper storage pond at the treatment facility shall be checked quarterly for the presence of water. The Division shall be notified if water is found.

The monitoring wells at the Wetlands Enhancement Facility are numbered 1 - 6, and 8, and shall be monitored as follows.

Table I.A.2.b

Parameter	Limitation	Frequency	Sample
Depth to groundwater, ft	m&r (1)	quarterly	discrete
Groundwater elevation, ft	m&r	quarterly	discrete
Nitrate as N, mg/l	10.0	quarterly	discrete
Chloride, mg/l	m&r	quarterly	discrete
Total Dissolved Solids, mg/l	m&r	quarterly	discrete

(1) m&r = monitor & report

If the nitrate level increases to 7.0 mg/l a nitrate reduction plan shall be selected after approval by the Division.

Monitoring wells shall be labeled, capped, and locked.

Procedures for Public Comment: The Notice of the Division's intent to renew permit NEV30009, authorizing discharge of treated effluent from the Incline Village Wastewater Reclamation Facility to the Wetlands Enhancement Facility and irrigation use at Schneider Ranch and Bently Agrowdynamics' Kirman Tract is being sent to the **North Lake Tahoe Bonanza** and the **Nevada Appeal** for publication. The notice is being mailed to interested persons on our mailing list. The notice, this fact sheet, and draft permit are also posted on the Division's web site, at http://ndep.nv.gov/admin/public.htm. 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 by which all

written comments are to be postmarked or hand delivered to the Division is Monday April 12, 2004 by 5:00 pm.

A public hearing on the proposed determination can be requested by the applicant, any affected State or interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing the Administrator determines to hold 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 renew the proposed permit for a five year term.

Prepared by: Robert J. Saunders
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Bureau of Water Pollution Control
March 1, 2004