



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: PARADISE VALLEY SEWER DISTRICT
P.O. BOX 25
PARADISE VALLEY, NV - 89426

Permit Number: NS0089011

Location: PARADISE VALLEY SEWER DISTRICT, HUMBOLDT
3/4 MILE S. OF PARADISE VALLEY, PARADISE VALLEY, NV - 89426
LATITUDE: 41.4825, LONGITUDE: -117.532222
TOWNSHIP: 42 N, RANGE: 39 E, SECTION: 36

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		PARADISE VALLEY	NV	89426	HUMBOLDT	41.4825	-117.532222	GROUNDWATER
002	POND	External Outfall		PARADISE VALLEY	NV	89426	HUMBOLDT	41.4825	-117.532222	GROUNDWATER
003	MONITORING WELL - MW-1	Monitoring Well		PARADISE VALLEY	NV	89426	HUMBOLDT	41.4825	-117.532222	GROUNDWATER
004	POND	External Outfall		PARADISE VALLEY	NV	89426	HUMBOLDT	41.4825	-117.532222	GROUNDWATER

General:

Paradise Valley is a small agricultural community of approximately 110 residents located on State Route 290, approximately 40 miles north of Winnemucca in Humboldt County, Nevada. Besides farming, the area's economy includes tourism and seasonal hunting. A number of the residences are occupied only part-time during weekend events and hunting season. There are also a number of historical structures, which are vacant.

Paradise Valley's current wastewater treatment system consists of a flow meter, septic tank, facultative treatment pond and one active rapid infiltration basin (RIB). The wastewater treatment facility (WWTF), was originally constructed in 1975. The Permittee improved the WWTF in 2013 by abandoning the primary west pond and relining the primary east pond. A septic tank was installed ahead of the primary treatment pond to aid in solids removal. The septic tank will be pumped when its sludge and scum reaches 50-percent of the tank's liquid holding capacity. The treatment capacity is 5,000 gallons per day (gpd).

Discharge Characteristics:

The discharge from the wastewater treatment plant is secondary-treated effluent. The effluent is pumped to the RIBs, which distribute the effluent into the groundwater of the State. The treated effluent meets State and Federal standards for secondary treatment.

CBOD: The flows from the 4th quarter 2014 through the 3rd quarter 2015 show that CBOD ranged from a

low of 10 mg/L to a maximum of 35 mg/L which is well below the permit limit of 45 mg/L.

Total Suspended Solids: TSS values during the same period ranged from a low of 8 mg/L to a maximum of 210 mg/L. The latter value exceeds the permit limit of 90 mg/L and the operator stated that this was due to low flows and a long retention time.

pH: Two quarters during the same time period exceeded the upper pH level of 9.0 SU. The operator stated that this was due to algae growth and long retention times due to low flows.

Receiving Water:

The monitoring well (MW-1) was installed in 2004 and is located 250 ft south and down-gradient from the treatment pond. Water quality data collected from MW-1 will show whether groundwater is impacted.

Average depth to groundwater is shallow (11 ft below ground surface). Groundwater flow is to the south following the Cottonwood Creek drainage. The local water table is influenced seasonally by creek flow and flood irrigation practices.

The flows from the 4th quarter 2014 through the 3rd quarter 2015 show that groundwater has not been impacted by infiltration through percolation. Total dissolved solids averaged about 500 mg/L, chloride averaged 45 mg/L and total nitrogen values were all less than 1.3 mg/L, which is well below the permit limit of 10 mg/L.

Summary of Changes From Previous Permit:

There are no changes from the previous permit other than the new naming conventions at the Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control. The permit number has been changed from NEV89011 to NS0089011. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

The discharge shall be limited, sampled and monitored by the Permittee as specified below:

WWTP Discharge Limitations Table for Sample Location 001 (Internal Outfall) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Solids, total suspended	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Quarterly	DISCRT
BOD, carbonaceous, 05 day, 20 C	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Quarterly	DISCRT
Flow rate	Quarterly Maximum	<= 5000 Gallons per Day (gal/d)		Raw Sewage Influent	001	Quarterly	METER ^[1]

Notes (WWTP Discharge Limitations Table):

1. Flume reading.

WWTP Discharge Limitations Table for Sample Location 002 (External Outfall) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
pH, maximum	Quarterly Maximum		<= 9 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
pH, minimum	Quarterly Minimum		>= 6 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
Solids, total suspended	Quarterly Maximum		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
BOD, carbonaceous, 05 day, 20 C	Quarterly Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. If no effluent is discharged into a percolation pond, indicate "NO EFFLUENT DISCHARGE" on DMR.

Groundwater Monitoring Wells Table for Sample Location 003 (Monitoring Well) To Be Reported Quarterly^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface ^[2]	Quarterly Maximum	M&R Feet (ft)		Groundwater	003	Quarterly	VISUAL ^[3]
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Groundwater samples shall be taken only after purging at least three (3) well volumes of groundwater from the monitoring well.
2. Depth to groundwater, ft.
3. Field measurement.

Ponds / Rapid Infiltration Basins for Sample Location 004 (External Outfall) To Be Reported Annually^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Sludge/Solids, depth	Maximum Value	M&R Feet (ft)		Sludge	004	Annual	VISUAL

Notes (Ponds / Rapid Infiltration Basins):

1. Maximum sludge depth at various points throughout the pond shall be sampled in the 3rd quarter of every year of this permit.
2. Monitoring points shall be included in the O&M Manual and approved by NDEP prior to sampling.

Rationale for Permit Requirements:

Monitoring is required to ensure that groundwaters of the State of Nevada are not degraded. Monitoring is also required to assess the level of treatment being provided, and to determine compliance with discharge permit limits. The Permittee is in substantial compliance with its current discharge permit.

Special Conditions:

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Flow:

Permitted flow capacity is 5,000 GPD. This is equivalent to daily full-time use by 50 capita (100 gallons per day per capita). Instantaneous flow is periodically assessed by reading a non-recording staff (head) gauge located inside the Palmer-Bowlus flume. The daily average flow indicated 2,500 GPD over the past five years.

Corrective Action Sites:

There are no Bureau of Corrective Actions remediation sites located within a one-mile radius of the wastewater treatment facility site.

Wellhead Protection Program:

The Paradise Valley WWTF is located within the 6,000 feet, Drinking Water Protection Area 4, of a non-transient, non-community well (elementary school) and two transient wells (community center and park).

The wellhead capture zones for these supply wells have not been delineated (modeled). Paradise Valley is not supplied by a community supply well. Individual residences supply their own drinking water with private wells.

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 NDEP for review. The manual shall be prepared in accordance with the Division's WTS-2 guidance document: <i>Minimum Information Required for an Operations and Maintenance Manual</i> . If no revisions are needed, the Permittee shall submit a letter stating that the O&M Manual has no revisions.	7/1/2016

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2016
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 **Humboldt Sun 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 until 5:00 P.M. **3/7/2016**, 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: **Steve McGoff**
Date: **4/8/2013**
Title: **Staff Engineer III**