FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: CARVER'S SMOKY VALLEY RV & MOBILE HOME PARK
HC 60 BOX 53708
ROUND MOUNTAIN, NV - 89045

Permit Number: NS0020018

Location: CARVER'S SMOKY VALLEY RV & MHP, NYE
HWY 376, ROUND MOUNTAIN, NV - 89045
LATITUDE: 38.787778, LONGITUDE: -117.176667
TOWNSHIP: 11 N, RANGE: 43 E, SECTION: 29

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 TO SEPTIC TANK	Intake Structure		ROUND MOUNTAIN	NV	89045	NYE	38.787778	-117.176667	GROUNDWATER
002	DISCHARGE WEIR	External Outfall		ROUND MOUNTAIN	NV	89045	NYE	38.787778	-117.176667	GROUNDWATER
003	EFFLUENT PONDS 1 & 2	External Outfall		ROUND MOUNTAIN	NV	89045	NYE	38.787778	-117.176667	GROUNDWATER
004	MONITORING WELL (MW-1)	Monitoring Well		ROUND MOUNTAIN	NV	89045	NYE	38.78777780	-117.176667	GROUNDWATER
005	MONITORING WELL (MW-2)	Monitoring Well		ROUND MOUNTAIN	NV	89045	NYE	38.787778	-117.176667	GROUNDWATER
006	SEPTIC TANK	External Outfall		ROUND MOUNTAIN	NV	89405	NYE	38.787778	-117.176667	GROUNDWATER

General:
Carver's Recreational Vehicle (RV) and Mobile Home Park (MHP) was constructed in 1982. The property is located on State Route 376, approximately eight miles northwest of Round Mountain in Nye County. Connections include a coffee shop, laundry and 120 total hookups. Occupancy varies depending on the number of employees working at the local gold mine. There are presently 86 tenants. Of the hookups, 10 are families living full-time in traditional mobile homes and the rest are single-occupant RV hookups. The RV hookups are occupied part-time since the gold mine's employees work a seven days on/seven days off schedule and usually reside elsewhere on their off days. Most of the RV occupants also eat their meals offsite further reducing water demand.

Discharge Characteristics:
Domestic (sanitary) wastewater flows to the wastewater treatment facility (WWTF) via gravity. The original design engineer modified a below-grade septic tank to provide secondary-treatment (biological) to the wastewater influent. The modified septic tank consists of three baffled compartments to provide primary settling, aeration, and secondary clarification. Six submerged aerators are used in the second compartment, each rated at 1/3 Hp. The interior dimensions of this modified septic tank are 18' (W) x 40' (L) x 7' (liquid depth). At design capacity, the tank provides approximately one day's detention period.

The septic tank effluent discharges to a 500-gallon chlorine contact tank for disinfection. Solid calcium hypochlorite tablets are used to maintain a chlorine residual of at least 0.1 ppm (in practice, the former operator typically measured 0.3 ppm). An outlet weir is staffed to provide an instantaneous flow reading. Chlorinated effluent is discharged to one of two unlined ponds for further polishing and disposal via evaporation and percolation. Each pond is approximately 0.6 acres in area.

Water quality results as reported in the quarterly DMRs for the period from the 4th quarter 2014 through the 3rd quarter are as follows:

Flow: Flows ranged from a low of 12,960 gallons gallons per day (gpd) to a maximum of 15,120 gpd. This is less than 50-percent of the permitted flow rate of 34,500 gpd.

Biochemical Oxygen Demand: BOD values ranged from 58 mg/L to 76 mg/L. In two of the quarters, the Permittee exceeded the permit limit of 45 mg/L. This is most likely due to insufficient aeration and the aeration needs to be consistent to meet the water quality standards outlined in the permit.

Total Suspended Solids: TSS values during the period ranged from 18 mg/L to 38 mg/L. These values are within the permitted limit of 90 mg/L. These values show that settling is occurring in the septic tank and in the secondary treatment tank.

pH: These values ranged from 7.2 standard units (SU) to 7.6 SU. These values are all within the permitted range of 6.0 to 9.0 SU.

Receiving Water:

Effluent is discharged to the groundwater via percolation in ponds 1 & 2. The estimated depth to groundwater is 10 feet below ground surface (bgs) and the topographic quad map for this site indicates nearby springs and flowing (artesian) wells.

Two boreholes have been drilled on this property to mimic monitoring wells. One borehole (MW-1) provides a background (up-gradient) sample, while the other borehole (MW-2) provides the down-gradient sample. Based upon the water quality results from the boreholes, it can be determined whether the groundwater quality has been impacted.

Water quality results as reported in the quarterly DMRs for the period from the 4th quarter 2014 through the 3rd quarter are as follows:

Total Dissolved Solids: TDS values during the period ranged from 260 mg/L to 300 mg/L. There can be no exceedances of a permit limit since the permit states that the results are to be monitored and reported.

Chlorides: Chloride values ranged from 19 mg/L to 40 mg/L. There can be no exceedances of a permit limit since the permit states that the results are to be monitored and reported.

Total Nitrogen: TN values during this period ranged from less than 0.7 mg/L to 17 mg/L. This latter value exceeded the permit limit of 10 mg/L. Since this value occurred during the 4th quarter 2014, the values during the subsequent quarters were well below the permit limit. Since the boreholes are not engineered monitoring wells, these values may not be an accurate demonstration of the impact to groundwater.

Summary of Changes From Previous Permit:

The sampling and reporting of certain constituents have been removed from the requirements of this permit. These constituents include the operation time of aerators 1-6, number of chlorination tablets used during the week, number of active connections, pond depth and the operator's dated monthly logs.

Removing these constituents makes the permit requirements consistent with other similar permits.

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 NEV20018 to NS0020018. This change does not reflect a change in the type of permit being issued.

Proposed Effluent Limitations:

The Permittee is authorized to discharge in accordance with the limitations, requirements and conditions of this permit. The discharge shall be limited, sampled and monitored by the Permittee as specified below:

WWTP Discharge Limitations Table for Sample Location 001 (Intake Structure) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
BOD, 5-day	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Quarterly	DISCRT
Solids, total suspended	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Intake	001	Quarterly	DISCRT

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

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Quarterly Average	<= .034 Million Gallons per Day (Mgal/d)		Effluent Gross	002	Quarterly	INSTAN

WWTP Discharge Limitations Table for Sample Location 003 (External 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		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
BOD, 5-day	Quarterly Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT

Groundwater Monitoring Wells Table for Sample Location 004 (Mw-1) To Be Reported Quarterly[3]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Depth to water level ft below landsurface[1]	Quarterly Maximum		M&R Feet (ft)	Groundwater	004	Quarterly	VISUAL[2]
Nitrogen, total	Quarterly Maximum		<= 10 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
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

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

Groundwater Monitoring Wells Table for Sample Location 005 (Mw-2) To Be Reported Quarterly[3]

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Depth to water level ft below landsurface[1]	Quarterly Maximum	M&R Feet (ft)		Groundwater	005	Quarterly	VISUAL[2]
Nitrogen, total	Quarterly Maximum		<= 10 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
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

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

Ponds / Rapid Infiltration Basins for Sample Location 006 (Septic Tank) 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	006	Annual	VISUAL

Notes (Ponds / Rapid Infiltration Basins):

1. The Permittee shall measure the sludge depth in the septic tank during the third quarter and report the depth in the 3rd quarter DMRs.
2. If the sludge depth reported in the 3rd quarter DMRs exceeds 24-inches, the septic tank shall be pumped by a licensed septage pumper during that same quarter. After the septic tank is pumped, the Permittee shall provide a copy of the receipt proving that the septage was pumped and disposed of properly.

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:

The Division has approved the design treatment capacity of this WWTF at 0.0345 MGD (34,500 gpd).

Corrective Action Sites:

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

Wellhead Protection Program:

The facility is located within a 3,000-foot radius Safe Drinking Water Protection Zone.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies of an Operations and Maintenance (O&M) Manual for BWPC's review that has been prepared in accordance with BWPC's WTS-2 guidance: *Minimum Information Required for an Operations and Maintenance Manual*.	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	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 **Tonopah Times-Bonanza & Goldfield News and the Las Vegas Review 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. **3/14/2016** , 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: **3/27/2013**
Title: **Staff Engineer III**