

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: TravelCenters of America
24601 Center Ridge Road, Suite 200
Westlake, OH 44145-5634

Permit Number: NEV90016

Location: TravelCenter of Mill City
6000 E. Frontage Road
Mill City, NV 89418 (Pershing County)

Effluent from four Rapid Infiltration Basins (RIB), Outfall 001;
Latitude: 40° 41' 28"N, Longitude: 118° 03' 33"W
Township 33N, Range 35E, Section 33

Effluent from Modified Sump, Outfall 002 (ditch downgradient from modified sump);
Latitude: 40° 41' 41"N, Longitude: 118° 03' 33"W
Township 33N, Range 35E, Section 33

Effluent from OWS #2, Outfall 003 (ditch downgradient from OWS);
Latitude: 40° 41' 41"N, Longitude: 118° 03' 25"W
Township 33N, Range 35E, Section 33

General: TravelCenters of America (TA) operates a vehicle fueling station, truck service shop, employee's housing, a convenience store, restaurants, a laundromat and a 50-room motel. With exception of the employee housing units, domestic wastewater from the facility was treated in two primary facultative ponds constructed in 1991. The ponds were designed as total retention lagoons with a surface area of 1.95 acres each. Actual construction of the ponds included neither a clay nor a synthetic liner. This resulted in leakage from the ponds to groundwater at a rate of approximately 26,500 gallons per day (gpd) (seepage rate = 0.25" per day). The percolation of wastewater through the pond bottom and sides negatively impacted the groundwater with elevated nitrate levels. Since January 1995, nitrate as nitrogen exceeded the Nevada Safe Drinking Water (SDW) MCL of 10 mg/L in Monitoring Well #1. Monitoring Wells 2, 3 and 4 have shown exceedances of the SDW MCL since February 2002. TA was directed in the previous permit issued on June 20, 2002 to submit plans and specifications to provide an alternate method of effluent disposal.

TA submitted a complete application and 100% Plans and Specifications for a major modification to the TA-Mill City sewage treatment and disposal system. The plans for a package treatment plant were approved by the Technical Services Branch of the Bureau of Water Pollution Control on June 2, 2005.

TA has installed a denitrifying wastewater package treatment plant as an alternative to the existing facultative pond system. The system was activated in June 2006. Raw domestic wastewater flows via gravity to a lift station and is then pumped to an equalization chamber (wet well, sludge holding chamber). From the wet well the sewage flows to an anoxic tank. The anoxic tank flows into an aeration chamber, then to a post anoxic tank, followed by a clarifier and dosing tank, and then to one of four rapid infiltration basins (RIBs). Scum is returned to the aeration chamber and sludge is returned to the sludge holding chamber from the clarifier. The two former primary facultative ponds have been converted into four RIBs. The RIBs are equipped with staff gauges so that water depth can be measured on a routine basis. The RIBs are rotated on a weekly basis and completely dry during the hot summer months.

As part of the permit modification process, TA also replaced the existing four oil/water separators (OWS) that were located at the facility with one modified sump and one OWS. The type of waste to be treated includes stormwater combined with oil products, sand and trash collected from the truck parking lot. Three sumps located on the south side of the parking area will drain to a modified sump (500 gallon capacity). This modified sump provides for the separation of oil, sand and trash from the stormwater. The treated water is discharged into a ditch downgradient from the modified sump. The ditch water then either evaporates or percolates into the groundwater. The OWS is a three-basin (5,000 gallons) interceptor, located northwest of the parking/fueling area. It receives wastewater generated from the pressure washing of the fueling islands. Treated effluent from the interceptor is discharged into a ditch downgradient from the interceptor. The contents of the modified sump and the OWS shall be pumped on an annual basis in accordance with Table 2 below. The pumped materials are to be disposed of in a manner approved by the Division.

Receiving Water Characteristics: The direction of groundwater flow is to the west-northwest towards the Humboldt River, which is located approximately two-thirds of a mile downgradient of the existing wastewater disposal system and the location of the denitrifying package treatment plant. This area is located approximately 75 feet higher in elevation than the river.

Downgradient Monitoring Well #2 (MW-2, approximately 250 ft. downgradient and northwest of the RIBs) has shown exceedances in the nitrate concentrations since June 2001. The average nitrate concentration from MW-2 from November 2003 to September 2006 was 15.25 mg/L. Monitoring Well #3 (MW-3), also downgradient, measured an average of 13.58 mg/L from November 2003 to September 2006. The two upgradient monitoring wells (MW-1 and MW-4) have also exceeded the MCL for nitrate (35.58 mg/L and 15.67 mg/L, respectively). For compliance purposes MW-2 is the point of compliance, however MW-1, MW-3 and MW-4 shall continue to be sampled as per Table 3 below. The Permittee may request a reduction in monitoring frequencies after the results of sampling, consistently show at least one year's data with a concentrations of ≤ 7.0 mg/l total nitrogen.

Flow: The facility's permitted flow limits (0.025 MGD (25,000 gpd, 30 day average) and 0.0325 MGD (32,500 gpd, daily maximum)) are within the design limitations established by the manufacturer of the package treatment plant (Ashbrook Simon-Hartley Operations, LP).

Proposed Effluent Limitations and Special Conditions:

Table 1: Plant Discharge Limitations

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (Influent)	0.025 MGD (25,000 gpd)	0.0325 MGD (32,500 gpd)	Continuous	Wet Well Pump ¹
BOD ₅ , mg/L (Influent) ²	Monitor & Report		Quarterly	Composite
BOD ₅ , mg/L (Effluent) ³	30	45	Quarterly	Discrete
TSS, mg/L (Influent) ²	Monitor & Report		Quarterly	Composite
TSS, mg/L (Effluent) ³	30	45	Quarterly	Discrete

Nitrate as N, mg/L (Effluent) ³	Monitor & Report	Quarterly	Discrete
Total Nitrogen, mg/L (Effluent) ³	10	Quarterly	Discrete
pH (Effluent) ³	6.0 to 9.0 Standard Units	Quarterly	Discrete
Depth of Effluent in RIBs	Monitor & Report	Weekly	Discrete Staff Gauge Reading

- 1: Pumping volume (gpm)*Pump run time (minutes)*1440 min/day=gallons/day
 2: Influent samples to be collected at inlet to sludge holding chamber
 3: Effluent samples to be collected at outlet from dosing tank
 MGD: million gallons per day; gpd: gallons per day; mg/L: milligrams per liter

Table 2: Modified Sump - Oil/Water Separator Limitations

Parameter	Discharge Limitations (mg/L)	Monitoring Requirements ^{4, 5, 6}	
		Frequency	Sample Type
Arsenic	0.05	Annually	Discrete
Barium	2.0	Annually	Discrete
Cadmium	0.005	Annually	Discrete
Chromium	0.10	Annually	Discrete
Lead	0.0015	Annually	Discrete
Benzene	0.005	Annually	Discrete
Chlorobenzene	0.10	Annually	Discrete
Ethylbenzene	0.7	Annually	Discrete
Methylene Chloride	0.005	Annually	Discrete
Trichloroethylene (TCE)	0.005	Annually	Discrete
Tetrachloroethylene (PCE)	0.005	Annually	Discrete
Toluene	1.0	Annually	Discrete
Xylene	10.0	Annually	Discrete
MTBE	0.02	Annually	Discrete
Total Petroleum Hydrocarbons (TPH)	1.0	Annually	Discrete
Pumping and Disposal	Monitor & Report	Annually	

- 4: If no effluent discharge to groundwater has occurred during the annum, then so state in the annual (4th quarter report)
 5: Samples to be collected and analyzed only if treated effluent discharges from the modified sump or OWS during the annum.
 6: Sampling location is the discharge pipe from the modified sump or OWS holding tank outlet.
 7: Modified Sump and OWS to be pumped annually and contents to be disposed of in a manner approved by the Division.

Table 3: Groundwater Monitoring

PARAMETER	DISCHARGE LIMITATIONS	MONITORING REQUIREMENTS ⁸	
		Measurement Frequency ⁹	Sample Type
TDS, mg/L	Monitor & Report	Quarterly	Discrete
Chlorides, mg/L	Monitor & Report	Quarterly	Discrete
Nitrate as N, mg/L	Monitor & Report	Quarterly	Discrete
Total Nitrogen as N, mg/L	10.0	Quarterly	Discrete
Depth to Groundwater, feet	Monitor & Report	Quarterly	Field Measurement

⁸: Sample or measure each monitoring well (MW-1, MW-2, MW-3, MW-4)

⁹: The Permittee may request a reduction in monitoring frequencies after the results of sampling, consistently show at least one year's data with concentrations of ≤ 7.0 mg/l total nitrogen.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the administrator, including in said implementation and compliance, any additions or modifications which the administrator may make in approving the schedule of compliance. The Permittee shall implement and/or execute the following schedule of compliance requirements:

- Within thirty (30) days of permit issuance (**Month XX, 2007**), the Permittee shall submit an Operations and Maintenance (O&M) Manual for the new package plant, modified sump and oil-water separator system. The minimum requirements for preparing an O&M Manual are specified in the Division's WTS-2 guidance document entitled *Minimum Information Required for an Operations and Maintenance Manual*.
- Within ninety (90) days of permit issuance (**Month XX, 2007**), the Permittee shall provide a potable water line, to be located within the plant enclosure. The faucet on the line shall be equipped with the appropriate backflow/back siphonage protection.

Rationale for Permit Requirements: The NDEP's rationale for the proposed monitoring conditions is as follows:

Flow: Flow is tracked to ensure that treatment design capacity is not exceeded.

Effluent limits: Effluent limits are established and monitored to ensure that the denitrifying package wastewater treatment plant is functioning in accordance with design criteria and to ensure the modified sump and the oil/water separator are functioning properly.

Groundwater Monitoring: The drinking water MCL for nitrate is 10 mg/L. All monitoring wells have shown an exceedance of the drinking water MCL. The denitrifying wastewater treatment plant is designed to reduce total nitrogen from being discharged to groundwater. MW-2 shall be the point of compliance for this discharge permit. MW-1, MW-

3 and MW-4 shall continue to be monitored in order to demonstrate that groundwater nitrogen is decreasing and that the denitrifying wastewater treatment plant is being operated in accordance with design.

Procedures for Public Comment: The Notice of the Division's intent to issue a permit, with proposed modifications authorizing the facility to operate the existing facultative ponds, subject to the conditions contained within the permit, is being sent to the **Reno Gazette-Journal** and **Lovelock Review-Miner** 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 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 date and time by which all written comments are to be postmarked (via mail) or transmitted to the Division via fax or e-mail is **April 30, 2007** by 5:00 P.M.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator 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 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 issue (modify) the proposed permit for a period of five (5) years.

Prepared by: James T. Hogan
Staff Engineer II
Bureau of Water Pollution Control
March 16, 2007