

## NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

### FACT SHEET

(pursuant to NAC 445A.236)

**Permittee Name:** Petro Source Refining Partners  
Eagle Springs Refinery  
HC 34 Rox 34830  
Ely, Nevada 89301

**Permit Number:** NEV90055

**Description of Discharge** Wellhead Protection Area has not been established

**Location:**

Eagle Springs Refinery  
11 miles South of Carrant, Nye County, Nevada  
Nevada State Highway 6

Latitude: 38° 37 '08"N  
Longitude: 115° 37' 15"W

### **Characteristics**

The Petro Source Eagle Springs Refinery operates in a batch mode, accumulating crude oil in storage in sufficient quantities to process. The facility has constructed a wastewater recycling system for refinery wastewaters that are disposed in two clay and HDPE lined total containment/evaporation ponds. Refinery operations have been reduced since the original permit due to a reduction in throughput of crude from 7,000 barrels per day to about 1,500 barrels a day currently. This and a change in process operations have reduced the wastewater discharge to the evaporation/containment pond by 50%.

The permitted discharge includes two discrete waste streams that consist of oily water generated from the refinery processes, and non-contact waters generated from steam boiler blow down condensate, water softener regenerate, and cooling tower blowdown water. Minor incident stormwater enters the process drains and contributes to the wastestream.

Oily water generated in the vacuum and distillation columns and oil storage tanks flows to a central collection sump, from which it is pumped to a heated surge tank where primary oil/water separation takes place. Water is pumped to the water compartment of the API separator and oil is sent to the "gun barrel" separator tank where additional oil/water separation occurs. Recovered oil goes to the oil compartment of the API separator and water goes to the water compartment of the API tank. Oil in the API unit is pumped to crude oil tanks for refining, and the oily contact water is pumped to the Induced Air Flotation unit IAF/Quadracell (clarifier) for further treatment and oil/water separation. Oil is returned to the surge tank, and the clarified water flows to the clear water sump from which it is pumped to the large total evaporation/containment pond for disposal. Non-contact waters are collected in a sump and pumped to the lined evaporation/containment pond for disposal.

A small lined pond adjacent to the large pond serves to handle emergency discharges; wastewaters discharged to this pond are recycled through the clarifier treatment system and then disposed in the large evaporation/containment pond. Water is used seasonally from the evaporation/containment pond for dust control on area access roads as needed; this water must meet limits for TPH and BTXE before application. Two monitoring wells (one upgradient and one downgradient) of the ponds monitor water quality. Additional wells are planned to function as a means of leak detection for the ponds.

**Discharge Limits**

Table I.1

<u>PARAMETER</u>	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>30-day Ave.</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
<b>OUTFALL 001</b> (Small Pond)				
Flow	Monitor & Report <sup>1</sup>		Each Event	Discrete
TPH (mg/L)	Monitor & Report Quarterly <sup>1</sup>		Each Event	Discrete
<b>OUTFALL 002</b> (Large Pond)				
Flow	0.005	0.02	Continuous	Meter
pH (SU)	between 6.0 and 9.0		Weekly <sup>2</sup>	Discrete
Specific Conductance: (mg/L)	Monitor & Report		Weekly <sup>2</sup>	Discrete
TDS: (mg/L)	Monitor & Report		Monthly	Discrete
TPH: (mg/L)	10	15	Monthly	Discrete
BTEX: (mg/L)	Monitor & Report		Monthly	Discrete
<b>OUTFALL 003<sup>3</sup></b>				
Flow	Dust Control on Roadways		Bi-Monthly	Discrete

<sup>1</sup> If no discharge occurred, report as "no discharge"

<sup>2</sup> To be field tested once per week

<sup>3</sup> Outfall 003:TPH 15 mg/l, Benzene 5 ppb, toluene 100 ppb, ethylbenzene 100 ppb, xylenes (total) 200 ppb

GROUNDWATER MONITORING \*

Table I.2

<u>PARAMETER</u>	<u>MONITORING WELLS AND WELL POINTS (ALL):</u>	<u>MONITORING REQUIREMENTS</u>	
pH: (SU)	Monitor & Report	Quarterly	Discrete
TDS: (mg/L)	Monitor & Report	Quarterly	Discrete
Static Water Level (ft)	Monitor & Report	Quarterly	Discrete
TPH: (mg/L)	Monitor & Report	Quarterly	Discrete
Specific Conductance (mg/L)	Monitor & Report	Quarterly	Discrete

\* The groundwater monitoring well points (excluding MW-1 and MW-2) serve as a leak detection device for the ponds.

Receiving Water Characteristics

Groundwater quality at the facility site is potable, but is characterized by elevated levels of TDS (2,800 mg/l). No discharge to groundwater is anticipated from the facility ponds. Water for drinking and domestic use is treated on site with water softeners to reduce the TDS.

Schedule of Compliance and Special Conditions

The Permittee shall implement and comply with the provisions of the following 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 achieve compliance with the effluent limitations upon issuance of the permit. Every fourth quarter, photos of the facility components shall be submitted to the Division with the QUARTERLY DMR. Submit DMRs to:

Nevada Division of Environmental Protection  
 Bureau of Water Pollution Control  
 Attn: Compliance Coordinator  
 901 S. Stewart Street, Suite 4001  
 Carson City, NV 89701

Procedures for Public Comment:

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to lined evaporation/containment ponds, and utilize the treated pond water for dust suppression subject to the conditions contained within the permit, is being sent to the **Reno Gazette Journal and The Ely Times** for publication on **June 4, 2010**. 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 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 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 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 reissue the proposed permit. The permit will be for a five (5) year period.

### **Rationale for Permit Requirements**

Monitoring is required to track the quantity and quality of wastewater being discharged to the lined evaporation/containment ponds, and the quantity and quality of water land applied for dust abatement.

Prepared by: Kristen M. Rose  
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