NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

F A C T S H E E T

(Pursuant to NAC 445A.236)

Nevada Thermal Services, Incorporated – NEV88030

PERMITTEE NAME: Nevada Thermal Services, L.L.C.
Post Office Box 50489
Sparks, Nevada 89435

PERMIT NUMBER: NEV88030 - Renewal

LOCATION: 2600 East Mustang Road
Sparks (Storey County) Nevada 89435

Latitude: 39° 31' 20" North
Longitude: 119° 36' 25" West
Township 19 North, Range 21 East, Section 11 M.D.B.&M.

PUBLIC WATER SUPPLY: Zero discharge permit within a 6,000-foot buffer zone for the Old Bridge Ranch Well. Hydraulically separated from: Sage Trailer Park well, Reno Drain Oil Service wells, and Lockwood Community Corporation wells.

FLOW: 30,000 gallons per day – based on the holding tank size.

GENERAL: Nevada Thermal Services, L.L.C. (NTS) operates a thermal oxidation unit to treat petroleum contaminated soil from sites that are under remediation for liquid hydrocarbon spills. Also, spent activated carbon used in the remediation process can be processed at the facility. Soil and spent activated carbon are reused for aggregate products after treatment. Materials accepted for treatment at the NTS facility must: (1) be non-hazardous, (2) not contain heavy metals, (3) not contain halogenated compounds, and (4) not contain free liquids.

Material cleared for receipt and issued a Generator Acceptance Code is unloaded into a storage pit that has a holding capacity of 40,000-tons, lined with 80-mil polyethylene and compacted diatomaceous siltstone separated by layers of coarse slate and porous sand. The 80-mil polyethylene liner material is keyed to drain into a sump (Pit Sump) for collection of runoff water from accepted materials and precipitation. The underlying diatomaceous siltstone liner material has a reported permeability of 10^{-6} centimeters per second.

The proposed permit for renewal is a zero-discharge permit authorizing the use of collected leachate and runoff water for dust control purposes within the lined storage pit. Collected water is transferred to a 30,000-gallon storage tank, which is inspected daily to ensure sufficient storage capacity, and used for dust control within the lined storage pit. Should the volume of runoff water exceed tank capacity constraints, accumulated water is transported for disposal at a facility permitted to receive petroleum-impacted fluids.

DISCHARGE CHARACTERISTICS

This is a zero discharge permit. Leachate from stockpiled soil and runoff could conceivably contain petroleum hydrocarbons. Treated soil or carbon offered for reuse as aggregate material must be treated to a total petroleum hydrocarbon (TPH) concentration of 50 milligrams per kilogram (mg/Kg) or less. Review of data on file dating back to first quarter 2002 indicates facility compliance with permitted limitations.

RECEIVING WATER CHARACTERISTICS:

This permit does not authorize a discharge to receiving water. Wells positioned adjacent to the north and east sides of the storage area are used to identify fluid below the primary liner (leak detection observation points); however, the northern observation point is not easily accessed and is regarded as a secondary observation location only if it becomes needed.

Groundwater quality is monitored at two (2) locations near the lined storage pit. The 'Monitoring Well' (downgradient) is located approximately 50-feet east of the northeast corner of the pit, and the 'Pump House Well' (upgradient) is located approximately 150 yards south-southwest of the pit. A well located at an adjacent property (Trailer Well) had been monitored under the terms and conditions of the existing permit, however, access to that well location has been denied by the Bureau of Land Management. Monitoring requirements for the Trailer Well are omitted from the proposed permit for renewal. Groundwater data on file indicates that operations have not caused measurable or discernible impact to groundwater quality at the locations monitored or observed[1]. A new downgradient monitoring well will be installed this year (2010), to provide for another representative leak detection well.

PROPOSED LIMITATIONS:

a. There shall be no discharge or release of pollutants or contaminants from the facility to the ground surface or to waters of the State of Nevada.

b. During the period beginning on the effective date of this permit and lasting until the permit expires, the Permittee is authorized to manage fluids, soil, and granular activated carbon containing petroleum compounds as a function of the operation of a thermal treatment remediation facility in accordance with the limitations, requirements, and conditions of this permit.

c. Collected fluids from the containment pit sump are authorized for use for dust control purposes within the containment area.

d. Samples and/or measurements taken in compliance with the monitoring requirements specified below shall be collected at:

   i. At the Monitoring Well and the Pump House Well;
   ii. Prior to removal of treated soil or carbon from the containment area;
   iii. In the Containment Pit;
   iv. Containment Pad Liquid Collection Sump; and
   v On-site Precipitation Gauge.

[1] 1st and 2nd quarters 2003 Discharge Monitoring Reports: Total petroleum hydrocarbons and EPA Method 8240 volatile analytes reported as less than detection limits.

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e. The following shall be limited, monitored and reported by the Permittee as specified below:

Limitations

PARAMETERS[1]	DISCHARGE LIMITATIONS	MONITORING REQUIREMENTS		
	Maximum	**Sample Location**	**Measurement Frequency**	**Sample Type**
Benzene (µg/L)	5	i.	Quarterly	Discrete
Toluene (µg/L)	100	i.	Quarterly	Discrete
Ethylbenzene (µg/L)	100	i.	Quarterly	Discrete
Total Xylenes (µg/L)	200	i.	Quarterly	Discrete
Methyl tertiary butyl ether (MTBE, µg/L)	2	i.	Quarterly	Discrete
Total Petroleum Hydrocarbons (mg/L)	1	i.	Quarterly	Discrete
Total Petroleum Hydrocarbons (mg/Kg)	50	ii.	Per removal action	Composite
Weight of Material in Containment (tons)	45,000	iii.	Quarterly	Calculation
Amount of Waste Accepted (tons)	Monitor & Report	-----	Quarterly	Cumulative Calculation
Amount of Out-of-State Waste Accepted (tons)	Monitor & Report	-----	Quarterly	Cumulative Calculation
Amount of Waste Treated (tons)	Monitor & Report	-----	Quarterly	Cumulative Calculation
Amount of Material Discharged Off-Site (tons)	Monitor & Report	-----	Quarterly	Cumulative Calculation
Inspection – Liquid Volume (gallons)	Monitor & Report	iv.	Daily	Cumulative Calculation
Inspection – Precipitation (inches)	Monitor & Report	v.	Each Precipitation Event	Measure

gpd: gallons per day
µg/L: micrograms per liter
mg/L: milligrams per liter
mg/Kg: milligrams per kilogram
<: less than

[1]: Analysis for benzene, toluene, ethylbenzene, total xylenes, and methyl tertiary butyl ether by Environmental Protection Agency (EPA) Method 8260 or equivalent. Analysis for total petroleum hydrocarbons using EPA Modified Method 8015 (full scan) or

equivalent.

Rationale:

Benzene, toluene, ethylbenzene, xylenes, and methyl tertiary butyl ether: Parameter limitations are based on either Primary Drinking Water Standard Maximum Contaminant Levels (MCL) or are based on best professional judgment and preserved from the existing permit. In the absence of defined MCLs or promulgated clean up standards for methyl tertiary butyl ether (MTBE), a discharge limitation that effectively precludes the discharge of this constituent is consistent with limitations established for similar discharge permits that restrict the discharge of petroleum compounds.

Total Petroleum Hydrocarbons. These parameter limitations are based on best professional judgment and are preserved from the existing permit.

Weight of Material in Containment: This parameter is limited based on the design capacity and specifications of the containment pit. Monitoring and reporting requirements for this parameter promotes functional observation of the structural limitation of the pit.

Amount of Waste Accepted, Treated, and Discharged: These parameters are required to be recorded and reported to ensure proper and timely management of wastes processed at the facility.

Inspections: Inspection of the liquid volume in the leak detection sump and records of precipitation volumes provide indications of the amount of fluid collected, managed, analyzed, and potentially used as a palliative during each quarter.

Narrative Conditions: The narrative conditions included under Part I.A. of the permit are preserved from the existing permit.

SCHEDULE OF COMPLIANCE:

Upon issuance, the Permittee shall implement and comply with the provisions of the permit and the following schedule of compliance, after approval by the Administrator, including in said implementation and compliance, any additions or modifications the Administrator may make in approving the schedule of compliance.

- **Upon issuance of the permit,** the Permittee shall achieve compliance with all discharge limitations;

- **Within 90 days of permit issuance (July 15, 2010),** the Permittee shall complete the installation of a new downgradient monitoring well whose design and siting has been approved by the Division.

PROPOSED DETERMINATION:

The Division has made the tentative determination to renew the proposed permit, under the provisions prescribed, for a 5-year period. Under NAC 445A.232, this permit is classified as a *Discharge from Remediation, Dewatering, other than a discharge to groundwater from the dewatering of a mine, or from a Power Plant, a Manufacturing or Food Processing Facility or any Other Commercial or Industrial Facility – Less than 50,000 gallons of process water daily.*

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PROCEDURES FOR PUBLIC COMMENT:

Notice of the Division's intent to issue a permit authorizing the facility to handle and manage soil and carbon containing petroleum compounds, as well as leachate and run-off water, subject to the conditions contained within the proposed permit, is being sent to the **Reno Gazette Journal** for publication. Notice is also 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, and must be postmarked, faxed, or e-mailed by 5:00 p.m. on **April 15, 2010**. 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 reason(s) why a hearing is warranted. Public hearings granted by the Division are 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.

Revised by: Joseph L. Maez, P.E
Staff Engineer III
February 10, 2010