

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET (pursuant to NAC 445A.236)

Permittee Name: US Department of the Army
Hawthorne Army Depot (HWAD)
Western Area Demilitarization
Facility (WADF)
1 South Maine Avenue
Hawthorne, Nevada 89414

Permit Number: NV0021946

Description of Discharge:

Location: The Hawthorne Army Depot Western Area Demilitarization Facility (WADF) is located northwest of Hawthorne, in Mineral County, Nevada.

Latitude: 38°35'48"N.; Longitude: 118°39'31"W. Outfall 001 – 004
38°35'34"N.; 118°39'20"W. Outfall 005

Characteristics: The wastewaters generated at this facility are of five types: domestic sewage effluent from the DMIL plant, boiler blowdown water, treated scrubber blowdown liquid, treated red water (TNT), and stormwater discharge.

Flow: The facility has a flow limitation of 0.3057 MGD 30-day average, 0.352 MGD Daily maximum for total flow of outfalls 001-003 combined.

Limitations: Each outfall has specific parameters that are monitored, and they are presented below by outfall number:

Outfall 001 - influent to the lined (sewage disposal) evaporation ponds

FLOW:	0.005 MGD 30-day ave.	0.020 Daily Max.
BOD ₅ : mg/L	Monitor and Report Composite Samples	
TSS:mg/L	Monitor and Report Composite Samples	
NITRATE AS N: mg/L	Monitor and Report Composite Samples	

Outfall 002 - Boiler Blowdown Water to the lined evaporation ponds

FLOW:	Monitor and Report
TDS: mg/L	Monitor and Report
PHOSPHORUS as P: mg/L	Monitor and Report

Outfall 003 - Treated Red Water to the lined evaporation ponds

FLOW:	0.30 MGD 30-day ave.	0.33 MGD daily max.
TNT & NITRO SPECIES:	2 mg/L 30-day ave.	5 mg/L daily max.
TPH: ¹	10 mg/L 30-day ave.	15 mg/L daily max.
TSS:	20 mg/L 30-day ave.	30 mg/L daily max.

Outfall 004 - Stormwater overflow (emergency) from lined pond 3B weir to Walker Lake via an unnamed ditch.

FLOW:	Monitor & Report any discharge as an estimate
TEMPERATURE:	Monitor & Report
pH:	Between 6.0 & 8.3 S.U.
PHOSPHORUS as P:	.17 mg/L 30-day ave. .23 mg/L daily max.
TPH: ¹	Monitor and Report
NITRATE as N:	10 mg/L daily max.
NITRITE as N:	1.0 mg/L daily max.
UN-IONIZED AMMONIA as N:	0.06 mg/L daily max.
TSS:	60 mg/L daily max.
CHLORIDES:	250 mg/L daily max.
Fecal Coliform:	200/400 CFU/100 ml daily max.
TDS:	500 mg/L daily max.
TOTAL ORGANIC CARBON:	(TOC) 35 mg/L daily max.
CHLORINE RESIDUAL:	0.02 mg/L daily max.

Outfall 005 - a.) treated process water, for reuse via land application for dust suppression.

FLOW:	Monitor & Report	Monthly
TDS: mg/L	Monitor & Report	Monthly
TSS: mg/L	Monitor & Report	Monthly
NITRATE as N:	10 mg/l	Monthly
CHLORIDE: mg/L	Monitor & Report	Monthly
PHOSPHORUS as P:mg/L	Monitor & Report	Monthly

Waters used for dust suppression must not be hazardous or considered a hazardous waste by TCLP characterization.

General: The US Army Hawthorne Army Depot (Permittee) operates the WADF process water treatment plant that is located north of Hawthorne. This facility is designed to treat explosive contaminated water produced from all of the WADF operations. The contaminated water is treated chemically and physically using a chemical feed system, a flotation clarifier system, a multi-media filter and carbon adsorption columns. Chlorine is added to inhibit bacterial growth. Ultimate disposal is to lined evaporation ponds. Some water may be used for dust suppression on site. During extreme storm events pond 3B overflow may discharge to Walker Lake. Six monitoring wells are installed to monitor groundwater quality adjacent to the ponds.

No negative environmental impacts are anticipated as a result of the reissuance of this permit.

Receiving Water Characteristics: Discharges are to lined ponds; a minor discharge from specific sites will be allowed for dust suppression on site at HWAD. During extreme storm events emergency discharge may occur from Outfall 004 to Walker Lake via an unnamed ditch. The groundwater at the site ranges from near surface to 22 feet

below ground surface fluctuating in response to seasonal weather and Walker Lake elevations. A confining clay layer near Walker Lake has been identified which is up to 30 feet thick, which restricts vertical ground water flow between the shallow aquifer and the aquifer below. Groundwater meets drinking water standards.

I.A.1.f. **GROUNDWATER MONITORING WELLS:** MW #s: WDF-5 & WDF-8 up gradient and WDF-10, WDF-11 and WDF-12 downgradient

<u>PARAMETERS</u>	<u>GROUNDWATER LIMITATIONS</u>	<u>MONITORING REQUIREMENTS</u>	
		<u>Frequency</u>	<u>Type</u>
NITRATE as N: 10 mg/l		Quarterly	Discrete
CHLORIDES: mg/L	MONITOR AND REPORT	Quarterly	Discrete
GROUNDWATER ELEVATION: DEPTH TO GROUNDWATER:	MONITOR AND REPORT	Quarterly	Discrete
TDS:mg/L	MONITOR AND REPORT	Quarterly	Discrete
2,4-DNT:mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete
2,6-DNT:mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete
1, 3, 5-TNB:mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete
RDX: mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete
HMX: mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete
2, 4, 6-TNT: mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete
AMMONIUM PICRATE:mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete
(Yellow D)			
TOC: mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete
CONDUCTIVITY (at the well)	MONITOR AND REPORT	Annual 4th Quarter	Discrete
pH: SU(at the well)	MONITOR AND REPORT	Annual 4th Quarter	Discrete
TOTAL NITROGEN:mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete

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<u>PARAMETERS</u>	<u>GROUNDWATER LIMITATIONS</u>	<u>MONITORING REQUIREMENTS</u>	
		<u>Frequency</u>	<u>Type</u>
NITRATE/NITRITE NITROGEN: mg/L	MONITOR AND REPORT	Annual 4th Quarter	Discrete

Procedures for Public Comment:

The Notice of the Division's intent to reissue the permit authorizing the facility to discharge: to the lined ponds, groundwaters of the State (dust suppression), the unlined ditch, and to Walker Lake (Major catastrophic storm events only) subject to the conditions contained within the permit, is being sent to the **Mineral County**

Independent News 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 for a period of 30 days following the date of the publication of the public notice, by April 20, 2005. 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, 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 for a five-year period.

Schedule of Compliance and Special Conditions

There are no items for compliance, or any special conditions.

Rationale For Permit Requirements

Monitoring is required to assess the level of treatment being provided and to ensure that Waters of the State are not degraded.

National effluent guidelines have not been promulgated for this type of industrial discharger. Therefore, under the authority of Section 402 (a)(1) of the Clean Water Act, the EPA has developed a NPDES permit on a case-by-case basis. The Best Conventional Technology (BCT) and Best Available Technology economically achievable (BAT) have been established on the effective date of the permit. The limits have been developed using Best Professional Judgment (BPJ).

Prepared by: Icyl C. Mulligan
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