

EXECUTIVE SUMMARY

In accordance with provisions of the Federal Water Pollution Control Act (33 USC 1251, et. seq.) and the Nevada Water Pollution Control Law Chapter 445, of the Nevada Revised Statutes, Hawthorne Army Depot (HWAD) is submitting the attached application for a permit to discharge. The application is to allow the continued operation of the ProcessWater Treatment Facility (PWTF), which is the heart of the Western Area Demilitarization Facility (WADF) located at Hawthorne Army Depot. The PWTF currently has authorization to discharge under State of Nevada Permit Number NV0021946, which became effective on 25 March, 1991.

CURRENT PERMIT CONDITIONS

The current permit, as modified, has allowed HWAD and the Army to fulfill the essential mission to renovate, recover, and demilitarize unserviceable ammunition and explosives in an environmentally sound manner. A copy of permit number NV0021946 is attachment 1. The limitations, requirements, and conditions as set forth in Part I.A.1-4 of current permit number NV0021946 are quite satisfactory and within the operational capabilities of the PWTF. Excerpts from the original application for the current permit, which have not changed, are enclosed as follows for reference:

Attachment 2. Geology and Hydrology Report of the area, including figures.

Attachment 3. Description of PWTF process, including figures.

Attachment 4. Calculation of sludge volumes.

Attachment 5. Ground water monitoring well description and locations, including figures.

The previously submitted drawings of the facility currently on file at the state in regards to permit number NV0021946 are not included with this application to reduce paperwork and duplication. Part I.A.13 of permit number NV0021946 has been modified to read as stated in the NDEP reference letter at attachment 6. The typical permitting process would dictate a request for renewal, but to incorporate modifications both previously approved and proposed the application is for a new permit.

PROPOSED PERMIT MODIFICATIONS

The proposed changes involve new outfalls and a process modification at building 117-5 "Steamout" facility. The modification to building 117-5 involves the addition of one more air-driven pump and a buffer tank at the building to more efficiently handle the processwater and provide a backup to the primary pump. The distance which the processwater is pumped naturally results in a loss in cubic feet per minute (cfm) rating in the existing pump. In the event of

PROPOSED PERMIT MODIFICATIONS (cont'd)

maximum processwater flow being exceeded (i.e., hose ruptures, line breaks, etc.) it is currently necessary to shutdown the process, to allow the pump to catch-up. The second air-driven pump will provide a similar in-place back-up to the primary. With the pump and buffer tank in place inadvertent extra flow can be held and then returned to the primary drain tank to be pumped as the primary can handle without interruption of the operation. Attachment 7 is a schematic of new pump, valves, floats, and tank.

There are two new outfalls being proposed for this permit to expand the diversity in the fate of treated pink water from the PWTF. This proposal in no way is intended to change or replace the conditions of current outfall 003, Part I.A.3, effluent, but to offer alternative choices. Meteorological data from the Fallon Weather Station, Hawthorne Airport, and HWAD Detonation Ranges indicates the climate in the valley provides over 270 days per year of sunshine, with the majority of the overcast days occurring during the winter months. These conditions greatly reduce the evapotranspiration rate during the winter.

The first new proposed outfall is identified in the application as outfall number 005. Once the effluent is deemed suitable it would be applied to dirt road surfaces, excavation areas, and/or construction sites on HWAD for fugitive emissions "dust" control. The treated water would be dispensed from the "Treated Water Holding Tank" into government owned water trucks for dispersion.

The second new proposed outfall is identified in the application as outfall number 006. There are three lined evaporation ponds immediately to the west and north of the PWTF (building 117-7) which, if authorized, would nearly double the total evaporative surface area of permitted ponds. The expanded evaporative surface area would be especially beneficial during the periods of reduced evapotranspiration. These three ponds are constructed in like fashion to the ones currently permitted. The ponds were constructed in the mid 70's but have not been used or permitted to date. Funds are being allocated to survey the ponds and render them serviceable, as/if required. Attachment 8 contains a drawing of the ponds construction details. Groundwater monitoring wells are already in-place from both the NPDES and RCRA monitoring programs covering both up and down-gradient flows.