FACT SHEET

PART V, CLOSURE UNIT GROUP 8, 600 AREA PURGEWATER STORAGE AND TREATMENT FACILITY
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UNIT DESCRIPTION
The 600 Area Purgewater Storage and Treatment Facility, also called ModuTank 1, was in Hanford’s 200 East Area. It was a modular containment structure, open to the air.
ModuTank 1 was a freestanding unit installed on bare ground, 55 meters (180 feet) above groundwater (based on 1995 groundwater contours). Its capacity was 3,785,400 liters (1,000,000 gallons). It had steel sidewalls that supported a double layer of flexible membrane liners. The liners were 80-mil high-density polyethylene, separated by a geotextile layer. There was a leak detection system between the two liners. It consisted of a standpipe with measurable depth and sampling capability.
ModuTank 1 began operating in 1990. It stored and treated purgewater for 20 years. Purgewater is water generated from well installation, development, sampling, etc. The Permittees removed the unit according to the draft closure plan in July 2011.
Purgewater came to ModuTank 1 from various groundwater wells during development or sampling by tanker truck. The purgewater was then gravity-drained into the unit. Solar evaporation reduced water volume. If evaporation did not keep up with the demand, the Permittees trucked water from ModuTank 1 to the Effluent Treatment Facility.

TYPE AND QUANTITY OF WASTE
The unit contained and treated water from:
- Purging monitoring wells.
- Drilling and construction of new wells.
- Pumping tests.
- Cleaning and renovation of wells.

Along with the purgewater, solids were deposited as sediment in the unit. Windblown silt and environmental media also accumulated as part of the sediment. The sediments contained in the purgewater settled out and were concentrated in the northeast corner of the unit. During the summer months, the Permittees added raw water is to the unit to prevent sediments from drying out and becoming airborne.
ModuTank 1 received some purged groundwater designated with dangerous waste code “F001” due to a carbon tetrachloride groundwater plume. Some purged groundwater had the waste code “D019” depending on the concentration of carbon tetrachloride in the water. Groundwater from other wells has a state-only dangerous waste designation of “F003” due to past discharges of methanol.
ModuTank 1 received purgewater from other sources with other listed waste codes. Purgewater containing such listed wastes were subject to a “contained-in” determination. For purposes of closure, ModuTank 1 is considered to have managed F001 through F005 listed waste and D019 characteristic waste. The dangerous waste codes come from 40 Code of Federal Regulations, Section 261, Subpart D

BASIS FOR PERMIT CONDITIONS
The water and sediments in ModuTank 1 had dangerous waste or dangerous constituents. This is mainly because the purgewater had metals, organics, and low activities of radiological contaminants. The permit addenda are incorporated into this permit and are enforceable by reference. Ecology has reviewed the closure plan to ensure it meets WAC 173-303-610.
CLOSURE

While in operation, ModuTank 1 was regulated as a miscellaneous unit under WAC 173-303-680. Closure requirements were in WAC 173-303-650(6). The closure is also subject to the general closure performance standards of WAC 173-303-610(2)(a).

The Permittees have completed closure activities according to the draft closure plan that Ecology is proposing in this permit. After the permit is final, the Permittees will submit a certification of closure according to the final approved closure plan. If Ecology modifies the closure plan, the Permittees may be required to do more work.

REQUESTED VARIANCES OR ALTERNATIVES

There are no requested variances or alternatives for ModuTank 1.

STATE ENVIRONMENTAL POLICY ACT (SEPA) DETERMINATION

The SEPA determination for this unit is in the Hanford-Wide Permit Fact Sheet.
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