

River Protection Project

Expectation:

Protect the Columbia River, our workers and the public by safely storing and disposing of high-level radioactive tank waste.

Status Update:

- Initiated pumping from two more underground single-shell tanks (S-106 and S-103) well ahead of the consent order due date of July 30. We now have seven tanks in the pumping phase. About 190,000 gallons were pumped out this quarter and more than 375,000 gallons since last summer when pumping resumed.
- Removed another two feet of waste sludge from high-heat Tank C-106 six weeks early. Sluicing activities to date have removed four feet of sludge – enough to drop the waste temperature in the tank below the level needed to resolve the high-heat safety issue once posed by this tank.



A technician checks the pump winch for Tank AY-102. The double-shell tank is receiving the waste sludge removed from Tank C-106.

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Status Update (continued):

- Moved 640,000 gallons of liquid wastes through the cross-site transfer line since its first use March 10. That's about half the 1.2 million gallons we plan to transfer this fiscal year from SY-102, one of only three double-shell tanks in the 200 West Area, to AP-107, one of 25 double-shell tanks in the 200 East Area.
- Twice deployed a mechanical arm in Tank SY-101 as a near-term mitigation measure while waste transfer equipment is installed. The arm successfully induced the release of about 300 cubic feet of gas from the tank's waste crust. As a result, the waste level stopped rising, and even fell slightly in May.



Workers install a mechanical arm to induce controlled releases of gas from the waste crust of Tank SY-101. The device successfully stopped the rise in the measured level of waste inside the tank.

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Future Focus Areas:

- Complete retrieval of waste sludge from Tank C-106.
- Prepare to transfer 100,000 gallons of waste from Tank SY-101 to SY-102 this fall. The transfer will bring us another major step closer to resolving SY-101 safety issues, and is possible with the room made in SY-102 by our cross-site waste transfers.
- Begin pumping in U Tank Farm. This would keep us ahead of the consent order schedule, which calls for pumping to start on four more single-shell tanks by June 15, 2000.
- Complete AN Tank Farm valve-pit upgrades needed to deliver wastes to Hanford's future waste treatment plant. The pits are being relined and new jumpers, cover blocks and leak detectors installed.



Craft workers finish one of six concrete pads that will support new systems to monitor tank farm air emissions. The construction start was under budget and ahead of schedule. An early completion is predicted. The improved design more fully meets the rigid standards of the Federal Clean Air Act, and might be usable at other DOE sites.