Hanford Waste Storage Tunnel Stabilized

Grouting Placement Complete on PUREX Tunnel 1

RICHLAND, Wash. – Hanford workers have finished stabilizing a waste storage tunnel with engineered grout, after it partially collapsed earlier this year.

Since early October, crews worked mostly at night to place several thousand cubic yards of engineered grout into Tunnel 1 near the Plutonium Uranium Extraction (PUREX) Facility. Grouting reduces the risk of further collapse and increases the protection for workers, the public, and the environment from radiological hazards, while not precluding future remedial actions or final closure decisions.

Department of Energy contractor CH2M HILL Plateau Remediation Company (CH2M) began grouting Oct. 3 and placed the last truckload of grout Nov. 11, without any injuries.

“Stabilizing Tunnel 1 was achieved safely and quickly, due to our skilled workers, solid planning, and extensive coordination,” said Doug Shoop, manager, DOE Richland Operations Office. “Our
contractor not only completed this work safely, but also ahead of the Department’s projected
completion timeframe of late December.”

“The team did an amazing job,” said Ty Blackford, president and chief executive officer, CH2M HILL
Plateau Remediation Company. “I couldn’t be more proud of the crew, and all those who supported
planning and preparations.”

Approximately 521 truckloads (4,434 cubic yards) of grout were placed in the tunnel. Cameras in
the tunnel ensured the grout flowed the length of the tunnel and around the contaminated
equipment inside. The grout was injected in several lifts, or layers, and each lift was allowed to set
up before the next began. Approximately a foot of space was left between the topmost layer and
the ceiling of the tunnel.

“Now that Tunnel 1 is secure, we can focus on our evaluation and determining the appropriate
course of action for stabilizing Tunnel 2,” Shoop said.

An integrity analysis completed earlier this year showed nearby Tunnel 2 does not meet current
codes for structural integrity, and it may not be able to bear the weight of the soil above the tunnel.
Like Tunnel 1, Tunnel 2 contains railcars with contaminated pieces of plutonium processing
equipment. Enhanced surveillance is in place to detect any changes to the structural integrity of the
1960s-era waste tunnel. Plans to stabilize Tunnel 2 are under evaluation and should be finalized in
the coming weeks.

For more information:

- PUREX Tunnels continuing response information webpage
- Engineering evaluations for PUREX Tunnel 1 and Tunnel 2 submitted to Ecology as part of
  Administrative Order corrective action 1
- PUREX Tunnels draft report on corrective actions to ensure safe storage of waste in
  PUREX Tunnels 1 and 2 submitted to Ecology as part of Administrative Order corrective
  action 2

The Department of Energy (DOE) is responsible for the federal government’s cleanup of the legacy
of more than 40 years of plutonium production at the Hanford Site near Richland, Wash. Except for
a tank waste mission managed by the DOE Office of River Protection, the DOE Richland
Operations Office is responsible for all remaining Hanford cleanup and is currently focused on
cleaning out and demolishing the high-hazard Plutonium Finishing Plant, excavating and disposing
of contaminated soil and waste, treating contaminated groundwater, moving radioactive sludge out
of the K West Basin and away from the Columbia River, and configuring Hanford Site infrastructure
for the future. The office oversees Hanford Site work that is conducted by a federal and contractor
workforce of approximately 4,000 personnel. Visit www.hanford.gov.

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