



Hanford 300-Area UST Removal, Hanford Nuclear Reservation, Richland, WA; Washington Closure Hanford, LLC for the US Department of Energy

White Shield supported Washington Closure Hanford with the removal of an abandoned 5000 gallon UST in the 300-area of the Hanford Nuclear Reservation. The tank, located at Facility 3621D that is slated for demolition, was formerly used to supply diesel fuel for large generators, and was emptied and placed into temporary closure in 2007. This decommissioning process was required to be completed prior to the facility demolition.

Phase II Environmental Assessment and Tank Removal, Vashon, WA; K2 Corporation

White Shield (WSI) provided K2 Corporation with a Phase II Environmental Site Assessment at their facility located on Vashon Island. WSI installed eleven borings at selected locations around the facility to investigate the potential for soil and/or groundwater contamination. All borings were advanced using a "Geoprobe" drill rig. The drill rig pushed a 2 inch "probe" to depths of approximately eight to twelve feet below ground surface. At each four foot interval, samples were collected for possible chemical analysis. The soil was visually examined for evidence of contamination and screened using an Organic Vapor Analyzer (OVA). Upon reaching groundwater a temporary 1-inch diameter well was placed in the boring and the water sampled for the location specific contaminants of concern. WSI also performed a GPR/magnetic survey to determine the exact location of a 300-gallon heating oil tank and to determine if a second tank was present. WSI's Certified Site Assessor and a Certified Tank Decommissioner (Central Environmental Construction) cleaned, decommissioned, removed and disposed of the tank. WSI visually checked the soils beneath the tank and piping for signs of leakage, and collected five clearance samples from the sidewall and base of the tank excavation for diesel/heavy oil analysis. Approximately one hundred cubic yards of petroleum contaminated soil was excavated for disposal. Contaminated soil had migrated under the building at the site, and WSI is working with K2 and the Washington State Department of Ecology on a plan to address the future soil remediation.

Genesee Union Hardware Store Fueling Station, Genesee, ID; Central Environmental Construction for Pacific Northwest Farmer Cooperative

White Shield (WSI) provided site assessment and remediation oversight services at the Genesee Warehouse (now Pacific Northwest Farmer Cooperative) Facility in Genesee, Idaho. Upon lifting one of the gasoline aboveground storage tanks, it was discovered that a hole approximately 2 inches in diameter was present in the bottom of the tank. Following tank removal, WSI began excavating petroleum-contaminated soils from the site. As excavation progressed, it was discovered that the contaminated soils extended to the depth of at least 10 to 14 feet below the former base of the tank and also below the depth that groundwater was encountered, approximately 11 bgs. To facilitate the remediation WSI submitted a plan to the Idaho Department of Environmental Quality requesting approval to dewater the excavation and remove contaminated soils to a depth of 14 bgs. WSI removed approximately 7,000 gallons of water from the excavation and placed it in a former diesel tank for on-site air stripping treatment. Upon completion of the excavation, WSI collected 10 samples from the base of the excavation and 17 samples from the sidewalls to determine if the contaminated soils had been removed. Sample analyses results were used to run the Idaho Risk Evaluation Model (REM) for Risk Based cleanups. The results returned indicated that the site posed a risk greater than is allowed by the State of Idaho Cleanup Regulations. Additional excavation was performed and a total of approximately 7800 cubic yards of soil were removed. Additional samples were then collected from the base and the sidewall of the excavation and were also used in the REM. The results of the REM showed the soil was no longer an exposure pathway of concern. As a result the excavation was backfilled and a plan to install groundwater monitoring wells was submitted to the Idaho Department of Environmental Quality.



Paradise Inn UST De-commissioning, Mt. Rainier National Park, Paradise, WA; Watts Construction for the National Park Service

During a planned re-design and construction of the Paradise Inn, the main lodge in Mt. Rainier National Park at Paradise, Washington, it was found that two underground storage tanks (USTs) and some related lines that supply heating oil to the facility were leaking. White Shield assisted Watts Construction and the National Park Service in overseeing the removal of the tanks and remediation of the project site. The regulatory agency responsible for this project was the Tacoma-Pierce County Health Department (TPCHD). Evidence of impacted soil was found around the UST fill ports, and in the already excavated area underneath the Paradise Inn dining room. Odors of impacted soils were also reported by personnel on-site east of the north-south oriented portion of the inn, and demolition of a sump in the boiler room needed to be halted when it was found to be partially filled with free-liquid heating oil. Further removal of piping underneath the building was determined to increase the likelihood of unintended spillage, due to the many yards of intertwined supply pipes. TPCHD concluded that careful abandonment with the pipes being drained and capped was the most reasonable solution, and was left to National Park Service and Project Manager discretion. The tanks will be pumped and stabilized for transportation to the Kautz Creek storage area to be cut and cleaned before transportation out of the park.

Remedial Investigation for Gasoline Leak, Smitty's Conoco, Kennewick, WA; R.H. Smith Distributing

White Shield provided a Hydrogeologist and Project Manager for the investigation and remediation of a 6500-gallon gasoline leak at a service station in Kennewick, Washington. The site is within the Wellhead Protection Area for one of the City's municipal drinking water wells. To date the investigation has included sampling of soils in trenches used for fuel distribution lines, the installation and sampling of four groundwater-monitoring wells to determine if groundwater was impacted by the release, and the design and installation of a product recovery system to recover floating product found on the groundwater. Two of the wells were constructed as 4 inch wells to facilitate floating product removal. White Shield's Project Manager designed a state-of-the-art product recovery system, using a floating skimmer and pump that will remove floating product but will not capture water should the water level rise above the intake of the skimmer. The system is automated to maintain 24-hour operation. Additional support included the installation and sampling of three additional groundwater-monitoring wells at the site to further delineate the extent of the groundwater plume. All work is being coordinated with the City of Kennewick, the Washington State Department of Ecology, and the insurance carrier for R.H. Smith Distributing.