

Autosampling System for the WTP facility

MCE was contracted by EnergySolutions to fabricate, assemble, and test an autosampling system (ASX) for ultimate end use by Bechtel National, Inc. at the Hanford Waste Treatment and Immobilization Plant (WTP). Due to complexity of the project, MCE has also provided extensive engineering guidance.

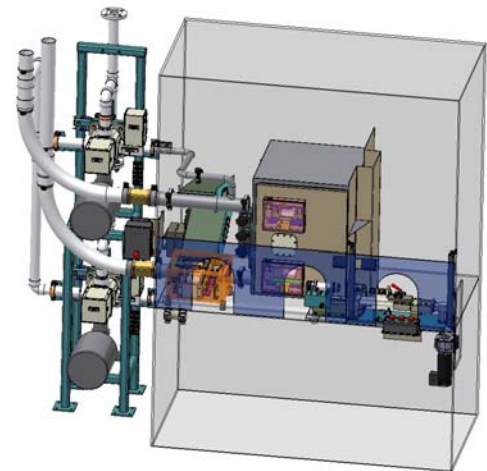
The ASX will provide a means of remotely collecting samples directly from the low-activity waste (LAW) (Phase 1), pre-treatment facility (PTF) (Phase 2), and the high-level waste (HLW) (Phase 2) process lines, depositing the samples into disposable sample bottles, and then transporting the filled sample bottles in carriers via a pneumatic transfer system (PTS) to designated receipt stations inside the Analytical Laboratory (Phase 1). These samples provide confirmation of the state of the process and also provide process validation and control.

The WTP ASX includes the following major assemblies:

- Ten autosampler units - two located in the LAW facility, five located in the PTF, and three located in the HLW facility
- Carrier Posting Station (LAW Facility)
- Fumehood Receipt Station (LAW sampling)
- Fumehood Receipt Station (HLW/PTF sampling)
- Hot Cell Receipt and Disposal Station

These assemblies are equipped with the following items that are also be procured, assembled and installed by MCE:

- Emergency stop and control signal junction boxes and push buttons
- Bar code readers
- Various motors and drives
- Position switches
- Pressure switches and transmitters
- Cable raceway and designated cables
- Non Q-listed gamma detector and Q-listed gamma monitor and associated cables.



Typical Fumehood Receipt Station

EnergySolutions