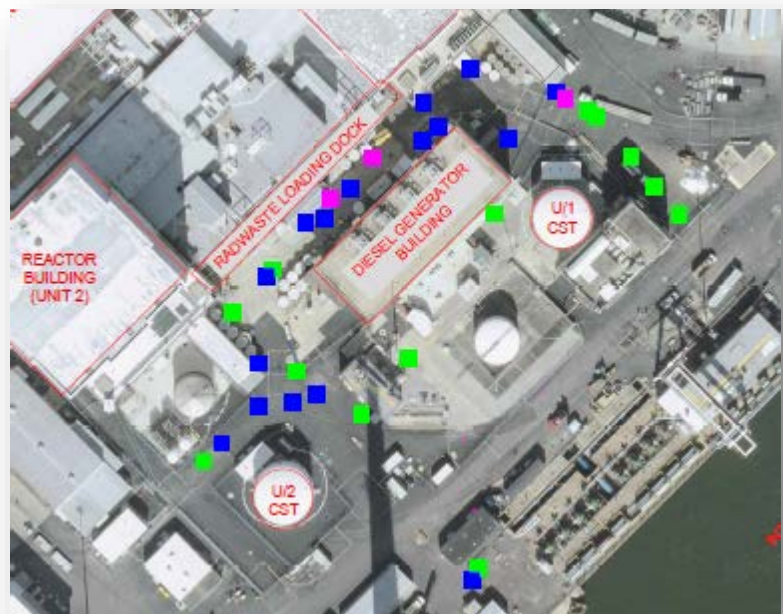


Nuclear Plant, Southeast, USA

Groundwater Investigation and Remediation

At this Nuclear Power Plant, SSi was selected to investigate tritium impacts to groundwater caused by a leak in a hotwell make-up line from a condensate storage tank. SSi had previously prepared several hydrogeologic assessments of the plant and used this knowledge to design an investigation that could achieve the project objectives of defining the extent of impacts and identifying appropriate remedial alternatives and that could be implemented within the Protected and Radiological Control Areas of the plant. From the beginning of the project, SSi collaborated with the approved contractor for Engineering Change (EC) design at the nuclear plant. The collaboration resulted in a project that dovetailed at the feasibility study phase with SSi ensuring that requisite data were collected and providing input to the selection and evaluation of alternatives. SSi's investigation methods considered the presence of safety-related buried piping and other utilities. SSi, utilized plant design drawings to geo-reference proposed investigation locations and followed that with EM, GPR and vacuum excavation to protect valuable plant assets. Following completion of the EC, SSi assisted with start-up and shakedown of the system. SSi continues to provide performance monitoring.



Project Highlights

- Characterization of Groundwater Conditions Relevant to the Site-Specific Hydrogeologic Framework that Consists of Three Aquifers
- Installation of Groundwater Water Monitoring Network with Monitoring Wells Constructed for Simple Conversion to Extraction Wells
- Design of Extraction Well Network Including Performance of Aquifer Pumping Tests on All Wells Installed
- Implementation of an Interim Groundwater Pumping System to Address Impacts Prior to Design Completion
- Technical Support for Engineering Change
- Groundwater Remediation System Start-up and Shakedown
- Support for Facility's Public Relations and Community Outreach Program