

## **UST Removals and Installations**

BANC3 assists clients in all phases of the management of underground storage tanks (USTs)—tank inventories, removals and installations, and soil and groundwater remedial actions. We provide task-specific technical services, comprehensive project management, and interface with regulatory agencies.

### **Tank Removals and Closures**

BANC3 prepares site-specific data for each tank to be removed or closed to obtain an environmental permit for the work from the state. We first determine if tanks are registered with the individual state's Department of Environmental Protection (DEP). If not, we secure registration so the tank can be removed. We develop site plans indicating tank locations relevant to buildings and appurtenances. Lastly, we complete Closeout forms—indicating whether the tank will be removed or abandoned-in-place—and submit them to DEP for approval.

### ***Tanks Abandoned-in-place***

If the DEP approves an abandoned-in-place tank closure, BANC3 follows the agency's requirements for soil and/or groundwater sampling at the site. We send these samples to a certified laboratory to determine if the tank has leaked and caused contamination. For tanks situated under buildings, BANC3 provides a report from a licensed structural engineer to affirm that the tank cannot be removed without damaging the structure.

If the lab report concludes no contamination is present, BANC3 will receive approval from DEP to proceed with the closeout. To prevent the possibility of future leaks, we pump all liquids, vapors and sludge from the tank. We then fill the tank with sand or another inactive solid material and seal it. However, if the collected samples show the presence of contamination, BANC3 can provide professional remediation services upon request.

### ***Tank Removals***

As the extent of conditions at a UST site may be unknown prior to tank removal, hidden contamination may be present. BANC3 recognizes this and has the experienced engineering resources to support any aspect of construction and environmental remediation in any step of the tank removal process. Our comprehensive technical management and environmental oversight provide effective solutions to these demanding projects. Our core services include:

*Soil and groundwater sampling:* To determine if the tank has leaked and caused contamination—even if no evidence is present—a BANC3 environmental scientist performs soil and/or groundwater sampling in accordance to all current DEP requirements prior to excavation. Samples are also taken for testing from within the tank excavation site.

*Preparation and review of contract documents:* BANC3 develops the engineering plans for UST removal and any associated environmental remediation. We conduct a review meeting with the construction contractor to plan all site activities.

*Certified environmental support:* A full-time, environmental scientist who is certified in site evaluations and experienced in site work and construction activities monitors the contractor's work and progress.

*Environmental remediation:* We provide targeted, cost-effective technical solutions to remediate fuel oils, solvents and other contaminants from soil and groundwater at UST sites.

Following excavation of a UST, BANC3 collects additional test samples to confirm that the site is clean, or to determine the extent of contamination. After final site samples have been analyzed and identified by a certified laboratory, BANC3 either restores the site or provides remedial services.

- If no contamination is discovered, we will prepare and submit our Remedial Action report to receive a No Further Action letter.
- All our restoration activities conform to the existing site conditions, client requests, or potential DEP requirements.
- Restoration of roadways and related appurtenances—such as curbing, sidewalks and conduits—are performed in accordance with the current DOT requirements for roadways and bridges, and will be included in our design.
- If contamination is discovered, we will provide comprehensive Site Remediation services. Our environmental scientist will be responsible for supervision of all remediation efforts.

All BANC3 site activities during UST removals and closures are performed by qualified technical personnel whose efforts protect the public, project personnel, buildings, utilities, and sensitive environmental areas. We maintain expert environmental engineers and scientists who understand how to minimize disturbances to the site; by targeting specific areas around the UST for sampling, they control the size of the excavation area. This reduces the amount of soil removed, which in turn reduces disposal, backfill, and restoration costs.

### **Tank Installation Design**

BANC3 prepares definitive plans and specifications to install storage tanks for specific purposes as the client may require. Once we have consulted with the client regarding the best system to install for him, we initiate the storage tank design. By working with the client, we determine the proper phasing of the site work to create as little disturbance as possible. We explore all design options by considering the type of fuel required, its use, the location of the proposed tank, regulatory restrictions, economics and aesthetics. We provide the client with various options and our recommendations, including any necessary remedial activities (in projects involving replacements of leaking tanks) and the feasibility of installing an above-ground storage tank (AST) rather than a UST.

This design is prepared in accordance with applicable US Environmental protection Agency (USEPA) and DEP procedures. Our systems designs meet all mandated safety requirements under such codes as the International Building Code and the National Electrical Code, as well as requirements and standards from the National Fire Protection Association and the American Petroleum Institute.

BANC3 also explores the current regulatory environment to anticipate changes in codes and regulations. This will help to prevent installing systems that may require upgrades or modifications in the near future. Therefore, we routinely present a state-of-the-art system as an option.

Our final tank design includes all civil, mechanical, electrical and environmental engineering evaluations, and the design of existing and proposed fuel storage and delivery systems. These include such elements as foundations and ballasts, fuel oil and steam piping design, electrical load requirements and wiring diagrams, leak detection, soil conservation, utility preservation or relocation, spill containment, site surveys, fuel demands, and inventory monitoring systems.

To initiate these projects, BANC3 secures the required permits—for site design, construction, and, if necessary, environmental remediation—from all applicable local, state and federal agencies. As BANC3 is well versed in the regulations of EPA, DEP, municipal departments of Community Affairs, and other similar agencies, we ensure that all necessary permit applications are completed and submitted within the mandated time limits. If we identify alternatives that reduce project costs (e.g., for environmental remediation), we recommend to the client the permits to obtain for the appropriate level of work required.

Once the permits are received, BANC3 will conduct the pre-construction meeting with the construction contractor to plan the site activities. We provide a full-time field inspector who is experienced in tank installations, site work and construction activities to monitor the contractor's work and progress.

Following tank installation, BANC3 examines all appropriate equipment to verify that the system is functioning properly. We also verify that the contractor conducts tank operations training for facility personnel to ensure that they have a complete and thorough understanding of the new equipment.

Our UST projects include:

- The removal of 133 USTs and 41 ASTs at 28 sites in New Jersey for the New Jersey Department of Property Management and Construction (NJDPMC).
- The removal of 26 Tanks at 11 sites for NJDPMC and NJDEP, Division of Parks and Forestry—Central Region.

- The removal of three USTs; installation of two USTs; installation of one AST for Buttonwood Hospital in New Lisbon, NJ.
- Construction management for UST upgrades on the Ben Franklin Bridge, Betsy Ross Bridge, and Walt Whitman Bridge (owned by Delaware River Port Authority).
- Tank integrity testing services for several GSA-operated facilities in Philadelphia, PA; Camden and Trenton, NJ; and Wilmington, DE.