



PROJECT ABSTRACT

Project Type: Air Sparging / Soil Vapor Extraction System Installation
Client: Confidential Client
Site Location: Walkertown, North Carolina

In March 2006, A&D Environmental Services, Inc. (A&D Environmental) was contracted to perform the installation of an air sparging and soil vapor extraction piping system. The eight-point system was required for the treatment of groundwater and soils impacted by the release of virgin solvents from a former bulk storage tank farm.

A&D Environmental personnel used a back-hoe/front loader to excavate 820' of trench. The surface areas of the trenches consisted of soil with grass, asphalt and concrete cover. The asphalt and concrete was saw-cut, broken into manageable pieces, placed into dump trailers and transported for off-site disposal using a construction & demolition (C&D) debris landfill. Fourteen 24" x 24" steel vaults with lockable lids were installed at the well points and along the trench to house piping connections associated with changes in direction. A total of 660' of 4" schedule-80 PVC pipe, 120' of 2" schedule-80 PVC pipe and 1440' of flexible HDPE pipe was installed. The piping terminated within a 10' x 10' prefabricated treatment building.

A&D Environmental personnel self-performed the assembly of all piping, connections and fittings required for the AS/SVE system without the use of any subcontractors. Flow meters, gauges and regulators were installed along with solenoid valves. A certified electrician inspected and approved the installation work. The system was pressure tested and successfully placed into operation the same day.

Clean, imported sand was placed into the trenches to cover the piping. Native soil originally removed from the trenches was placed back into the excavations and compacted using a jumping-jack tamp. Concrete forms were constructed around each steel vault. 5,000 psi concrete was poured into each form and a 30' section of a concrete drive with curb and gutter was replaced. All disturbed natural areas were restored by the application of grass seed and straw.