

downgradient monitoring wells above NJDEP Groundwater Quality Criteria. At their peak, contaminant levels within the groundwater were 7,440 times higher than the NJDEP Groundwater Quality Criteria.

Under the RI phase, a passive soil gas survey was conducted at the CW-1 site in March 1996 to delineate the extent of lateral soil contamination at the site and aid in the placement of additional monitoring wells. Results of the soil gas survey determined that compounds of concern were migrating horizontally in site soil. Three new monitoring wells were installed at the CW-1 site during the first week of May 1996. One deep well was installed next to the lime pit to determine the vertical extent of contamination both in soil and groundwater. The other two wells were placed downgradient of the contaminant plume. The RI phase delineated the vertical and horizontal extent of the contaminant plume.

At present, the contaminant plume has not encroached upon the Myer Center facility. However, the downgradient migration pathway for said contaminants is in the direction of the referenced building. It should be noted that the Myer Center facility has a basement level.

A remedial design was completed and approved by the NJDEP in August 1997. The selected remedial technologies involved using a combination of air sparging and SVE techniques. Construction of the selected remedial alternative was completed in April 1998. In January 2002, two groundwater recovery wells (RW-1 & RW-2) were installed in the source area and two additional air sparge points (SPG-3 and SPG-4) were installed to further enhance source area remediation. Groundwater recovery system wells RW-1 and RW-2 were connected to a newly constructed groundwater treatment system (GWTS). The GWTS was designed to capture and treat contaminated groundwater in the source area and reduce the elevated concentrations of detected chlorinated hydrocarbons as well as achieve hydraulic control in the source area and beyond. The GWTS utilized an air stripper to remove dissolved-phase chlorinated hydrocarbons from impacted groundwater extracted from the recovery wells. The air stripper effluent was polished via two in-series 500-pound granular activated carbon units prior to final discharge to the sanitary sewer.

In addition to groundwater extraction, recovery wells RW-1 and RW-2 and source area monitoring wells MW-28 and MW-29 were tied into the SVE system to further enhance removal of vapor phase chlorinated hydrocarbons in the source area. Air sparge wells SPG-1, SPG-2, SPG-3, and SPG-4 were installed to enhance the stripping of volatile chlorinated hydrocarbons from source area groundwater, where they were subsequently captured by the vapor extraction at RW-1, RW-2, MW-28, MW-29, SVE-1, and SVE-2. The vapor phase carbon units were upgraded from two in-series 55-gallon drums to two in-series 1,000-pound vapor phase units capable of a substantial SVE airflow increase. The flow upgrade resulted in a substantial increase of contaminant mass removal rates. As part of the 2002 system upgrade, the wastewater treatment lime pit was demolished and all existing limestone was removed and properly disposed of. A new sewer pipe was installed in order to maintain the existing sewer connection.