



Minnesota
Pollution
Control
Agency

Soil vapor extraction at Former Pilgrim Dry Cleaner Site (also known as 57th and Logan Redevelopment Site or Hmong American Shopping Center Site #2)

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Soil vapor extraction (SVE) is a technology used to remove contaminants from the soil in the area between the ground surface and the water table. As the name suggests, SVE removes contaminants from the soil in vapor form, making it an ideal cleanup technology for volatile organic compounds (VOCs). Soil vapor is vacuumed out of the ground through extraction wells. These wells are like slotted straws and are installed in holes drilled through the vadose zone, the portion of the ground below the surface and above the water table. The number of extraction wells depends on site conditions, such as the amount of contamination and the type of soil. SVE is most effective in loose soils, such as sand and gravel, because soil vapor moves quickly through the large spaces between the soil particles. In tight soils, such as silt and clay, SVE systems must operate longer to get maximum results.

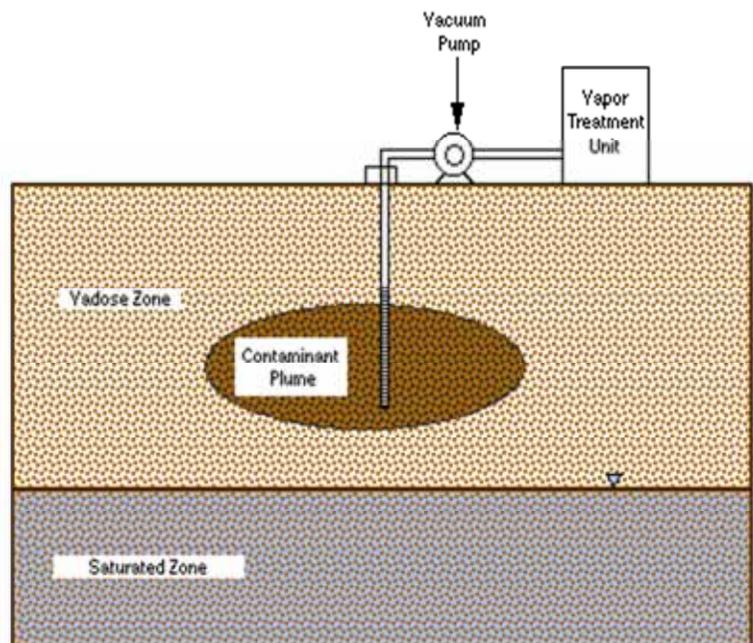
Extraction wells are connected together using above- or underground pipelines, and these networks are connected to vacuum pumps. When soil vapors are removed from the ground, VOCs are captured and treated to assure protection of human health and the environment.

SVE systems are easy to install, can be used with other cleanup technologies, and are effective under a variety of site conditions. SVE

does not require digging up contaminated soils; soil vapors extracted using SVE usually require treatment, but costs for treating extracted vapors are low compared to costs for digging up and treating soil. Additionally, SVE prevents contaminants from migrating to the groundwater — cleaning up contaminated groundwater is more time consuming and costly.

For more information

For more information about how soil vapor extraction is being used at the 57th and Logan Hmong American Shopping Center Site #2 in Brooklyn Center, contact Dave Scheer, hydrogeologist, Minnesota Pollution Control Agency, (telephone 651-296-6630, e-mail dave.scheer@state.mn.us).



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