

Table A-13.B. Evaluation factors for air sparging/soil vapor extraction

Remedial time frame	Concern	Low to moderate
	Discussion	Short to medium—typically 1–5 years. Depends on soil type and LNAPL type. Low-permeability soils and heavier LNAPL require more time to remediate.
Safety	Concern	Low to moderate
	Discussion	Vapor releases and potential of volatilization due to sparging and vapor migration in the subsurface (if AS used without SVE). Pressurized piping systems. Low safety concern for SVE alone.
Waste management	Concern	Low to moderate
	Discussion	Vapors generated by SVE systems may require treatment. Recovered LNAPL should be recycled.
Community concerns	Concern	Low to moderate
	Discussion	Noise of treatment equipment may be an issue. AS-induced vapor migration in the subsurface can be controlled using SVE.
Carbon footprint/energy requirement	Concern	Moderate to high
	Discussion	Carbon footprint depends on the energy required for treatment (e.g., thermal oxidation make-up fuel or energy for activated carbon regenerations) and energy used to power blowers/compressors, which can be significant.
Site restrictions	Concern	Low to moderate
	Discussion	Vertical AS/SVE wells can usually be spaced and located around site restrictions or accessed through the use of directional drilling equipment. Appropriate power supply is critical.
LNAPL body size	Concern	Moderate
	Discussion	The size and depth of the LNAPL body directly affect the cost and extent of the remediation system, although there is an economy of scale with the ability for one blower and compressor to operate on multiple wells and sparge points.
Other regulations	Concern	Low to moderate
	Discussion	Air emissions permitting may be required.
Cost	Concern	Low to moderate
	Discussion	In general, AS/SVE is more cost-effective than other active LNAPL technologies and has been proven at many sites for over 30 years.
Other	Concern	
	Discussion	