

Improve Performance in a Multi-Phase Extraction System

Dual Phase Extraction (DPE), also known as multi-phase extraction, is becoming a choice to remediate groundwater contamination again in many parts of the country. It is used to recover both liquid and vapor phase contaminants using pumps to remove free product, dissolved phase and vapors from the subsurface. It is perhaps most frequently used for hydrocarbon site remediation. Typically, the “smear zone” is targeted since it has contaminated water (both dissolved and free product). The water table is lowered, exposing the “smear zone” to the effects of vapor extraction.

Seems pretty easy....right? With the correct technology, absolutely. Vertical wells are seriously limited in their ability to provide an effective DPE system due to their lack of well screen coverage and contact with the contaminant. Improve your well screen coverage and contact, and you will improve the effectiveness. That is how using Horizontal wells can enhance a DPE project by giving you more well screen in contact with the contamination.

Advantages of Horizontal Dual Phase Extraction:

- Proven performance over a wide range of conditions. Requires no downhole pumps, but is flexible enough to allow their use if necessary.
- Minimal disturbance to site operations; can be used under buildings without excavation.
- Shorter treatment times due to more effective screen area.
- Substantially increases groundwater extraction rates.
- Can be applied at sites with free product, and can be combined with other technologies.
- Can reduce the cost of groundwater treatment through air stripping within the vacuum extraction tube (stinger).

If you are interested in learning more about Dual Phase Extraction Wells using Horizontal Remediation Wells contact us at [877-788-4479](tel:877-788-4479) or drilling@directionaltech.com.