

CASE HISTORY

Reducing Long-Term Monitoring Costs – Modifying the Sampling Program as COCs Change

Challenge:

Long-term monitoring of impacted groundwater can be a very expensive phase of any project, sometimes even exceeding the capital cost of remedial equipment. Unless monitoring programs are critically evaluated on a regular basis, it is easy for inefficiencies to creep in over time and reduce the effectiveness of money spend on the project.

Action:

On sites with multiple Contaminants of Concern (COCs) it is not uncommon for one to be remediated before others. In such a case it is important that the sampling program be modified to eliminate unnecessary and expensive laboratory analyses.

Result:

On one large LUST site, the overseeing regulatory agency had requested that all monitoring wells in the vicinity of the source area be sampled for Semivolatile Organic Compounds (SVOCs) as a part of each quarterly sampling event. Over the course of two years of sampling it became evident that SVOCs had become an insignificant aspect of the overall risk associated with this site with only one well containing levels of one SVOC compound slightly above regulatory limits (with concentrations steadily dropping). MUNDELL negotiated with the regulating agency to remove SVOC sampling from the sampling plan with an understanding that the regulating agency could request SVOC samples at their discretion and that a set of samples would be required prior to closure of the site. The cost savings achieved by eliminating these SVOC analyses are shown below:



27 wells sampled per quarter x \$165.00 per sample analysis = \$4,455.55 per quarter
\$4,455.55 per quarter x 4 quarterly sampling events per year = \$17,820.00 per year

By eliminating the unnecessary quarterly SVOC sampling and analysis at this site, MUNDELL was able to reduce its client's annual monitoring costs by more than \$17,000.00 per year and still adequately monitor the contaminants of concern in the groundwater.