



# VERTEX Environmental Inc.

## CASE STUDY MTBE

### MTBE Groundwater Plume Treated Within 1 Year



#### Background

Vertex has designed, constructed and operated a variety of systems to effectively treat the fuel additive Methyl tertiary-butyl ether (MTBE). MTBE is an oxygenate which was added to gasoline in the 1990s to replace lead as an octane enhancer. It is often associated with gasoline releases and is persistent in the subsurface.

At a former gasoline dispensing facility in southern Alberta, Vertex launched an in-situ chemical oxidation program to treat a groundwater plume that contained:

- MTBE
- BTEX
- F1 to F2 PHCs



#### Solution

The geology of the site (fill, silty sand) required three in-situ injections across a one-year time frame. The administration of the chemical oxidant RegenOx effectively treated the chemicals of concern using direct placement and direct push techniques.

Long-term observation of gradient monitoring wells established that no rebound reactions were occurring, nor were there any by-products of concern generated by the chemical oxidation process.

#### Benefit

The chemical oxidation program initiated by Vertex proved both quick and effective: the MTBE plume was treated within one year, with no on-going operation or maintenance costs.

**For more information contact: 519.653.8444 [www.vertexenvironmental.ca](http://www.vertexenvironmental.ca)**