

Remediation of Well Site Located Within City Limits



Project Profile

A gas well was drilled in 1957 and produced until the early 70's and then was used as an injection well. At the time, the Site was located outside Fort St John (FSJ) City limits. The Site is now located inside city limits in an area of industrial development. There is a history of many documented spills of produced water and condensate at the Site. An historical flare pit is also present on Site.

Issues

SynergyAspen completed an investigation and determined that soils in the upper 1 m exceeded the Ministry of Environment (MoE) High Risk Upper Cap concentrations resulting in the Site being classified as High Risk and managed through MoE regulatory process.

SynergyAspen prepared the Notification of off-site migration for 2 contamination plumes migrating into the roadway in two different directions and forwarded to off-Site affected landowner (City of FSJ). Based on its location, soil vapour assessment is required due to future Site use and that of surrounding properties.

Solution

SynergyAspen completed a hydrogeological assessment to formulate a conceptual site model of migration pathways, which assisted in the development of a remedial action plan. Synergy remediated the flare pit and well center to remove the Upper Cap soils. SynergyAspen will be remediating hydrocarbon impacted soils on-site to remove future vapour risk; remediate on-site salt areas to 1m below grade and use risk assessment to address remaining on-site salt impacts, and off-site hydrocarbon and salt impacts.

Outcome

SynergyAspen's initial limited remediation work enabled removal of high risk conditions for the Site to be returned to OGC regulatory process resulting in a ***less cumbersome process with reduced costs.***

