

Gas Plant Remediation Project Profile

Project Type

Contaminated Site Assessment
and Remediation

Project Value

\$1,800,000 (total cost)

Start and Completion Date

August and September 2008

Client

International Oil and Gas Company

Market Sector

Upstream Oil and Gas

Challenge

- Naphthalene and petroleum hydrocarbon contamination (>6,000 metric tonnes) to a depth >10 metres
- Soil was primarily dangerous oilfield waste

Solution and Highlights

- Reviewed remedial options
- Excavated, segregated and disposed of soil at a Class I landfill
- Ensured gas plant remained operating during the remediation
- Developed a thorough site-specific health and safety plan
 - Completed on schedule and on budget

This gas plant remediation project started when the client requested Trace Associates Inc. (Trace) conduct an environmental liability assessment to fulfill Alberta Energy Resources Conservation Board requirements. A Phase 2 environmental site assessment (ESA) conducted by Trace in 2007 identified petroleum hydrocarbon (PHC) contamination in soil resulting from historical features including a wellsite dehydrator, an earthen flare pit and an underground storage tank. Fortunately, groundwater is relatively deep in this area and was not encountered.

Trace acted as the prime consultant and developed a remedial action plan; which included extensive involvement with the client's corporate and operational staff, the landowner and the lead remediation contractor. The project included ambient air quality monitoring and extensive health and safety planning.

The remediation area was in very close proximity to a large NGL tank; which the client required to be in operation during the entire project. Trace personnel worked with the client to reroute the unload line out of the work area. A traffic flow management plan helped operational and remediation activities to occur at the same time. The next phase of the project will include a site-specific risk assessment to manage hydrocarbon contamination in bedrock at depths greater than 10 metres below ground.

For more information on this project contact Darrell Haight, P.Ag., President at 780.458.7787. The photo below shows the remediated work area. The NGL bullet remained operating during remediation.

