Reclamation

Reclamation is the final step and returns the site to equivalent land capacity. This includes levelling of soils and re-vegetation. There are a variety of options for end land use, which include traditional land use, agricultural, pasture, forested and residential.

Imperial, in conjunction with the Four Nations and IOGC, has developed a site closure checklist. This checklist incorporates traditional knowledge, end land use and surface improvements (such as roads, powerlines, etc.) to remain in place for the benefit and use of the Four Nations.

Return lease to Nations

Once the surface of the land has been restored to the satisfaction of Chief and Council, a Band Council Resolution executed by all Four Nations will be submitted to IOGC for final review and approval.

Working together to return the land for the future generations of the Four Nations

Resources

- Indian Oil and Gas Canada: www.pgic-iogc.gc.ca
- Alberta Energy Regulator: www.aer.ca

Imperial Environmental Services
505 Quarry Park Blvd SE
P.O. Box 2480, Stn. M
Calgary, AB T2C 5N1

www.imperialoil.ca/PigeonLake

WB00427b 15 11

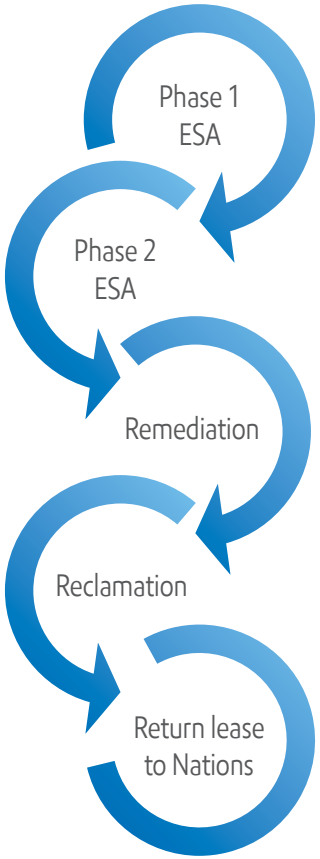
Imperial

Pigeon Lake project information

Imperial Oil Resources Limited (Imperial) is responsible for the environmental management of Imperial's oil and gas well sites, satellites, batteries, transfer stations and pipelines that have reached the end of productive life, as well as historical spills. In accordance with and in cooperation with the Alberta Energy Regulator (AER), Imperial investigates these sites to determine if potential environmental risks are present and to ensure regulatory standards are met.

A framework is followed to assess sites for environmental impacts. It is important to note that several factors will affect the timing and completion of assessment work.

Framework overview



Phase I Environmental Site Assessment (Phase I ESA)

The purpose of a Phase I ESA is to gather historical and current information about a site to determine if previous oil and gas activities have created areas of potential environmental concern. The Phase I is a desktop review that includes various source of information, such as: aerial photographs, historical records and operator/ occupant interviews. Indian Oil and Gas Canada (IOGC) has established guidelines that must be followed when completing a Phase I ESA to ensure a consistent and accurate approach.

Phase II Environmental Site Assessment (Phase II ESA)

A Phase II ESA may be completed if the results of a Phase I ESA indicate the potential for environmental impacts at the site. A Phase II ESA involves physical disturbance to the site as a result of the collection and analysis of soil and groundwater samples. All soil and groundwater samples are submitted for analysis to an independent, qualified and accredited laboratory.

Two main methods are used to obtain soil samples for analysis: 1) Test Pit sampling and 2) Borehole sampling. Groundwater samples are obtained through the installation of small diameter observation wells called piezometer wells.

Test Pit (TP) soil sampling

A track-mounted excavator may be used to excavate soil to collect soil samples. Topsoil is separated from subsoil during this process. Typical test pit dimensions are 1 metre wide by 3 metres long. Once soil samples have been collected, test pits are backfilled with the excavated soil in the reverse order in which it was removed so that soil layers are replaced in their original order.

Borehole (BH) soil sampling

A drill rig may be used to collect soil samples where either test pitting is not suitable or the installation of a piezometer well is required. Drill rigs are either mounted on a truck or track. The drilled holes are known as boreholes and are typically 15 cm in diameter and vary in depth.

Piezometer wells and groundwater sampling

Piezometer wells are small diameter, shallow observation wells used to collect groundwater samples. Piezometers may be sampled multiple times in a given year and may be in place for several years.

Remediation

Remediation is the removal or treatment of impacted materials to relevant soil and groundwater criteria. A site- specific remedial action plan is developed and executed for each site based on the results of the Phase I and II ESA. This plan may include removal or treatment of soils.