EXPLORATION

Over the past six years, onshore petroleum exploration in Nova Scotia has continued to increase. The establishment of petroleum based infrastructure as a result of offshore production has caught the attention of a number of companies that see the potential for new exploration opportunities in Atlantic Canada and onshore activity is currently at a peak.

The Nova Scotia government is using a phased approval process for exploration companies pursuing onshore oil and gas. In the exploration phase, companies typically conduct seismic programs and then drill wells. Moving into the production phase, companies would continue to drill wells and test for commercial quantities of gas. This leads to full production of the resource. A phased approach provides opportunity for the government of Nova Scotia, community leaders, and residents to be involved with the project as well as monitor and track project status.

DRILLING

Coal deposits in Nova Scotia are buried deep beneath the surface. Companies drilling for natural gas from coal may use a horizontal drilling technique, which allows them to access more of the coal seam.

Horizontal drilling allows a producer to drill more than one well from the same site – minimizing the surface area required for production. This also keeps the amount of equipment and infrastructure needed to do the work to a minimum.

Drilling consists of boring down to the coal seam and lining the drill-hole with concrete and steel pipe. The next steps are de-watering the coal seams which can take up to six to eight months to complete, followed by further testing of the well. Upon completion, a company may go into production depending on the availability of pipeline or technologies such as gas turbines that bring electricity to market.
PRODUCTION

Coal gas exploration is relatively new to Nova Scotia. Until now, natural gas from coal has not been commercially produced in our province.

Production involves taking the gas from the coal seam and selling it locally for industrial use or sending it to outside markets via a pipeline.

ABANDONMENT

Once all of the usable gas has been extracted, wells are plugged and permanently sealed with cement to stop the flow of any remaining gas and water. The well head is cut off below the surface, the site is cleared, and the lease area is restored to its natural condition.