

EXECUTIVE OVERVIEW

Chapter 4 – Section 4.4 Petroleum and Mineral Resources

SUMMARY

Petroleum and mineral resources are non-renewable and finite across Niagara Region. These resources are protected for potential extraction and long-term use, but are not the same as mineral aggregate resources.

- The Province provides mapping of petroleum wells and petroleum pools for within the Niagara region. Petroleum pools will be depicted on Draft Schedule H.
- The Ministry of Northern Development, Mines, Natural Resources and Forestry regulates petroleum resources through the Oil, Gas and Salt Resources Act and provincial operating standards. This includes licensing of new wells, and overseeing decommissioning of existing wells.
- Proper and regulated decommissioning of wells is integral to ensuring potential hazards are avoided. Rehabilitation must be conducted according to the Oil, Gas and Salt Resources Act and its regulations and standards.
- Policy direction for this section is primarily focused on ensuring Petroleum resource operations in Niagara and any future possible mineral mining operations, will be protected from incompatible land uses, and the establishment of new operations as well as access to resources should not be hindered by development or activities on the resources or adjacent lands.

A Draft Policy set is provided with this sub-section document.

Integration Guide for Sub-sections Reported in PDS 32-2021			
<input checked="" type="checkbox"/>	Regional Structure	<input type="checkbox"/>	Archaeology
<input checked="" type="checkbox"/>	Housing	<input type="checkbox"/>	Employment
<input type="checkbox"/>	Land Needs	<input checked="" type="checkbox"/>	Agriculture
<input type="checkbox"/>	SABR	<input type="checkbox"/>	Aggregates
<input type="checkbox"/>	Transportation	<input checked="" type="checkbox"/>	Natural Heritage incl.
<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Water Systems Options
<input type="checkbox"/>	District/Secondary Plans	<input type="checkbox"/>	Watershed Planning
<input type="checkbox"/>	Urban Design	<input type="checkbox"/>	Climate Change

OVERVIEW

Petroleum and mineral resources are finite non-renewable resources and must be protected from incompatible land uses or uses that would limit their extraction in the future.

Petroleum resources include oil, gas, and salt resources. These resources can be found trapped underground in layers of ancient sedimentary rock which underlie all of southern Ontario. Ontario's oil, natural gas and salt resources are extracted by the

drilling of wells. Petroleum Resource Operations is the term used for these wells, and associated facilities and other drilling operations. The Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNRFF) regulates petroleum resources through the Oil, Gas and Salt Resources Act (OGSRA) and provincial operating standards. This includes all licensing of new wells, and overseeing decommissioning of existing wells.

Wells may be privately owned or corporately owned, but are all required to be licensed and issued a licensing number accordingly through the MNDMNRFF. When wells of all types are no longer needed for the purpose for which they were drilled, they are plugged according to standards in Oil, Gas and Salt Resources of Ontario Operating Standards. Proper and regulated decommissioning of wells, is integral to ensuring potential hazards are avoided.

All wells, whether active, suspended, or plugged and abandoned (i.e., rendered safe as part of site rehabilitation following cessation of production) should be respected in any decisions regarding new development. Namely, in accordance with the OGSRA, a restriction on new developments within 75m of a petroleum resource operation.

The province maps well locations as point features, where a well has been drilled into geological formations for purposes such as; production of oil and gas; injection, storage and withdrawal of oil, gas, brine or other hydrocarbons; or geological evaluation or testing of underground bedrock formations that may contain oil or gas. The province also provides mapping for petroleum pools; where there is a subsurface accumulation of oil and/or natural gas in porous and permeable rock whose presence has been proven by the drilling of petroleum wells and from which hydrocarbons have been or are being produced, or are capable of being produced in economic quantities. Petroleum pools will be mapped on Schedule H of this Plan.

Mineral resources, include metallic minerals; those minerals from which metals (e.g. copper, nickel, gold) are derived, and non-metallic minerals; those minerals that are of value for intrinsic properties of the minerals themselves and not as a source of metal (e.g. graphite, gypsum, mica). Mineral deposits in the Niagara Region are not as readily mapped or identified, although some mineral occurrences data is available from the MNDMNRFF. However, mineral resources are protected in a similar fashion to petroleum resources, to ensure future resource extraction possibilities exist. The closest mineral mining operation is currently a Gypsum mine located in Haldimand County.

The attached draft policy and mapping, **Appendix 3.2** and **Appendix 3.3** respectively, illustrates the direction the Niagara Official Plan is taking as it continues towards completed final draft status.