

Soil Contamination

Description

Soil contamination is closely regulated by the Province¹ because if untreated, contaminated soils and groundwater can impact ecosystems, compromise drinking water and impair human health. Health impacts range from minor irritations to serious diseases, such as cancers. Ecosystem impacts include short-term injury, chronic damage like loss of reproductive ability, and broad damage to natural food systems. A wide variety of different metal and hydrocarbon contaminants are found on sites in BC; many potent contaminants are associated a wide range of activities, from residential oil tanks to snow dumps, drycleaners, and industry.



Once properly treated, contaminated sites pose much less risk to the environment and human health. However, it can be very expensive to clean up contamination, and can take a long time. The cleaning and development of contaminated sites is known as 'brownfield' redevelopment, and is an important opportunity to revitalize once derelict lands. Examples of brownfields include:

- Abandoned gasoline/service stations
- Former waste disposal facilities
- Former commercial sites (junkyards, automotive repair shops)
- Former industrial sites (drycleaners, mills)
- Vacant derelict buildings.

Status and Trends

A variety of historical and current uses, have led to contamination of soil and/or groundwater. More than 300 sites within Prince George are on the Ministry of Environment's Site Registry, which means that hazardous materials were likely used there, and may have remain in the soil. Of the sites on the Registry, some are likely to be free of contamination, while others will need

¹ In British Columbia, a contaminated site is defined as an area of land in which the soil or underlying groundwater or sediment contains a hazardous waste or substance in an amount or concentration that exceeds provincial environmental quality standards.

to be cleaned up. Still others have been cleaned up to Provincial standards and are ready for redevelopment.

The City of Prince George is in the process of analyzing the current inventory of registered sites in the City to assess opportunities for brownfield redevelopment. The advantages and potential of brownfield redevelopment can include:

- Protection of public health and safety,
- Protection of groundwater resources,
- Preservation of agricultural lands
- Renewal of urban core and the quality of life within it,
- Economic development, job creation and retention,
- Decreased community costs by using existing infrastructure and services, and
- Can allow for the provision of public housing, parks and other public spaces.

Questions for Consideration

Location – What currently contaminated locales are priorities for future growth?

Impacts – are existing contaminated sites known to have significant impacts on sensitive environments or people?

Brownfields – What can be made available to encourage brownfield redevelopment?

More Information

[Ministry of Environment Land Remediation Website](#)

Ministry of Agriculture and Lands, Crown Land Restoration Branch

<http://www.agf.gov.bc.ca/clad/ccs>

[National Round Table on the Environment and the Economy, Brownfields Homepage](#)

[Ontario Ministry of Municipal Affairs and Housing, Brownfields Ontario Website](#)

[Canadian Brownfields Network](#)

[National Brownfield Associations including B.C. Chapter](#)