

Land Treatment Facilities and Landfarming (General Information)

Landfarming is an efficient and inexpensive way to clean up petroleum hydrocarbon contaminated soils created by fuel spills or leaking tanks. It occurs in Land Treatment Facilities (LTFs), which are specially designed facilities where contaminated soil is spread out thinly on a water-resistant layer of earth or other material. The soil is turned over to increase its exposure to the air, and additives such as soil nutrients and water may also be added. This stimulates native bacteria in the soil, which use the hydrocarbons as a source of energy and convert them to water and carbon dioxide. Once the hydrocarbons have been degraded to suitable levels, the remediated soil can be used for other projects.

Land Treatment Facilities do not create an environmental hazard provided they are built on a suitable site and operated properly, but an improperly constructed or operated LTF could contaminate the native soil and groundwater near it, creating a new contaminated site. For this reason the Contaminated Sites Regulation has established permits which impose conditions on the siting, construction and operation of Land Treatment Facilities.

Land Treatment Facility Permits

A permit is required for the construction or operation of a Land Treatment Facility. Land Treatment Facilities must also be constructed and operated in accordance with all other applicable laws, including zoning bylaws. Environmental Protection Officers with the Yukon Government carry out regular inspections of Land Treatment Facilities. In addition, operators of Land Treatment Facilities must submit annual reports to the Environmental Protection Branch describing specified details of the operation of their LTF each year.

A Land Treatment Facility Plan must be submitted with an application for a Land Treatment Facility permit. This Plan must provide information on the suitability of the site, the size and nature of the proposed Facility, operational procedures, and a conceptual abandonment plan. The Environmental Protection and Assessment Branch reviews the plan before issuing a permit to ensure the facility will be built and operated properly to prevent the creation of a new contaminated site.

Re-using Treated Soil

Once soil has been treated in a Land Treatment Facility it is tested to ensure contaminant levels are low enough to allow the soil to be re-used. Sampling and testing must be carried out according to protocols developed by the Environmental Protection and Assessment Branch. Acceptable contaminant levels depend on how the soil will be re-used: soils for use on parkland, agricultural, or residential land require lower contaminant levels than soils for use on commercial or industrial land. Remediated soil is often used as clean fill on sites where depressions or hollows are being filled in.

For more information on the Environment Act, please contact:

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The Environment Act and regulations may be viewed online at www.gov.yk.ca/legislation/env.html, or at any Yukon Public Library, territorial agent, territorial representative or regional services office. You may purchase copies at the Inquiry Centre, Yukon Government Administration Building, 2071-2nd Avenue in Whitehorse, request by email queens.printer@gov.yk.ca or mail: Yukon Government Queen's Printer, Box 2703 (W-4), Whitehorse, Yukon, Y1A 2C6 (phone 867-667-5146 or toll free 1-800-661-0408, extension 5146).