

Challenges Facing Soil Treatment Facilities in the Yukon

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Commercial and private treatment facilities, often referred to as Land Treatment Facilities, have been regulated in the Yukon since 1997. These facilities mainly address hydrocarbon contaminated soil. The focus of this presentation will be the challenges faced by the operators of these facilities. These challenges have been divided into three broad categories: permitting of the facility, construction, and operation.

Permitting of these facilities is regulated by the Contaminated Sites Regulation under the Yukon's Environment Act. These facilities are also subject to the Yukon Environmental and Socioeconomic Assessment Act. While this legislation is necessary to ensure acceptable operating standards for the facilities it must be recognized that it requires significant time to work through the regulatory processes.

Construction of the facilities is often limited by the available space, materials, and equipment. Construction using synthetic liners often requires specific materials for liner placement and construction techniques that may not be readily available within the Yukon. Compacted silt liners have proven to be an acceptable substitute to address this issue.

Operation is also subject to the available equipment and climatic conditions. Most treatment facilities are designed with available equipment in mind. Local staff have been trained in the proper operation and maintenance of the facilities. Configuration of soil stockpiles and operational techniques can help overcome some of the climatic challenges faced by the operators.

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Don Wilson is a Senior Environmental Scientist with EBA's Whitehorse Environment Group. He is the team leader for the contaminants group and has been in the Yukon for the last 20 years. He has previously worked with the Yukon Government in the development of Yukon's Environment Act and four sets of regulations under the act, including the Contaminated Sites Regulation. He has also designed two of the four commercial soil treatment facilities operating in the Yukon.