REMEDIATION OF A FORMER TANK FARM
SAVIKTOK POINT, NWT

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General View

Saviktok Point
Site Characteristics

- No source of electrical power
- Sea access only
- Remote location
- Limited availability of equipment, materials and manpower
- Hydrocarbon contamination – 25,000 m³
- Biological treatment was preferred solution
**Keys of Biological Treatment**

- $O_2$ is required to maximise the degradation of contaminants
- Heat is required to sustain microbial activity
- Nitrogen and Phosphorous
- Neutral pH, loose structure and moisture content
Treatment Technologies
Bench Scale Trials
Wind Turbines
Results

- 17,000 m³ treated to NWT Industrial Standard (2,500 mg/kg)
- 85% Average reduction of concentrations
  4,136 mg/kg to 649 mg/kg
- Three seasons of treatment
- Average temperatures of 30 ºC during treatment
- Soils were recycled as landfill cover material
Other examples
Other Applications
Other Applications
Saviktok Point
Benefits

- Minimization of soil handling
- Utilization of a wind-powered aeration system
- Adapted design of the biological treatment to site-specific conditions
- Maximum use of local resources