



Thermal Phase Separation (TPS)



In Canada, the TPS technology has successfully completed projects in or been permitted by Newfoundland and Labrador, Nova Scotia, New Brunswick, Quebec, Ontario, Alberta, and British Columbia.

Abroad, this Canadian technology has successfully completed projects or been permitted in Australia United States, Japan, Ecuador, Kazakhstan, Saudi Arabia, United Arab Emirates, Argentina, Russia, Bolivia and Algeria.

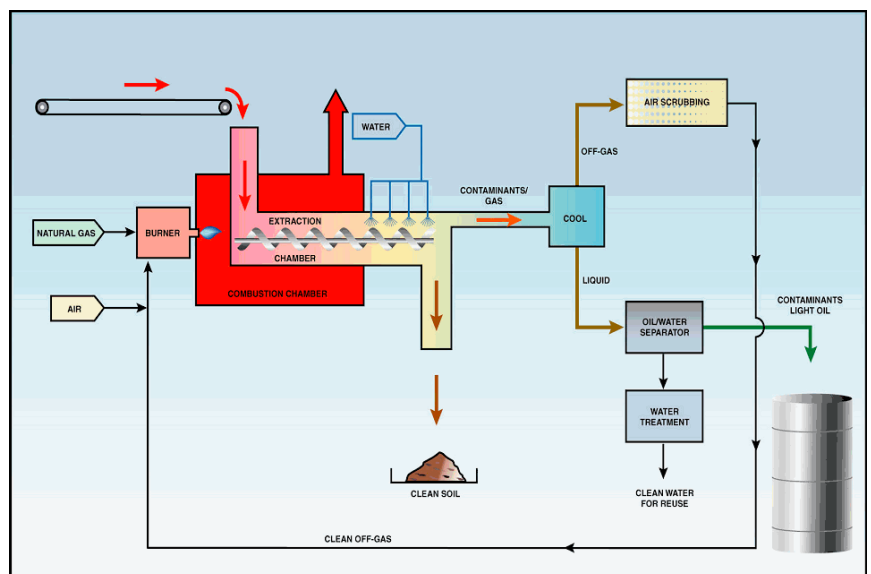
Thermal Phase Separation (TPS) is an innovative, Canadian developed and commercially proven, technology verified by Environment Canada's Environmental Technology Verification (ETV) Program. The unique TPS technology safely and efficiently separates all hydrocarbons with boiling points up to 550°C from the sludge matrix. TPS has proven successful internationally in the treatment of a wide variety of sludges including those from VLCC super tankers and petrochemical refineries in the Arabian Gulf, weathered drill cuttings and oilfield wastes from Central Asia and South America, manufacturing wastes in Japan and paint wastes from a major U.S. hazardous waste treatment provider. Sludge is carefully and indirectly heated in a limited-oxygen, closed loop environment. Water and hydrocarbons are forced off and re-condensed using recycled and treated recovered water.

The hydrocarbons are removed and filtered producing an oil that contains <2% BS&W, is free of most long chain hydrocarbons, chemically resembles #2 Fuel Oil. And is suitable for sale. Any solids in the sludge are effectively pyrolyzed and rendered inert and safe for landfill disposal.

Key Advantages of TPS

- Recovery and recycling
- Requires no pretreatment
- Non-incineration
- Meets all Canadian air-emissions standards ETV Certified
- Secure fixed facility
- On-site option available
- Permitted for all types of hydro carbon impacted sludge, sediment and soil

Thermal Process overview





Phase Separation Solutions

Our state-of-the-art Treatment Facility is unique in Canada for the recovery of hydrocarbons from paint and other industrial sludge



It is the only pharmaceutical waste destruction facility using proven non-incineration technology



Facility Capabilities

- Tank Sludge
- Paint Sludge
- Petrochemical Sludge
- Refining Catalyst
- Solvent Distillation Sludge
- PCBs
- Dioxin/Furan
- PERC
- PAH/Creosote

Owned and operated by the same Canadian management team responsible for the original development and international commercialization of the TPS, Phase Separation Solutions (PS2) is a leading specialist in the safe thermal extraction and recovery of hydrocarbons from soil, sludge and debris. Designed to the most stringent of standards, the Wolseley Facility, is a self-contained island. The Operations Building and Soil Storage Area, which enclose all activities, is constructed upon 15m of compacted clay, a 60mil HDPE liner with leachate collection system, 1m of compacted fill and 150mm of steel reinforced concrete. The site itself is engineered so as to prevent any surface water from entering the site and all rainwater falling on the site is directed to a Detention Pond. All recovered water is treated, all treated solids contained and tested and no emissions other than that produced from combustion of natural gas are released. The plant is designed with the latest digital electronic controls and monitoring equipment ensuring the most efficient and safe operation.

Incineration and landfilling have long been the accepted means for disposal of impacted sludges. Incineration has been the source of much public debate regarding air emissions and landfilling leaves the generator and the public with long term liability. The TPS and PS2 provide a permanent, environmentally benign solution that immediately releases generators from liability.

Excelling in the management of hydrocarbon based sludge the Wolseley Facility leads the way in hydrocarbon recovery. Drilling waste, refining waste, paint waste all have one thing in common: valuable recoverable hydrocarbons. Using the advanced TPS technology PS2 is able to not only effectively treat traditionally landfilled or incinerated material but able to recover every last drop of valuable oil from these products. Environmental responsibility. Liability removal. Value recovery. PS2 is THE alternative to conventional sludge management.

To find out how we can help your organisation call:

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