1999 Assessment of Phytoremediation In Situ Technique for Cleaning Oil Contaminated Sites Phase 1

Dr. Jim Germida, University of Saskatchewan and Dr. Sandra Blenkinsopp, Environment Canada

- Identify plant species with the ability to significantly reduce hydrocarbon levels in oil contaminated soils.
- Optimize plant growth/phytoremediation variables.
- Identify the efficiency of phytoremediation under western Canadian conditions.
- Identify field assessment protocols for monitoring phytoremediation.
- Elucidate mechanisms of phytoremediation.

Schedule:

Phase I - Broad literature review and creation of database of plants with known/suspected ability to phytoremediate hydrocarbons - Completed.

Phase II — Botanical survey of plants growing on

hydrocarbon contaminated sites in Alberta and Saskatchewan — Completed.

Phase III — Preliminary screening of plants for phytoremediation (as opposed to tolerance) of hydrocarbons — Completed.

Phase IV — Finish: October 2002

- Growth chamber studies to optimize plant growth/phytoremediation variables, develop field assessment protocols, and elucidate degradation mechanisms.
- Set up field (demonstration) trials of selected phytoremediation technologies.
- Manage and update internet version of the PhytoPet®database and phytoremediation web site.

1999 UoS_Phytoremediation Presentation
UoS_ Database of Plants that Play a Role in the
Phytoremediation of Petroleum Hydrocarbons
1999 UoS_Phytoremediation as an InSitu Technique for
Cleaning Oil Contaminated Sites Report