

ENGINEERED WETLANDS



Client: Abitibi Consolidated – Mackenzie Paper Division Cogeneration Facility

Value: Confidential

Description: Conceptual assessment of hog pile leachate collection and site soils remediation.

Scope: SDE was contracted with sub-contractor Microbial Technologies Inc (MTI) to examine the treatment of leachate created by rainfall on the hog pile. SDE and MTI investigated the subsurface soil contamination in the Hog Fuel Area with soil and water sampling. It was found that normally there is sufficient biological activity to remove the organic and inorganic compounds and prevent environmental contamination. During periods of high precipitation the volume of leachate may be too high to be absorbed by the current level of biological activity so run-off collection and treatment is required.

SDE prepared a conceptual design and cost estimate for the run-off collection and treatment system. The recommended solution was a engineered wetlands which will allow for easy monitoring of the biological activity and purifying of the leachate. This provided Abitibi with solution that had a low capital cost and minimal operating costs while meeting their formalized environmental management plan.