

Assignment Name: Steepbank Mine – Environmental Management of surface water run-off		ID#: 20
Country: Canada Location within Country: Alberta	Approx. value of the contract: Not available.	
Name of Client: SUNCOR	Approx. value of the professional services provided under the contract: US\$ 250,000	
Address:	Total No. of staff-assigned to Project: 5	
Start date (month/year): March 2009	Total No. of staff-months of the assignment: 9	
Completion date (month/year): November 2011	Duration of assignment (months): 32	
<u>Narrative description of Project:</u> Design and construction guidance for the environmental management for stormwater run-off and leak/burst protection for all tailings effluent water (TEW) pipelines for the operational mine site		
<u>Description of actual services provided by professional engineering staff within assignment:</u> Development of various design options for selection by SUNCOR maintenance teams to accommodate the temporary use and relocation of TEW pipeline corridors as the mine infrastructure shifted to accommodate the changes to the pit mining operations. Designs were required to be low-cost in construction, easy to maintain and robust in cases of TEW pipeline ruptures. Significant use of earthworks and temporary pipe solutions. Project solutions were under increased scrutiny from regulators due to compliance breaches in the 12 months prior to the project commencing.		
<u>Description of Activities provided by RWI</u> Led the design team for environmental containment systems for surface water run-off and TEW pipeline corridors, capable of withstanding pipeline ruptures and harsh winter conditions. Interface between SUNCOR environmental and engineering divisions to develop acceptable design scenarios. Including GIS mapping of facilities to assist in maintenance operations for site staff.		

