



Capital Budget Request - DESIGN & CONSTRUCTION

Project Name	Fort McMurray WTP Rehabilitation Program			\$	8,600,000
Order Code	New	Project Location	Fort McMurray		
Project Category	Environmental	Ward	1 - Fort McMurray		
Type of Project	Lifecycle - Construction	Municipal Function	41 - Water Sup & Distribution		

Project Description and Scope

The Fort McMurray Water Treatment Plant is the most significant and critical asset for the Municipality in providing potable water to five (5) of our communities. Keeping this asset in good operable condition is essential to continue daily life in a safe manner. This program will address safety & compliance issues, asset management, security, and process optimization. This will allow the municipality to maintain the above-mentioned asset in acceptable condition, improve the safety and reliability of the asset and ensure the preservation or extension of the life span of the asset.

The program scope comprises of the following:

1. Relocate Potassium Permanganate (KMnO4) Injection Point - Increase contact time of the chemical with raw water
2. Ammonia room HVAC Control - Method to improve the air changes in an emergency situation
3. VOC Analyzers for raw water intake and lab - Upgrade analyzers required for measuring VOC (Volatile Organic Compounds) in raw water
4. Caustic Fill Point - Design & Improve the handling of the Caustic during filling and improve overall safety around the Caustic Fill point
5. Raw Water Pumphouse & River Intake Integrity - A full assessment of the structure and asset management
6. Fixed Gas Detection System - Install gas detection for early safety warning
7. Filter 1 - 4 Efficiency Improvement - Process modifications to improve filter efficiency and water conservations
8. Air Scour for Actiflow - Addition of Air Scour to the Actiflow system will expand life expectancy of the Asset
9. Generator Containment Pad - Secondary containment of diesel tank
10. Instrumentation & Control System Upgrade - Asset management of process instrumentation and programming
11. Control Room relocation - To provide a secure locked-down facility
12. Reagentless Chlorine Analyser - Replace Chlorine Analysers that Utilize buffer solution with analysers that don't require buffer
13. Raw Water Ponds Shoreline Stabilization - Removal and prevention of vegetation that comprise the raw water pond integrity

Project Cash Flows

Year	Total Annual Cost	Federal Grant	Provincial Grant	Reserve	Other
2019 & Prior	-				
2020	2,100,000				
2021	6,500,000				
2022	-				
2023	-				
2024	-				
2025	-				
Thereafter	-				
Total Budget	8,600,000	-	-	-	-

Additional Funding Details

Business Case created by	<u>Antoine Rempp</u>
Project Sponsor Branch	<u>Water Treatment Plant</u>
Project Sponsor Department	<u>Public Works</u>
Project Delivery Branch	<u>Engineering</u>
Project Delivery Department	<u>Engineering Services</u>