

MACASKILL BROOK DAM - DAM SAFETY MANAGEMENT SYSTEM

Cape Breton Regional Municipality



Description of Services Provided:

Meco worked with the regional municipality to identify opportunities to integrate best management practices (BMP) and best available technology (BAT) related to dam safety with to other asset management strategies already in use. The Cape Breton Regional Municipality (CBRM) Water Utility provides drinking and industrial use water to the residents of Sydnet through a variety of sources, including the MacAskill Brook reservoir.

The Dam Safety Management System (DSMS) incorporated the components recommended by the CDA Guidelines, including development of policies, definitions for Operations, Maintenance and Surveillance practices (OM&S) and an Emergency planning (EPP/ERP), an assessment of public safety. Additional work included the design of a downstream toe drainage system to drain low lying areas to facilitate inspections. The system include a weir to monitor dam leakage flows, and assure passage of maintenance flow to meet regulatory requirements.

The main components of the project deliverables were:

- Site inspections
- Preparation of:
 - Operations, Maintenance and Surveillance Manual
 - Emergency Response Plan
 - Emergency Preparedness Plan
 - Issued for Construction Drawings
 - Cost Estimate
 - Progress Reports
- Documenting existing operating procedures
- Design of downstream toe drainage system
- Review and advice regarding ice damage to the spillway
- Training for Emergency Preparedness Plan Implementation