

# Environmental Assessment

## Highway 102 Aerotech Connector

### Acid Rock Drainage (ARD)

#### What is ARD?

- Exposure of sulphide minerals (e.g. pyrite) to air and water that leads to acid run off / metal leaching
- ARD is a natural process
- Goldenville and Cunard Formations are known ARD producers
- ARD can be significantly accelerated during construction
- Results in lowered pH which can increase metal concentrations

#### How is ARD managed?

- NS Sulphide Bearing Material Disposal Regulations must be followed
- Sulphide Bearing Material Management Plan
- Disposal in containment cells (or other approved method/location)
- Monitoring of disposal site (e.g. pH, aluminum, conductivity)
- Construction staging to minimize exposure
- Erosion and Sedimentation Control Plan
- Water controls / management

#### What are the environmental effects?

- Degrades water quality and aquatic habitat
- Negatively impacts stream and lake organisms

