

Case Study

Hydro Quebec James Bay, Quebec, Canada

Issues

- No salvaged or imported topsoil available.
- Highly erodible, sandy subsoil.
- Short growing season.



Before installation, near James Bay.

After use of Biotic Earth, near James Bay.



Solution

In 2004, Hydro Quebec worked with Verdyol to combine peat moss with their wheat based straw mulch to help reclaim road sides that were being built on their northern construction sites near James Bay. This project was located in the Northern Boreal forest where salvaging topsoil was impossible, and there was no topsoil to import.

To further complicate matters, the subsoil was highly erodible sand and their growing season is short. The goal was to establish vegetation within one season and make it sustainable without the use of topsoil.

Application

- Verdyol Biotic Earth HGM at a rate of 2000 kg/ha was used.
- The seed mix was seeded at a rate of 175 kg/ha and consisted of:
 - w 34% Creeping red fescue
 - w 5% Bent Grass
 - w 15% White Clover
 - w 3% Reed Canary grass
 - w 8% Timothy
 - w 20% Birdsfoot trefoil
 - w 15% Barley
- 12-18-12 fertilizer, 25% slow release.
- Ver Tack was used as the tackifier at a rate of 80 L/ha on the steeper slopes.



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Hydro Quebec

James Bay, Quebec, Canada



Installation: 2004



After use of Biotic Earth on Hydro Quebec Project near James Bay

Results

All goals reached! Quebec continues today to specify a straw and peat based hydro mulch in their northern areas.

“Renaturalization is a key aspect of all the rehabilitation efforts at our installations and development projects. At our northern facilities, replanting and reforestation efforts are particularly challenging because the annual growth season is very short and the topsoil is very thin and fragile.

Preventing erosion helps us to preserve the road network essential to the operation of these very distant sites. It also translates our commitment to minimizing the imprint of our projects by contributing to the harmonization of our facilities with the environment, protecting aquatic ecosystems and improving terrestrial fauna habitat. The straw- and peat-based hydro mulch has worked very well for us in this respect. Grass was growing within the first season of its use, and within the second season birdsfoot trefoil was blooming.”

Réjean Gagnon, Senior Adviser of Environmental Projects.



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