

Acid mine drainage and the Cape Breton coal industry

A. Peach

Three-D GeoConsultants Limited, 789 Prince Street, Truro, Nova Scotia B2N 1G7, Canada

Acid Mine Drainage (AMD) from mine waste and coal refuse spoil piles has long been recognized as an environmental liability for mine operators, property owners and the public in general. A vast amount of research has been completed within the mining community to understand the dynamics of the gen-

eration of acid water and to develop and implement ways to mitigate or eliminate the problem.

Current methods for control of acid water generation include water cover or flooding in the creation of wetlands; sealing the material with impermeable covers using organic mate-

rial, soils, cement or limestone sludge generated during the treatment of acid water, interlayering waste material with limestone or other buffers; and neutralizing the acid water using lime, limestone or other chemicals in a water treatment facility built at the site.

The Cape Breton Development Corporation (DEVCO) has numerous programs which are currently in place to control or eliminate the AMD problem in existing mine waste and coal spoil piles. This presentation discusses a recently initiated project of AMD remediation at a DEVCO site.