## Soil Management Technology at the Toronto Portlands

The construction of the Toronto Port Lands Flood Protection and Enabling Infrastructure Project (Toronto Port Lands Project) is taking place in parallel with the introduction of environmental regulations that enforce the tracking of soil leaving the site.

At the Toronto Port Lands, not only are soils leaving the site tracked, but due to several reuse applications at the site, all soils being reused require tracking, which has led to the creation of new technologies to reuse the majority of the 1 million cubic meters of soil being managed.

New technologies like 3-D digital models, GPS driven machine control and remote sensing, cloud-based truck tracking, environmental and geotechnical analytical data management and a QP approvals platform work together to form a sophisticated, integrated tracking system.

As we all know, new technologies go a long way in simplifying work and optimizing outputs, however they come with their own set of challenges.

This presentation describes the new-age soil management technologies QM now implements at sites across Canada, initiated by work at the Toronto Port Lands project.

**Nicholas Doucette**, P.Eng., QM's National Manager for Special Projects, is an environmental contractor that is a passionate advocate for innovation in the pursuit of safer, more sustainable environmental remediation projects. He is responsible for the bidding and delivery of complex, large, and/or sensitive Environmental Remediation projects across Canada including marine, civil, and specialty construction. Mr. Doucette has worked on projects from coast to coast including the Sydney Tar Ponds, Port Lands, Port Hope, Rock Bay, and Esquimalt Harbour projects. He currently leads QM's Toronto Port Lands Project portfolio, presently valued at over \$180 million.