Western Dredging Association's Exciting
Dredging & Summit Expo 2014
Post Conference Technical Tour
Wednesday June 18, 2014
1:00 pm to 6:00 pm

Randle Reef (Hamilton Harbor AOC), Lake Ontario

The Governments of Canada and the United States have recognized contaminated sediment issues as a major problem in the Great Lakes ecosystem. In 1985, the two countries identified 43 Areas of Concern (AOCs) where impaired water quality prevented full beneficial use of rivers, bays, harbors and ports.

Our Tour Site "Randle Reef (Hamilton Harbor AOC), Lake Ontario", approximately one hour bus ride from the Royal York Hotel is one of the largest PAH contaminated sediment site (675,000 m^3) on the Great Lakes and in all of Canada. Proposed remediation for this site involves constructing a 7.5 hectare engineered containment facility (ECF) that will manage PAH and heavy metal contaminated sediments in two ways: (1) the ECF will be constructed on top of the most highly contaminated sediments (*in situ* 130,000m^3) isolating those sediments in place; and (2) other contaminated sediments (500,000m^3) will be dredged and placed inside the ECF. The ECF will be constructed by installing a double steel sheet pile wall – the sealed inner wall will isolate the dredged material and the space between the walls will be filled with rock to enhance the wall structural properties and also function as a polishing cell for the dredge effluent. The outer wall will also serve as the outer face for a future port facility.

Because of concerns over volatile organic compounds (VOCs) from sediments, mechanical dredging will be minimized to less than 5% of the total dredge volume. The majority of the dredging will be conducted by hydraulic means, discharging into the ECF below the water level.

A thin layer cap (8-16 cm) of sand will be used to manage residuals generated during dredging. A thin layer cap will also be used to manage approximately 40,000 m^3 of less contaminated sediments at the site. Approximately 5,000m^3 of contaminated sediment will be capped using a combination of sand enriched with total organic carbon and reactive core mats.

The engineering design and environmental assessment are now complete for the project. The Randle Reef sediment remediation project is a critical step towards eventual delisting of the Hamilton Harbour AOC. Construction activities will begin in the summer of 2014 and be completed by 2022.

This will be your schedule of events:

1:00 PM: Pick up at Fairmount Royal York Hotel – 2:00 PM Arrive Randle reef
2:30 PM: Board Harbor Queen – 4:00 PM Return to Randle Reef/Board Bus
5:00 PM: Arrive Fairmount Royal York Hotel

Reservation: Paid Delegate_____ **Spouse/Guest** _____

Fee is not required as this Tour is part of Conference Agenda.

"DREDGING CREATES A STRONG ECONOMY AND A CLEANER ENVIRONMENT"