

New Canadian Guidance for Addressing and Managing Federal Aquatic Contaminated Sites in Working Harbours

Tamsin Laing (tamsin.laing@rmc.ca), Viviane Paquin, Daniela Loock, and Kela Weber (Royal Military College of Canada, Kingston, ON, Canada)
Stuart Dean and Mark Scott (Fisheries and Oceans Canada, Ottawa, ON, Canada)
Mario Cormier (Environment and Climate Change Canada, Montreal, QC, Canada)

Background/Objectives. Working harbours experience ongoing use for recreational, commercial, residential and/or industrial purposes and associated contaminant inputs from these activities. Consequently, decision-making regarding the assessment, remediation and/or risk management of contaminated sediments in water lots within working harbours can be challenging. The objective of this project was to develop guidance and a decision-making framework for addressing and managing aquatic contaminated sites in Canadian working harbours under the Federal Contaminated Sites Action Plan (FCSAP).

Approach/Activities. The working harbour guidance was developed through consultation with an internal governmental working group and focused interviews with site managers, as well as a case study review. The fundamental principle underlying the approach includes balancing the need for due diligence in addressing and managing sites that are a source of contamination posing unacceptable risks to surrounding areas and site users, while taking into account constraints on management actions due to ongoing sources and harbour uses.

Results/Lessons Learned. The working harbour guidance establishes general principles and a decision-making framework for managing water lots with contaminated sediments in working harbours. Topics covered include a recommended approach for screening sediment contaminant concentrations in initial assessments; stakeholder engagement; and implementation of source control measures. An approach is also outlined for setting achievable remediation and risk management (R/RM) objectives given ongoing inputs into the harbour. This includes a well-designed sampling program to establish harbour ambient background conditions, as well as a recontamination evaluation to identify potential limits for management actions and R/RM objectives. A framework and set of circumstances under which a site may be closed are also provided. Although the guidance was developed for aquatic contaminated sites in Canadian working harbours that are managed under the FCSAP program, the principles and approach are applicable for all working harbour sites.

This presentation will provide an overview of the newly-finalized Canadian guidance and decision-making framework for addressing and managing federal aquatic contaminated sites in working harbours.