

**PEER REVIEW
OF
SCREENING RISK ASSESSMENT
EAST & WEST ENDS OF LEBRETON BOULEVARD**

Prepared for:

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February 2003

Printed on Recycled Paper Containing Post-Consumer Fibre



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1.0 INTRODUCTION

SENES Consultants Limited was retained by Dessau-Soprin Inc. to perform a peer review of the screening risk assessment for the East & West Ends of LeBreton Boulevard.

The risk assessment document reviewed is entitled:

Screening Risk Assessment – East & West Ends of LeBreton Boulevard. LeBreton Flats Infrastructure and Remediation Project Ottawa, Ontario. National Capital Commission. Preliminary Report (2nd Draft). January 2003.

Detailed site characterization data are provided in the following reports:

- Dessau-Soprin Inc. (DSI) 2002a. *Complementary Phase II - Environmental Site Assessment, Blocks O, U, T, X, W and Adjacent Areas* Final Report. LeBreton Flats Infrastructure and Remediation Project Ottawa, Ontario. National Capital Commission. April.
- Dessau-Soprin Inc. (DSI) 2002b. *Supplementary Phase II - Environmental Site Assessment, LeBreton Boulevard, Booth and Lloyd streets, ORP, Common, Riverfront and Sedimentation Pond Areas* Final Report. LeBreton Flats Infrastructure and Remediation Project Ottawa, Ontario. National Capital Commission. July.

It should be noted that a screening level risk assessment has a special connotation under the MOE guideline. The MOE notes that a screening risk assessment is a preliminary tool with specific purposes as follows:

- to identify likely absence of potential human health risk
- to determine if a comprehensive risk assessment is needed
- to assist in determining the scope of the comprehensive risk assessment

The results of a screening risk assessment are qualitative in nature and cannot be used to make quantitative estimates of risk to human health or develop site specific clean-up values.

The peer review process is not a necessary element of a screening risk assessment under the MOE guideline. Therefore, this review focuses on the appropriateness of the framework and assumptions and does not comment on the conformity to the MOE guidelines.

It should be acknowledged, that we have not attempted to verify all calculations.

1.1 TERMS OF REFERENCE

The purpose of this peer review is to offer an opinion on whether or not the conclusions that have been reached are appropriate and defensible.

In order to carry out the terms of reference, this peer review examines the information presented in the above mentioned report prepared by Dessau-Soprin Inc. (DSI) that describes current site conditions, the relationships between current conditions and past activities or conditions, the rationale for identification of the chemicals of interest, the fate of those chemicals, the rationale for selection of the appropriate exposure scenarios, and the subsequent conclusions and recommendations.

The following sections of this report follow the general format presented by DSI.

1.2 LIMITING CONDITIONS

This report has been prepared for Dessau-Soprin Inc. Any use which a third party makes of this report, any reliance on this report, or decisions based upon this report are the responsibility of those third parties unless authorized in writing by SENES. SENES accepts no responsibility for damages suffered by any unauthorized third party as a result of decisions made or actions taken based upon this report.

This report has been written by Harriet Phillips, Ph.D. and Stacey Fernandes, M.A.Sc., P.Eng., with input and review from Douglas Chambers, Ph.D. of SENES Consultants Limited.

2.0 INTRODUCTION

This section of the report provides a brief description of the site. This includes a brief description of the history of the site as well as the planned use complete with relevant figures. The objectives of the site specific risk assessment were summarized.

The remediation plan for the site was outlined. It is planned to remove all contaminated soil to a depth of 500 mm below the future deepest service. Contaminated soils left in place will remain at the east and west ends up to 2 to 3 metres below the final grade of the proposed boulevard.

3.0 RISK ASSESSMENT METHODOLOGIES

This section describes in general terms the human health and ecological risk assessment process. DSI states that a screening risk assessment (Tier 1) approach is appropriate for this site. We concur with their general descriptions.

4.0 PROBLEM FORMULATION & HAZARD IDENTIFICATION

This section provides a more detailed description of the historic use of the site and the natural environment. Relevant information regarding the physical characteristics of the site (e.g. topography, geological characteristics, surface water, groundwater). The site characterization data has also been summarized. We concur that migration of chemicals onto adjacent properties is likely not to be significant.

The conceptual model states that after development exposure pathways for human and ecological receptors should be non-existent. We concur with this assessment.

5.0 RISK EVALUATION & RISK MANAGEMENT

The risk evaluation is appropriate considering the lack of exposure pathways. The discussion risk management measures is appropriate. The requirement for on-going monitoring and maintenance is also appropriate.

6.0 OVERALL OPINION

The risk assessment completed by DSI follows generally accepted practices and assumptions. We concur with the assessment of that the presence of contaminated soils and groundwater at the east and west ends of the proposed LeBreton Flats will not have an impact on human health or the environment. The recommendations provided in the DSI report are appropriate and should be implemented.