

121 Granton Drive Unit 12 Richmond Hill, Ontario Canada L4B 3N4

Tel: (905) 764-9380 Fax: (905) 764-9386 E-mail: senes@senes.on.ca Web Site: http://www.senes.on.ca

33438

12 March 2003

Dessau-Soprin Inc. 87 Broad Street Ottawa, ON K1R 1C1

## Attn: Peter Rapin

## RE: Peer Review of Ecological & Human Health Risk Assessment Common & Riverfront Park Areas

Dear Pete,

On behalf of the National Capital Commission (NCC), SENES Consultants Limited was retained by Dessau-Soprin Inc. to undertake a peer review of the above referenced report (Preliminary Report  $-2^{nd}$  Draft, December 2002). SENES performed the review and submitted a list of comments on 6 February 2003. Dessau-Soprin provided responses to these comments on 21 February 2003. Subsequent changes to the risk management plan were also provided to SENES by Dessau-Soprin. SENES concurs with the responses provided by Dessau-Soprin with the following exceptions (numbering follows Dessau-Soprin responses):

- 4) The use of a 95<sup>th</sup> percentile should provide a more conservative approach to the screening as compared to the UCL of the mean. We are therefore confused by barium being eliminated from consideration as a COPC with the use of the 95<sup>th</sup> percentile.
- 11) Dessau-Soprin provided an excerpt of the Certificate of Analysis for the additional information provided in the risk assessment. Consideration should be made to including these data in an appendix. It must be noted that the CofA shows the results for Total Organic Carbon (TOC) which was used in the assessment for fraction organic carbon (foc). It is our understanding, and confirmed by Paracel Laboratories Ltd. that completed the work, that different analytical procedures are used to determine TOC and foc. Carbonates can interfere with the TOC measurements providing a higher value than intended for foc. However, due to the nature of the contaminants and pathways it is unlikely that a change in foc would have a significant affect on the results.

- 31) We still disagree with the interpretation of soil ingestion values and the appropriate timeframe. However, this will not impact the conclusions of the report.
- 34) SENES was provided the CalTox output for naphthalene and lead. A review of the files showed that the model appears to be used appropriately for naphthalene. However, the CalTox guidance suggests that the model should only be used for inorganic chemicals if specific site-specific data is provided. The type of data includes soil-water partition coefficients, biotransfer factors and fraction dermal uptake of metal from soil. It does not appear that CalTox was used in this manner for the inorganic contaminants. For the ecological risk assessment, this may affect the results provided in Section 5.1.6 but would not change the overall conclusions. For the human health risk assessment, it is unlikely that the ingestion and inhalation routes would be significantly affected but the dermal calculations could be impacted. As the dermal exposure is low, any change is unlikely to have a significant affect on the conclusions of the report.

In summary, although there are some residual issues, none of the points indicated would have a significant impact on the overall conclusions of the report. Please note that the revised report was not reviewed and trust that all changes indicated in the responses were incorporated. If you have any questions or require clarification on the above, please do not hesitate to contact the undersigned.

Yours very truly,

## **SENES** Consultants Limited

Harriet & Thillips

Harriet A. Phillips, Ph.D. Senior Specialist Risk Assessment/Toxicology