



City of Richmond

# Report to Committee

**To:** Planning Committee  
**From:** Suzanne Bycraft,  
 Manager, Emergency & Environmental  
 Programs

**Date:** January 6, 2006  
**File:** 10-6520-02-01/2006-Vol  
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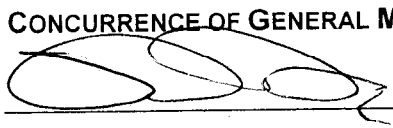

**Re:** Disposal at Sea of Excavated Materials from the Canada Line Project

### Staff Recommendation

That the attached report (from the Assistant Manager – Environmental Programs dated January 6, 2006) be received for information.



Suzanne Bycraft  
 Manager, Emergency and Environmental Programs  
 (3338)

| FOR ORIGINATING DIVISION USE ONLY        |   |                             |  |                              |                             |
|--|---|-----------------------------|--|------------------------------|-----------------------------|
| <b>ROUTED TO:</b><br>Major Projects..... | <b>CONCURRENCE</b>  |                             | <b>CONCURRENCE OF GENERAL MANAGER</b>  |                              |                             |
|  | Y <input checked="" type="checkbox"/>   | N <input type="checkbox"/>  |  |                              |                             |
| <b>REVIEWED BY TAG</b>                   | YES <input checked="" type="checkbox"/>   | NO <input type="checkbox"/> | <b>REVIEWED BY CAO</b>   | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
|  |  |                             |  |                              |                             |

## Staff Report

### Origin

Planning committee referral from December 20, 2005:

*“That staff report to the Planning Committee on whether the City supported the dumping of fill material from the Richmond segment of the Canada Line into the Gulf of Georgia.”*

### Background

#### *City Position*

The City of Richmond has not made any statements with respect to its position on the suitability of ocean disposal of excess fill material from the Richmond segment of the Canada Line.

The City was involved in the review of the harmonized federal and provincial environmental assessment for the RAV line. The environmental assessment is conducted at a strategic level review to see if there are any significant environmental effects and if those effects could be mitigated to an acceptable level. The review is conducted at the conceptual design level. Proponents still need to apply for all applicable federal, provincial and municipal permits and authorizations as the detailed design gets developed to enable the project to proceed.

As part of the environmental assessment process, the City identified its interest in ensuring that soil be disposed of in an appropriate manner. As part of its assurances and commitments associated with its Environmental Assessment Certificate, RAVCO committed that it would address soil management considerations pertaining to both contaminated and non-contaminated soil in a subsequent Construction Environmental Management Plan (CEMP) to be reviewed and approved by applicable federal and provincial regulatory agencies.

#### *Soil Management Plans*

The CEMP for the Canada Line has been prepared. It identified both land-based and disposal at sea as the two intended means for disposal of excess non-contaminated excavated material. According to the Environmental Assessment Office, the CEMP has been reviewed by applicable regulatory agencies and deemed to be acceptable.

RAVCO advises that InTransit BC has secured Disposal at Sea permits from Environment Canada for disposal of excess material from parts of the Vancouver Canada Line segment and dredged material from required construction activity in the Fraser River. These permits enable a specified amount of material to be disposed of at the Point Grey designated disposal site. InTransit BC is currently working out material balance for potential excess materials from the Richmond segment. It is possible that the excavated material may be used to support construction work on the elevated and above grade portions of the Canada Line at the airport depending on geotechnical suitability and other considerations. InTransit BC is also exploring other potential on-land uses.

It is anticipated by RAVCO, however, that InTransit BC will be seeking a Disposal at Sea permit to ensure that an alternative exists should material excavated exceed beneficial use needs on land. The amount of material to be excavated in Richmond is significantly less than that being excavated in Vancouver.

### *Disposal at Sea – Regulatory Regime*

Disposal at Sea permits are administered by Environment Canada under authority of the *Canada Environmental Protection Act (CEPA)*. Applications to ocean dispose of material are reviewed by Environment Canada with advice from the Regional Ocean Disposal Advisory Committee (RODAC), which has representation from Fisheries and Oceans Canada and the British Columbia Ministry of Environment. Environmental protection measures associated with decision-making pertaining to Disposal at Sea applications include:

1. Review of Alternatives - all applications must demonstrate that all practical land-based and beneficial use alternatives to ocean disposal have been considered.
2. Material Restrictions - only certain types of substances are permitted to be considered for ocean disposal; permitted substances must also be tested and meet the *Ocean Disposal Regulations* and the *Disposal at Sea Interim Contaminant Testing Guidelines* to ensure acceptable quality.
3. Designated Sites - approved material can only be disposed at designated sites which have been established according to selection criteria established by CEPA; criteria considers the location of fishery resources and habitat, potential interference with marine uses in the area, mixing and transport characteristics and feasibility of monitoring. There are presently 36 designated sites in BC, half of which are used routinely.
4. Monitoring – there is a legal obligation for Environment Canada to monitor disposal sites.

The public is invited to submit comments or concerns with regards to disposal activities throughout the application process.

### *Need for Disposal at Sea*

According to Environment Canada, annual volume of materials dredged and excavated in the Lower Mainland for which there are no beneficial uses, cannot be accommodated by existing landfill sites. Consequently, ocean disposal has become a necessary disposal practice. In the past, most ocean disposed material originated from channel and harbour maintenance dredging for navigation and industry. In recent years, the amount of excavated native till approved for ocean disposal has increased and now contributes 25-50% of material that is approved for disposal at sea.

## Analysis

It is staff's assessment that, beyond being a potential beneficial user, there is likely limited ability for the City of Richmond to undertake meaningful action in decision-making pertaining to disposal at sea of surplus material from the Canada Line project since:

- this decision-making resides entirely within federal jurisdiction and
- there appears to be few options at this time for addressing the large volume of excavated non-contaminated material that is being generated as a result of the current high construction activity.

It is also noted by staff that Environment Canada has established a relatively strong regulatory regime for ensuring that potential impacts associated with disposal at sea activity are well-managed.

The ability for the City to be a beneficial user would be dependent upon timing and cost implications for InTransit BC. It would also require further detailed analysis by the City to assess feasibility and value for Richmond.

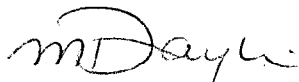
## Financial Impact

There is no financial impact associated with this report.

## Conclusion

InTransit BC is currently evaluating options for managing non-contaminated excavated materials from the Richmond segment of the Canada Line. Options being explored include use within the project construction for at-grade and elevated segments and potential beneficial use by other parties. No application has been made for a Disposal at Sea permit for materials from the Richmond segment but this remains a potential option.

The City of Richmond has supported the construction of the Canada Line project but has not made any specific statements pertaining to ocean disposal of materials. Disposal at Sea is regulated by Environment Canada and is considered a necessary disposal option as a result of current limitations of landfill sites and the large volumes of material being generated from the high level of construction activity in the Lower Mainland.



Margot Daykin, M.R.M  
Assistant Manager, Environmental Programs  
(4130)  
MD:md