

ITEM 15
MANAGER'S REPORT NO. 75
COUNCIL MEETING 85/11/25

RE: TRANSPORTATION OF DANGEROUS GOODS IN THE GREATER VANCOUVER AREA

RECOMMENDATIONS:

1. THAT Council endorse the Railway Transport Committee's Preferred Plan as an interim solution for the movement of dangerous goods as more specifically set out in the Committee's report dated September, 1985; and
2. THAT Council endorse the Policy Coordinating Committee's Position Paper; and
3. THAT the Policy Coordinating Committee be advised that in addition to the need for a long-term plan for movement of dangerous goods by rail in the Greater Vancouver area, as stated in its Position Paper, another objective that must be addressed is a comprehensive review of the movement of all dangerous goods by all modes of travel (rail, road, marine and air) throughout the Greater Vancouver Region.

SUMMARY

The movement of dangerous goods in the Lower Mainland is a matter of considerable concern and needs to be comprehensively addressed on a regional level. The Policy Coordinating Committee, which is comprised of Mayors representing fourteen Lower Mainland municipalities, have prepared a Position Paper on this matter for endorsement by their respective Councils. This report deals with that matter and also the Railway Transport Committee's decision to alter the routing of dangerous goods destined for Vancouver Island from the CP rail line that traverses Burnaby and terminates in downtown Vancouver to the CN rail line that connects with a terminal point in Delta (see attached sketch).

REPORT

A. Recommended Rerouting of Dangerous Goods Destined for Vancouver Island.

In May, 1982, Mr. Jim Eisler, the Regional Manager for the Canadian Transport Commission (CTC), released a report entitled "Railroad Transport of Dangerous Goods in the Greater Vancouver Region". This report provided an assessment of rail handling of hazardous goods from an overall perspective and included recommendations for improvements to safety at a number of different locations in the Lower Mainland. One of the recommendations called for the elimination or phasing out of the handling of dangerous commodities through the downtown Vancouver waterfront prior to 1986 January 01.

Three Commissions of the CTC's Railway Transport Committee carried out a thorough review of the Regional Manager's recommendation and concluded its deliberations with the release of a report dated September, 1985 entitled "Decision in the Matter of the Transportation of Dangerous Commodities by Rail in the Vancouver and Victoria Waterfront Areas" (a copy of this report is available in the Municipal Manager's Office). Two of the Commissioners agreed on a revised routing that is referred to in the Committee's report as the Preferred Plan: rail cars carrying dangerous goods to Vancouver Island are to be transported by rail to either CN's Tilbury Island Dock or the Brownsville Ferry Slip (whichever is determined to be the most suitable for the safe transfer of rail cars to barges or other vessels with the least delay and expense), then taken down the Fraser River and across Georgia Strait to Vancouver Island (the existing and proposed routes are shown on the attached sketch). The one remaining Commissioner dissented from this majority position because in his opinion, the status quo should be maintained pending the completion of an encompassing overall plan for the entire regional area.

The RTC's Preferred Plan has highly beneficial implications for Burnaby in that it would result in approximately 1,700 fewer rail cars of highly dangerous goods passing through our community each year. It would cause the routing of highly volatile goods that are destined for Vancouver Island via the downtown Vancouver City area to be discontinued while in no way affecting any rail movement of goods to Burnaby that are needed by local industry.

The Preferred Plan, which is promulgated as an interim, short-term solution until a comprehensive plan is prepared for the region, does not provide for the total removal of dangerous goods from the CP rail line, but only those goods which, by their nature, would present a significant risk to the public if released during or after an accident. The ban involves propane, a flammable gas which, upon release, can ignite, and anhydrous ammonia and sulphur dioxide which can be immediately life-threatening in relatively low concentrations. Remaining dangerous goods moved by CP Rail are less risky to human life, and given the special handling requirements which have been imposed on these goods by the RTC, they will be permitted to be taken over the CP rail line through Burnaby to the Burlington Northern Dock at the foot of Campbell Street in Vancouver. This approach is acceptable to both the Burnaby Municipal and Vancouver City staffs because it is a sound and practical interim solution to the problem.

The Railway Transport Committee has invited interested parties to comment on its Preferred Plan. Submissions will be received until 1985 November 30.

B. Burnaby's Proposed Response

The Preferred Plan is based on the Railway Transport Committee's analysis of risk to life and the environment and takes into account the economies associated with alternate routes. This Plan is basically acceptable to Burnaby staff because if an accident were to occur, the designated alternative route to Tilbury Island or the Brownsville area would affect a fewer number of people. Following are additional reasons why the CP rail line through Burnaby should be discontinued as a route for the movement of highly dangerous goods to Vancouver Island:

•Population Densities:

•Residential Settlement

The established population within one mile of rail line as it passes through Burnaby is in excess of 12,000 persons.

•Barnet Marine Park

Ongoing development of the Barnet Marine Park flanking the rail line has resulted in a highly attractive park with periods of very high attendance. At peak periods, as many as 1,000 persons may be in the park at the same time. Two serious problems could result from the occurrence of a disaster in this area: (a) immediate and direct exposure of the people to the dangers that are caused by the disaster and (b) blockage of the only road that provides access to and from the area.

•Adjacent Oil Refineries:

The concentration of existing oil refineries in the immediate area of the rail line poses two significant threats: possible ignition of explosive vapours and major explosions.

•Points of Access:

Vehicular access along the entire foreshore is extremely limited. In the event of a disaster involving hazard goods

- 3 -

• Soil Stability:

The typical steep escarpments rising to the south out of Burrard Inlet have in the past demonstrated an aspect of instability in certain areas which have resulted in several instances of physical disruption of the railway line. The determination of where, when and how such disruptions would manifest themselves is almost impossible to predict, but they do exist.

The RTC report advises that the exact impact of costs involved in establishing an alternative route cannot be estimated on the basis of evidence that has been presented to date, but cautions that any consideration of cost should "...be weighed against the real but equally unquantifiable costs to society of enduring the existing to hazard." The conclusion therefore reached is that the rerouting to Tilbury or Brownsville is a "...low cost action with measurable reduction in risks in the short run."

It is recommended that the RTC be advised that Burnaby Municipal Council endorses the Preferred Plan as an interim solution pending the development of a comprehensive plan for the region.

C. Need for a Comprehensive Plan

Considerable discussion has taken place over a period of years on the need for a comprehensive Regional Transportation Plan which would deal with the movement of dangerous goods by all modes of travel: rail, truck, marine and air. This Municipality and others in the Lower Mainland in concert with the GVRD have advocated this approach. The need for a broadly based overall plan was recently also addressed by the Policy Coordinating Committee which is comprised of fourteen Mayors from Lower Mainland municipalities. On 1985 October 30, the Mayors unanimously adopted the attached Position Paper and the following recommendations:

- "1. That copies of the response (Position Paper) be sent to the CTC/RTC;
2. That copies of the response be sent to municipal Councils with the request that they endorse the statement recognizing that municipal Councils may wish to forward a more detailed response to the CTC/RTC re the proposed decision of September 30, 1985; and,
3. That the *Sub-committee report further on this matter and on the possibility for developing a long range plan for the movement of dangerous goods by rail."

*This Sub-committee reports to the Policy Coordinating Committee.

It is recommended that Council endorse the Position Paper.

D. Conclusion

The Railway Transport Committee's Preferred Plan should be adopted as an interim solution because it minimizes the risk of exposure to hazard in the more densely populated municipalities in the area. The Preferred Plan, however, deals only with the movement of a relatively small proportion of dangerous goods through the region. What is also needed is a comprehensive plan that deals with movement of dangerous goods by all modes of travel. The Policy Coordinating Committee has proposed that work be commenced on a long-term plan for movement of dangerous goods by rail in the Greater Vancouver area, and this is seen as an excellent first step that will hopefully lead to an overall regional plan involving movement by truck, marine and air as well. It is for these reasons that endorsement is requested for both the RTC's Preferred Plan and the Policy Coordinating Committee's Position Paper.

ITEM

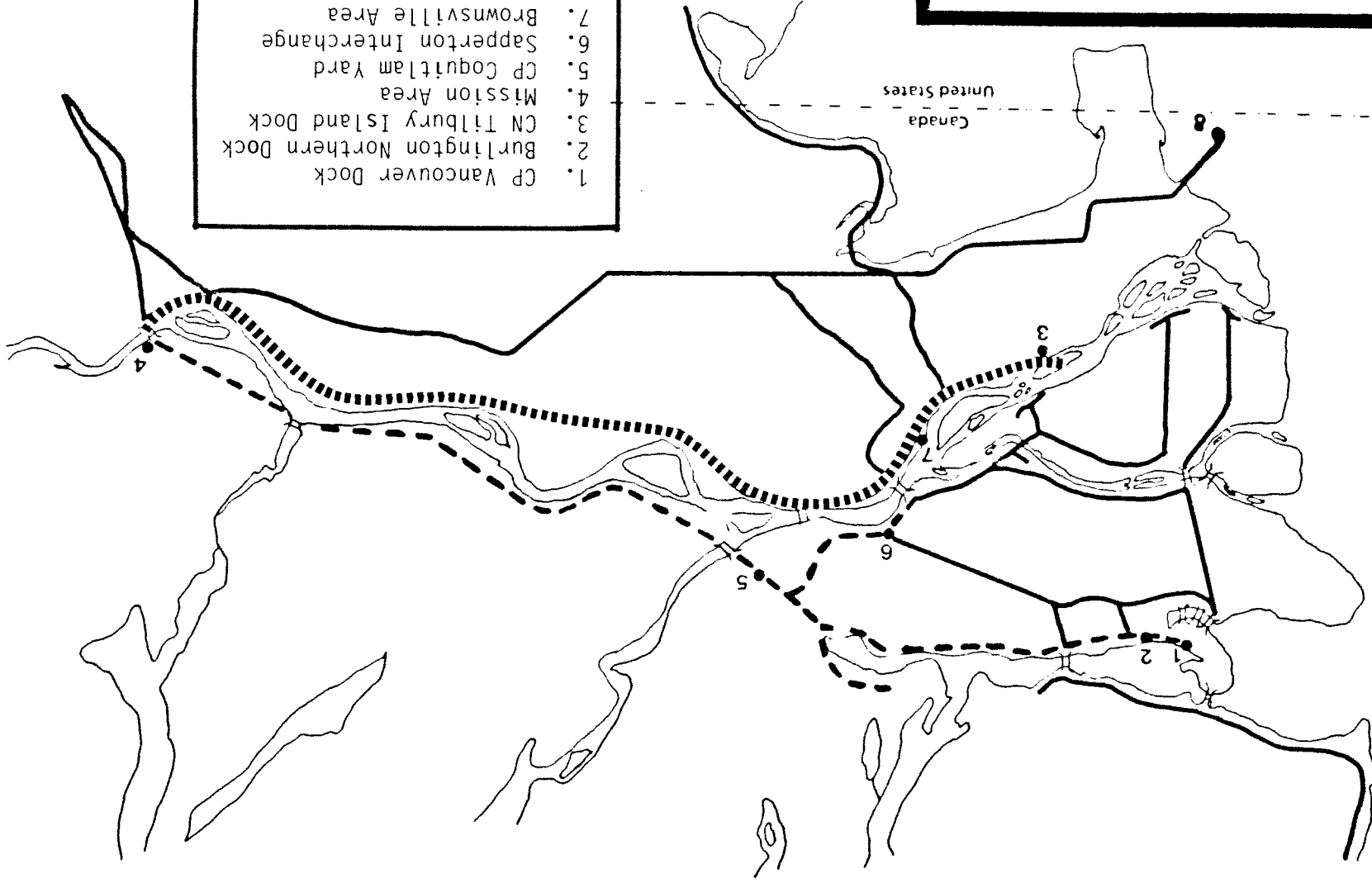
15

MANAGER'S REPORT NO. 75

COUNCIL MEETING 85/11/25

148

MOVEMENT OF DANGEROUS GOODS BY RAIL



- 1. CP Vancouver Dock
- 2. Burlington Northern Dock
- 3. CN Tilbury Island Dock
- 4. Mission Area
- 5. CP Coquitlam Yard
- 6. Sapperton Interchange
- 7. Brownsville Area
- 8.* Roberts Bank

* This is not presently a viable alternative route because the use of the site would require, as a minimum, new dock facilities and dredging of approaches. Another factor is that this area is environmentally fragile and dredging could potentially have harmful effects on fishing.

EXISTING CP ROUTE
ROUTE PROPOSED BY THE RTC

CORPORATION OF THE CITY OF NEW WESTMINSTER



OFFICE OF THE MAYOR

POSITION PAPER

PROPOSED RESPONSE TO THE CANADIAN TRANSPORT COMMISSION RAILWAY TRANSPORTATION COMMITTEE'S DECISION ON THE MOVEMENT OF DANGEROUS GOODS BY RAIL ON THE VANCOUVER AND VICTORIA WATERFRONTS.

The Mayors of the 14 municipalities in the Greater Vancouver area have reviewed the draft decision released by the CTC/RTC on the 30th September 1985.

The Mayors recognize that the movement of dangerous goods in significant quantities through the Greater Vancouver area is a continuing and long-term necessity. In general, these commodities can be moved most safely to ships by rail rather than by road. The safest possible system for rail transportation of dangerous goods can only be achieved through the development and implementation of a long-term plan. This plan must deal not only with the 1700 carloads moving to the Vancouver waterfront, but also with the 35,000 carloads moved annually in the Vancouver and Victoria metropolitan areas. It must take into account routing, railway rolling stock, operating procedures, recent and foreseeable safety improvements, intermodal facilities, future land use and emergency response plans. It must contain a clear statement of the responsibilities, authorities and liabilities of all agencies and officials involved in the movement of dangerous goods both on a day-to-day basis and in the event of an emergency. The plan should include a phase by phase improvement program that is financially feasible.

Because of their responsibilities for land-use planning and emergency services, municipalities must be involved in the preparation of such a plan and are prepared to contribute to it. Contrary to the CTC/RTC's statements, however, municipalities are not responsible for preparing this plan because they have no jurisdiction to direct federally and provincially chartered railways to participate in it or to comply with it.

The CTC/RTC and the Provincial Ministry of Transportation and Highways should draft terms of reference for the development of such a plan for review and agreement by all affected parties: regulators, operating companies, producers, shippers and municipalities. The contributions of municipalities, like those of other participants, would be based on areas where they have jurisdiction and expertise.

ITEM 15

MANAGER'S REPORT NO. 75

COUNCIL MEETING 85/11/25

CORPORATION OF THE CITY OF NEW WESTMINSTER

ITEM

15

- 2 -

MANAGER'S REPORT NO. 75

COUNCIL MEETING 85/11/25

The Mayors believe that a firm commitment to develop such a long-term plan should form the context for any interim solution to the **150** requirement to terminate dangerous goods transportation through Vancouver's central waterfront by January 1, 1986. Specifically, such an interim solution should not involve a commitment in the form of capital works which could be made redundant by the longer-term plan.

In addition, the selection of an interim solution from among the options presented for relocating CP marine terminal traffic should not only reduce the exposure of the population and ensure that the goods are safely handled; it should also be capable of implementation within the time limit specified.

Selection of an interim solution should also take into account the increasing possibility of a natural gas pipeline to Vancouver which was not considered when the CTC/RTC hearings were held. Such a pipeline could reduce by 50 percent the number of carloads of dangerous goods shipped by CP to the Island.

Accordingly, the Mayors of the 14 municipalities in the Greater Vancouver area recommend:

1. That the Canadian Transportation Commission Railway Transport Committee and the British Columbia Ministry of Transportation and Highways prepare terms of reference and a work program for a long-term plan for the movement of dangerous goods by rail in the Greater Vancouver area for consideration and joint
2. That the plan set out for incorporation in legislation a clear statement of the responsibilities, authorities and liabilities of all agencies and officials involved in the movement of dangerous goods both on a day-to-day basis and in the event of an emergency.
3. That an option for the relocation of the downtown CP marine terminal traffic be selected which does not prejudice the outcome of the long term plan, involves minimal expenditure on permanent works and takes account of the possibility of traffic reduction through construction of a natural gas pipeline to Vancouver Island while at the same time minimizing risk of exposure to our citizens and provides for the safe movement of dangerous goods.

Submitted by
Mayor Tom Baker
The City of New Westminster