

RE: NESTE OY AND PETRO-CANADA
PROPOSED M.T.B.E. PROJECT

ITEM
MANAGER'S REPORT NO. 18
COUNCIL MEETING 78
89/11/27

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendations of the Chief Public Health Inspector be adopted.

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TO: MUNICIPAL MANAGER 1989 NOVEMBER 23

FROM: CHIEF PUBLIC HEALTH INSPECTOR

SUBJECT: NESTE OY AND PETRO-CANADA PROPOSED M.T.B.E. PROJECT

PURPOSE: TO INFORM COUNCIL ON THE ENVIRONMENTAL CONCERNS ASSOCIATED WITH
NESTE OY AND PETRO-CANADA PROPOSED PROJECT

RECOMMENDATION:

1. THAT the Honourable Lucien Bouchard, Federal Minister of the Environment, Mr. P. Reid, O.C., Executive Chairman of the Federal Environmental Assessment Review Office and Mr. F. McNaughton, C.E.O., Vancouver Port Corporation, be requested to direct the proposed Petro-Canada Neste Oy M.T.B.E. project for evaluation under the EARP process.
2. THAT the comments contained in this report concerning the need to establish a sustainable limit for crude oil and petroleum product movements within Burrard Inlet be filed with Mr. David Brander-Smith, Chairman, Public Review Panel.
3. THAT Petro-Canada be requested to voluntarily direct the examination of the proposed M.T.B.E project for potential environmental concerns to the Federal Environmental Assessment Review Office for their assessment.
4. THAT a copy of this report be forwarded to the Burnaby Citizens for Environmental Protection, the Port Moody Concerned Citizens for a Clean Environment, Port Moody City Council, Chairman, Greater Vancouver Regional District and all municipalities that about Burrard Inlet.

1.0 INTRODUCTION:

REPORT

Further to the appearance of the Burnaby Citizens for Environmental Protection and Port Moody Concerned Citizens for a Clean Environment as a delegation during the 1989 November 20 meeting of Council regarding the proposed Petro-Canada and Neste Oy M.T.B.E. project and Council's request for a report on the proposed project we would advise as follows:

2.0 BACKGROUND:

On 1989 June 05, Petro-Canada and Neste Oy announced the planned construction of a \$300 million Methyl Tertiary Butyl Ether (M.T.B.E.) plant to be built in Edmonton, Alberta. The plant is scheduled to start production in late 1991.

Petro-Canada and Neste Oy are proposing to ship the M.T.B.E. from Edmonton via Trans Mountain Pipe Line Co. Ltd. facilities to Petro-Canada's Port Moody located refinery. The M.T.B.E. will be processed at the Port Moody located refinery and shipped by vessel to the west coast of the United States. The M.T.B.E. will also be delivered to markets in western Canada.

For the information of Council, M.T.B.E., which resembles gasoline, is used as a high octane blending component in gasoline. Currently M.T.B.E. is seen as a leading candidate to eventually replace lead as a gasoline octane enhancer. Under the new Federal Canadian Environmental Protection Act, M.T.B.E. is placed on the "Priority Toxic Substances List". This requires the Federal Government to assess the degree of toxicity and establish regulations to control the substance. Our discussions with the Federal research staff in Ottawa has revealed that they will start their research in assessing the degree of toxicity of M.T.B.E. in the near future. Staff are currently inquiring about research done in the United States by their Environmental Protection Agency.

The M.T.B.E. project requires Trans Mountain Pipe Line Co. Ltd. to provide an additional 4 kilometers of 20 inch pipeline, within their current right-of-way from Burnaby to the Port Moody located Petro-Canada refinery.

The Petro-Canada Port Moody refinery will require additions comprising one 44,000 cubic meters receiving tank, two 32,000 cubic meters shipping tanks, a distillation column to purify the product and a dedicated 1,500 meter 18 inch pipeline to the refinery's Burnaby situated vessel dock. Expansions to the refinery's vessel dock will also be required since the Petro-Canada refinery's vessel dock is situated within the Burnaby boundary. The vessel dock expansion is subject to P.P.A. approval through the Burnaby Planning and Building Inspection Department (see Section 5.0).

3.0 IDENTIFIED CONCERNS WITH THE PROJECT

3.1 Sustainable Vessel Traffic Within the Burrard Inlet Area

The volume of crude oil products shipped by vessel in Burrard Inlet from 1984 to 1988 is:

<u>Year</u>	<u>Tonnes</u>	<u>Barrels</u>
1984	61,346	439,454
1985	190,285	1,363,112
1986	429,606	3,077,495
1987	637,966	4,570,088
1988	1,024,692	7,340,411
1989	1,360,000	9,742,400

According to the Federal Tanker Review Committee, the number of tankers carrying oil products in Burrard Inlet during 1989 is 16, with an average load of 85,000 tonnes (608,900 barrels) totaling 1,360,000 tonnes (9,742,400 barrels). Petroleum products are also transferred in the Burrard Inlet by barge. The volume of petroleum products moved by barge were not available for this report. Staff are currently compiling this information, including volumes of crude oil and petroleum products moved within the Port of Vancouver.

The proposed Petro-Canada and Neste Oy project will add 26 vessels per year with a total movement of over 500,000 tonnes (3,581,765 barrels) of M.T.B.E. product.

The approved expansion to Trans Mountain Pipe Line Co. Ltd. will add 35 tankers per year.

Municipal Council has forwarded concerns regarding the increasing number of vessels transporting petroleum products in Burrard Inlet to the Federal National Energy Board and Environment Canada during the 1988/89 Trans Mountain Pipe Line Co. Ltd. hearings for expansion of their Burnaby facilities.

Council and staff are of the opinion that there is an urgent need for the Federal Government to initiate a study that would establish a sustainable limit for crude oil and petroleum product movements within the Burrard Inlet.

The determination of a sustainable limit for crude oil and petroleum product movements in Burrard Inlet should take into consideration, but not be limited to:

- * The ability of Burrard Inlet municipalities and cities to respond to an oil spill that would affect prime recreation areas.
- * The discharge to Burrard Inlet from vessel and barge ballast waters.
- * The discharge to the atmosphere from vessel power plants. The emission of oxides of sulphur by vessel engines has been recognized as a contributing factor to the Burrard Inlet Air Basin. Studies have questioned the levels of oxides of sulphur to community health issues such as respiratory problems.
- * The discharge to the atmosphere of petroleum product vapours during vessel/barge loading operations.
- * The adequacy of the Canadian Coast Guard Vessel Traffic Services to monitor vessel traffic east of the Second Narrows Bridge.

At this time, the Federal Government is conducting a public review on tanker safety and marine spill response capability. The public hearings across Canada commenced on 1989 July and will conclude on 1989 November 29.

It is recommended that Council file by 1989 November 29 the above comments on the need to establish a sustainable limit for crude oil and petroleum product movements within Burrard Inlet with Mr. David Brander-Smith, Chairman, Public Review Panel.

3.2 Need for Complete Environmental Impact Assessment

During consideration of the Phase I Trans Mountain Pipe Line Co. Ltd.'s expansion of their Burnaby located facilities, Council stated that they would expect an Environmental Impact Assessment for any future projects concerning additional facilities or expansion to the Petroleum Industries situated in this Municipality.

It is the opinion of the Environmental Health Division that the Petro-Canada and Neste Oy project requires an Environmental Impact Assessment.

Although Petro-Canada is undertaking an environmental assessment for this project, it is necessary that the assessment be conducted independent of the involved parties and include public input. This would ensure that there is an overall assessment of the project and would include a risk assessment for vessel movements in Burrard Inlet and air quality impacts within the Burrard Inlet Air Basin.

It is recommended that Council request Petro-Canada to voluntarily direct the examination of the proposed M.T.B.E. project for potential environmental concerns to the Federal Environmental Assessment Review Office (EARP), for their assessment.

4.0 THE E.A.R.P. PROCESS:

The Environmental Assessment and Review Process (EARP) deals with the physical and biological aspects of development proposals: air, land, water, plants, animals, and people. Its scope covers the potential environmental and directly related social effects of proposals; that is, effects that could bring adverse changes to the natural environment and the directly resulting effects that these changes could have on people.

EARP was established by the Federal Cabinet in 1973. On 1984 June 22, the process was strengthened and updated when the Environmental Assessment and Review Process Guidelines were issued by an Order in Council under the Government Organization Act.

The EARP Guidelines Order applies to all departments, boards and agencies of the Federal Government.

EARP is used when a Federal organization has the authority to make a decision about a proposal of another organization that is undertaking a project on lands administered by the Federal Government, including the offshore.

The M.T.B.E. project is being undertaken by a Federal Crown Corporation and will transfer petroleum products in waters governed by the Federal Government.

It is the opinion of the Environmental Health Division that an Environmental Impact Assessment of the M.T.B.E project would be appropriately handled under the Federal EARP process.

It is recommended that the Honourable Lucien Bouchard, Federal Minister of the Environment, Mr. P. Reid, O.C., Executive Chairman of the Federal Environmental Assessment Review Office and Mr. F. McNaughton, C.E.O., Vancouver Port Corporation be requested to direct the proposed Petro-Canada Neste Oy M.T.B.E. project for evaluation under the EARP process.

5.0 PLANNING & BUILDING INSPECTION DEPARTMENT COMMENTS:

At its meeting of 1989 October 23, Council received a report concerning the proposed preparation of a British Columbia Ports Policy. This report summarized a discussion paper prepared by the Provincial Government calling for a more co-ordinated Federal, Provincial, Regional and Municipal approach to the planning, development and operation of ports.

A number of issues were identified in the Municipality's submission to the Province including the relationship between certain port industrial uses and adjacent land uses. With population growth, the interface between port activities and adjacent areas has become more critical and will be a matter of continuing and growing concern.

On Burnaby's Burrard Inlet foreshore are refineries, LPG storage tanks, and terminals for LPG and crude oil shipments. These uses involve the refining, storage and transportation of hazardous materials by rail, road and tanker traffic, all of which increase the actual and perceived risk factor to the adjacent residential communities.

The development goals for the Region encourage the continued population growth of our inner metropolitan areas to ensure a more efficient use of available developable lands and existing infrastructure. As such, the communities surrounding Burrard Inlet can be expected to experience additional population growth and a corresponding increase in the level and frequency of potential conflict with adjacent port/industrial uses. It was with this in mind that the Province was requested in our brief to address the locational relationships between port terminals and uses handling hazardous goods within a major metropolitan area and whether in the longer term they are more appropriate in a non-metropolitan setting.

Planning staff have had follow-up discussions with Ministry staff on this matter and have determined that the Ports Policy Review will not be completed until Spring 1990. Staff have informed the Ministry of the public concern that has been raised in relation to the proposed increase of tanker traffic from the Trans Mountain and Petro-Canada terminals in Burnaby as specific examples of the type of issue referred to in our previous submission to the Province. Another major concern discussed with the Ministry staff is what level and type of tanker traffic together with related on shore handling and storage approaches an unacceptable threshold level within the Burrard Inlet area.

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Consistent with the above considerations, this department agrees with the intervention actions recommended in this report.

The Planning & Building Inspection Department has not received an application for Preliminary Plan Approval with respect to the proposed improvements to the Petro-Canada dock facilities. When an application is submitted, staff will be submitting a report to Council outlining the specifics of the proposal. Staff will not be issuing approval until Council has had an opportunity to review this matter to its satisfaction.

6.0 CONCLUSIONS:

The Petro-Canada Neste Oy proposed M.T.B.E. project will generate an annual increase of 26 vessels in Burrard Inlet carrying an approximate total of 3.5 million barrels of petroleum product. This report outlined a number of serious environmental concerns associated with this project which require examination at the Petro-Canada refinery site and consideration of potential environmental effects to Burrard Inlet waters and the Burrard Inlet Air Basin.

GVH/ro

cc: Medical Health Officer
Director Administrative &
Community Services
Director Planning & Building
Inspection Department

George V. Harvie

G.V. Harvie, C.P.H.I.(C)
CHIEF PUBLIC HEALTH INSPECTOR

