

TO: CITY MANAGER

1999 April 14

FROM: DIRECTOR PLANNING & BUILDING

**SUBJECT: BRACE - Report to Burnaby City Council Submission 1999 April 12 and
Chevron's Area I Facilities Plan
Preliminary Plan Approval #99-37**

PURPOSE: To respond to items raised by the BRACE presentation to Council and to respond to questions raised by members of Council with respect to Preliminary Plan Approval #99-37.

RECOMMENDATIONS:

1. **THAT** a copy of this report be sent to Mr. G.J. McRae, Operations Planner, Chevron Canada Limited, 355 North Willingdon Avenue, Burnaby, B.C. V5C 1X4
2. **THAT** a copy of this report be sent to Ms. Angela Homer 4364 Cambridge Street, Burnaby, B.C. , V5C 1N4

R E P O R T

1.0 BACKGROUND:

On 1999 April 12 Council received a brief by a delegation from BRACE (Burnaby Residents Against Chevron Refinery Expansion). On the same agenda Council was presented with a staff report on an application for Preliminary Plan Approval made by Chevron. This application is for the first phase of Chevron's Burnaby Refinery Area 1 Facilities Plan. The plan outlined a multi-year program under which Chevron proposes to achieve operational and environmental improvements in the Blending and Shipping Area. Components of this plan as noted in the report (Item 02 Manager's Report 10) were:

- Vapour recovery for marine loading
- Tank upgrade and replacement
- Spill prevention and containment
- Asphalt loading rack and scale
- Improved road access to the western part of Area 1

The P.P.A. approval requested at this time would include the Marine Vapour Recovery Unit and the first of the new tanks to be located in the area which is now occupied by the lube tanks.

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Council requested that the report on the Area 1 Facilities Plan be tabled in order for staff to respond to items raised by the BRACE delegation and additional questions from members of Council.

2.0 BRACE REPORT:

2.1 Vapour Recovery Unit

The delegation from BRACE noted in their submission that "it is essential that the VRU be built as soon as possible as it will greatly reduce the odours in the neighbourhood" and also noted that Chevron has indicated that any delay in approval of the PPA beyond April will delay completion of the VRU until August 2000. It was suggested that the PPA should be separated to allow for approval of the VRU only stating that "it is the only significant gain for the community for their plan".

Chevron's proposal is for a complete plan which they feel will provide a total reduction in emission of volatile organic compounds (VOC's), reduce odours and together with the proposed components give added safety with the increased operational efficiency, reduce the risk of operational incidents and improve spill prevention and containment. In setting out operational budgets and a framework of general maintenance and environmental improvements, Chevron has indicated that is essential that they have assurances that the program they have set out is approved in principle. This will allow for appropriate budgeting, timing of installation with the appropriate 'construction windows' and assure corporate responsibilities with respect to future allocation of budgets. The installation of the VRU alone is not a part of their proposal, nor do they feel is it feasible to budget and provide a work plan for one component without assurances of the complete improvement package. Consultation with the GVRD representative concurs with both the BRACE submission and the indication from Chevron that should the PPA approval be delayed beyond April, the window of opportunity to construct the VRU will be delayed another year. This also will delay further environmental improvements as outlined in the report. It has always been Chevron's plan to install the VRU prior to the fall of 1999 and they have made that commitment to the community throughout the past year.

2.2 Tank Replacement and Construction

The BRACE submission indicates that the residents do not want any increase in capacity of tanks and that in addition, any increase in throughput "is unacceptable".

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As outlined in the report on 1999 April 12 Item No. 02 Manager's Report #10 it was noted that no changes were contemplated with respect to an increase in refinery capacity at this time and that any plan to add to refinery capacity would be the subject of a separate permitting process. The new tanks will allow for more storage capacity than the combined total of the tanks they will be replacing. However, it is important to note that this increase is minor in relation to the total storage capacity as permitted under the 1974 Master Plan.

As also outlined in the report any change to the refinery's capacity will be the subject of a separate permitting process.

2.3 Environmental Site Assessment

The BRACE delegation submits that an independent consultant must be hired by the City before any more construction of new tanks is to occur.

Staff are professionally trained to assess environmental issues with respect to applications of this nature and would be able to acknowledge the need for a consultant if the need existed.

2.4 Operational Safety Audit and Risk Assessment

The BRACE report states that "an independent consultant hired by the City must provide a report to ascertain whether reductions in emissions or risk can be achieved".

All PPA applications of this particular nature are reviewed extensively by our Environmental Services Division of the Engineering Department together in consultation with the Greater Vancouver Regional District. A close liaison with the GVRD and the applicant assures that the Air Permit issued by the GVRD (the governing authority) and subsequent amendments thereto are adhered to. The matter of risk assessment for industrial land uses was addressed in the 1996 June 24 report to Council prepared by staff. In this report staff noted that companies are making reasonable efforts to establish, promote and maintain good safety practices. Staff are committed to continue to liaise closely with company officials to be appropriately involved with their operations so that a mutual desire for a high level of safety at plant sites will be continued.

2.5 Emergency Preparedness and Response

The BRACE delegation notes that a meeting was held which dealt with this issue and suggests that more progress is needed with respect to the warning system and "shelter in place".

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On October 7, 1997 the Chevron/North Burnaby Community Advisory Panel (CAP) invited Burnaby Emergency Service Personnel to make a presentation on how Burnaby plans for and responds to major emergencies. CAP members felt there was insufficient understanding and awareness of appropriate actions for response to emergencies by residents, schools, and community facilities in North Burnaby. The sentiment was that Chevron's emergency response and preparedness are part of the overall Burnaby plan and residents were concerned about the how the community could be educated and alerted in the event of a major emergency. CAP began a process to research programs in other cities today, and met with Burnaby in 1998 to discuss options that may be appropriate in North Burnaby to enhance to existing systems. Since that time Chevron has become a member of a committee headed by the City to investigate options that would meet the needs of the community. Chevron continues to be a part of a technical subcommittee that was subsequently formed by Burnaby to assess all industrial risks and options.

Council will note that a council report (Item 07 Manager's Report #10), was adopted 1996 April 01. This report addressed emergency planning with specific reference to the terminals and refinery in Burnaby. This report outlined the City's Emergency Preparedness Program already in place. Since that date Council adopted the "Burnaby Emergency Program Bylaw 1998" which provides a general direction or framework covering prevention, preparedness, response and recovery measures within which the City's senior officials can formulate roles and responsibilities to deal with emergencies and disasters.

A Shelter in Place steering committee (*made up of representatives from the North Burnaby Community Advisory Panel, Burnaby School District, Canadian Pacific Railway, Chevron, Shellburn, Trans Mountain Pipe Line, Vancouver Port Corporation, Burnaby Fire Department, Burnaby R.C.M.P. and the Emergency Planning Coordinator*) has been formed in Burnaby to evaluate a Shelter-in-Place Program. When activated, this program warns citizens of an incident that poses a threat to their health or safety (such as the release of a hazardous material).

A Shelter-in-Place Technical Sub Committee (*made up of one representative from Chevron, Shellburn, Trans Mountain Pipe Line, Burnaby Fire Department and Burnaby Emergency Planning Coordinator*), which reports to the larger steering committee, has been established and is continuing to work towards formulating an appropriate program.

Staff agree that more progress is needed on this topic, and will continue to work toward this end.

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2.6 Public Input

The BRACE report demanded "public input, initiated by the City, before any long term plans, now or in the future, are approved".

Staff would assure that there is a process in place which allows for Council to become aware of and input into the changes or plans of Chevron. It has been a long standing requirement that any development on a land use such as Chevron's Refinery require both P.P.A. approval and a prior information report to Council. In addition, any amendment to the GVRD's Air Quality Permit requires a public notification process that Chevron is obliged to provide. A change to land use or a change to the Master Plan adopted in 1974 would necessitate a report to Council.

3.0 **AREA 1 FACILITIES PLAN CHEVRON REFINERY
ITEM #02 MANAGER'S REPORT NO. 10:**

Several questions at the meeting of 1999 April 12 were raised by members of Council with respect to the above noted report. Although the report was tabled pending response as noted in the aforementioned paragraphs, this report will assist in responding to the questions which were item specific to the report on the Chevron Area 1 Facilities Plan.

Our response is noted below each question:

a) How many asphalt loading trucks use the site per week?

- Chevron advises that it has averaged 26 asphalt trucks per week with a peak day as high as 13 trucks. The new asphalt loading rack does not reduce the number of trucks but minimizes the impact on the neighbourhood by reducing the number of trips through the neighbourhood for weighing in and out. The new rack also provides a benefit in odour reduction through the recovery and treatment of vapours.

b) What are the heights of the tanks?

- With the removal of old tanks, construction of new tanks and relocation of existing tanks to sites at a lower elevation on the hillside, the top of the highest tank elevation will be lowered by approximately 20 feet. The elevation reduction provides a benefit in an improved line of site from the residential area. In addition to the elevation reduction, tanks relocated away from the fence line will aid in reducing odours.

c) What is the new tank capacity in cubic feet?

- The new tank capacity of 265,000 cubic meters is approximately 9,360,000 cubic feet.

d) What is the update on emergency preparedness?

- (See item 2.5 above)

e) Why are low growing trees proposed along the fence line?

- Chevron advises that it has worked closely with neighbours and residents over the last 2 years to landscape the area outside the fence line between Rosser and Madison on Eton, however from Chevron's perspective, there are security concerns with placement of trees along the fence line. Chevron officials inform us that they will continue to work with the community on this issue.

f) What is the tank maintenance schedule and what is the frequency of maintenance, and g) What is the maintenance requirement of double seals?

- Chevron has advised as follows on these questions:

The Area 1 Facilities Plan provides the flexibility to enhance Chevron's existing tank maintenance program and Chevron's ongoing commitment to reducing and managing odours. The plan also provides flexibility to allow the relocation of existing tanks, further contributing to odour reduction and control. Tanks are visually inspected monthly by operating personnel and annually by maintenance personnel. Tank seals are visually inspected annually and results may warrant further investigation including gap analysis. Although seals do require more maintenance, Chevron has advised that is taken into account in their inspection and maintenance program. Seal gaps will be measured every 5 years. The results of these inspections may warrant further investigation and any appropriate repairs will be scheduled for maintenance. Internal inspection of tanks will follow industry standards (i.e. API 653 guidelines) which recommend internal inspection frequency based on tank service and inspection history.

4.0 CONCLUSION:

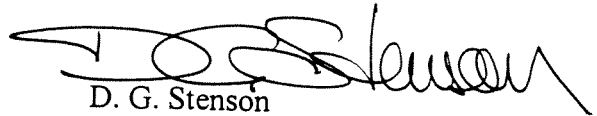
This report responds to the six items raised in the brief submitted by BRACE 1999 April 12 and will clarify the seven questions raised by councillors with respect to the report tabled by Council on the same date. Chevron has verified that a delay in the approval of the PPA for

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the Area 1 Facilities Plan will delay the implementation of the environmental improvement outlined in the plan and would not allow for the construction of the Marine Vapour Recovery Unit this year.

Unless otherwise directed by Council, the Planning and Building Department will pursue the approval and release of PPA#99-37 subject to satisfaction of all Bylaw requirements and all Departmental responses.



D. G. Stenson
Director Planning and Building

PJA/ds

cc: Director Engineering (Manager Environmental Services, Dipak Dattani)
Chief Fire Prevention Officer
Chief Building Inspector

