ITEM

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MANAGER'S REPORT NO.

15

COUNCIL MEETING 1980 02 25

CHEVRON (CANADA) LIMITED REFINERY RE: PRELIMINARY PLAN APPROVAL APPLICATION #5413

Following is a report from the Director of Planning regarding a Preliminary Plan Approval Application that has been received from the Chevron Refinery.

This report is submitted in accordance with Council's desire to be kept informed on new proposed construction at refinery sites, and more specifically, on environmental and development controls relative to new refinery construction in Burnaby.

RECOMMENDATION:

THAT the report of the Director of Planning be received for information purposes.

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MUNICIPAL MANAGER

PLANNING DEPARTMENT 1980 FEBRUARY 20

FROM:

DIRECTOR OF PLANNING

SUBJECT: CHEVRON (CANADA) LIMITED REFINERY

PRELIMINARY PLAN APPROVAL APPLICATION #5413

RECOMMENDATION:

THAT this report be received for information purposes.

REPORT

An application for Preliminary Plan Approval for a new separation column has been received from Chevron (Canada) Limited in connection with its Burnaby refinery. The proposed new installation is called a "Naphtha Prefractionator", and consists of a separation column 7 feet 6 inches in diameter by 160 feet in height, 2 new vessels, and additional heat exchangers and pumps. This facility is proposed to be located in the Rheniformer unit what is known as Area 2, the actual processing area north of Penzance Drive (see attached location sketch).

The function of the proposed new facility is to increase the yield of unleaded, high octane gasoline motor fuel without increasing the overall refinery throughput. This is achieved by routing the "light straight-run naphtha" (the lightest liquid streams from the crude and splitter units) to the proposed separation column, resulting in the separation of low-octane naphtha from high-octane naphtha. The low-octane stream will be sent to the existing Rheniformer for molecular re-forming and a resulting up-grading in octane rating. The higher-octane naphtha stream, on the otherhand, is made available directly as a gasoline blending component, without need for re-forming.

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By this means, the refinery expects to be able to respond to the projected increase in demand for unleaded gasoline in the B.C. market without increasing the throughput of the refinery. (For information, according to Chevron officials, approximately 25% of the current demand in B.C. is for unleaded gasoline, while the fraction is expected to rise to about 50% by 1984).

The light straight-run naphtha prefractionator is a fairly common element in refineries across North America and is sometimes also known as a de-iso-hexanizer tower. The expected cost of this installation, about \$2.5 million, is considered by Chevron to be justified by the anticipated growth in demand for this particular product line, and by the fact that no increase in refinery throughput will be required in meeting this demand.

The new process facility is a closed system, utilizing steam presently available from waste heat generation via a heat exchanger to accomplish separation in the column. There will be no new emissions to the air and no effect on refinery processing waste waters, which are discharged to the sanitary sewer. We have been assured that there will be no increase in property line refinery noise emission levels as a result of this proposed installation.

In any event, approval of such installations is subject to satisfaction of the pertinent regulations of the Pollution Control Branch, the GVRD Air Quality Control section, and the Environmental Health Department, and their respective monitoring and enforcement programs. The application has been reviewed by the Engineering and Environmental Health Departments as well as the Fire Prevention Office.

The unit covered under this application, while not included in the Chevron Refinery Modernization Program Master Plan approved by Council in 1974, does not represent any increase in refinery capacity, and moreover is in accordance with the provisions of the Burnaby Zoning Bylaw which apply to this site.

It is therefore our intention, unless otherwise directed by Council, to issue Preliminary Plan Approval #5413, subject to satisfaction of all pertinent bylaws and environmental and safety regulations.

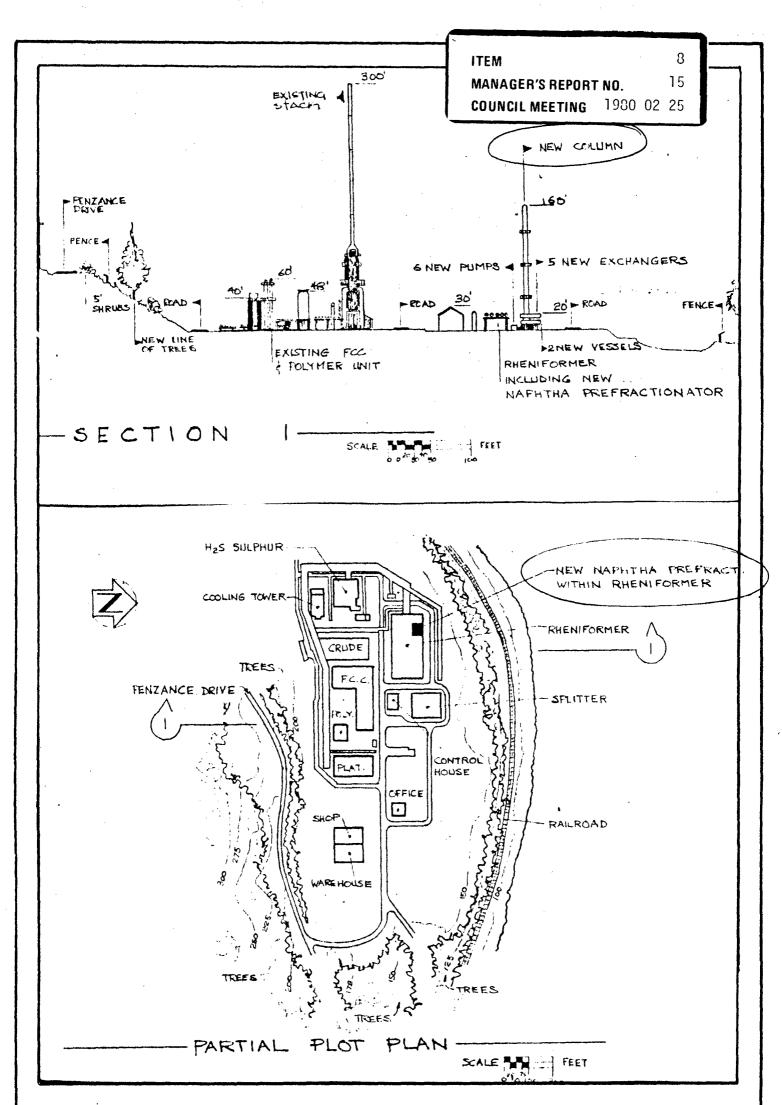
This is for the information of Council.

DIRECTOR OF PLANNING

DGS/rlp

cc: Chief Public Health Inspector Municipal Engineer

Director of Fire Services



Date

Date

Burnaby Planning Department

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PROPOSED NAPHTHA PREFRACTIONATON

CHEVRON (CANADA) LTD. REFINERY

PPA # 5413

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