

TO: CITY MANAGER 1994 AUGUST 17

FROM: MEDICAL HEALTH OFFICER

SUBJECT: NOISE FROM CHEVRON CANADA LIMITED REFINERY, 355 NORTH WILLINGDON AVENUE, BURNABY.

PURPOSE: TO ADVISE COUNCIL OF:

- A) STAFFS' RESPONSE TO NEIGHBOURHOOD COMPLAINTS REGARDING NOISE FROM THE CHEVRON CANADA REFINERY;
- B) CHEVRON CANADA'S NOISE MITIGATION STRATEGY FOR THEIR REFINERY IN BURNABY.

RECOMMENDATION:

1. THAT a copy of this report be forwarded to Ms. Eileen McLeod, 5171 Harbourview Road, Burnaby, B.C., V5B 1C9.

REPORT

1.0 INTRODUCTION

At the regular Council Meeting on 1994 July 25, a correspondence and petition were received from Ms. Eileen McLeod, 5171 Harbourview Road, Burnaby, B.C. regarding noise from Chevron Canada Refinery located at 355 North Willingdon Avenue, Burnaby, B.C.

Additional documents, which included a letter dated 1994 July 12 from Chevron Canada to Ms. McLeod, were also provided to Council and staff under separate cover.

The following report outlines staffs' response to neighbourhood complaints regarding noise from the Chevron Canada Refinery and Chevron Canada's noise mitigation strategy for their refinery.

. . . . Page 2

ITEM	9
MANAGER'S REPORT NO.	47
COUNCIL MEETING	94/08/22

2.0 NOISE FROM CHEVRON CANADA REFINERY

According to the Environmental Health Services records on the Chevron Canada Refinery, staff received a total of eleven (11) and four (4) noise complaints from neighbouring residents in 1993 and 1994 respectively. All complaints were promptly investigated and complainants were apprised of the findings and actions taken by Health Department staff.

In addition, staff undertook three separate noise surveys along the Chevron Canada Limited Refinery property line(s). Two additional sets of data were also obtained by placing a continuous noise monitoring equipment at Ms. McLeods residence to determine the ambient noise levels.

Noise surveys undertaken by staff along Chevron Canada's property line did indicate emanation of noise levels in excess of the Burnaby Noise or Sound Abatement Bylaw from three of the thirteen locations where noise measurements were taken. Separate noise monitoring undertaken by a consultant on behalf of Chevron Canada Limited at the above locations confirmed the same (see Attachment #1).

As a result of the noise surveys, staff met with Chevron Canada on 1994 February 01 to relay the survey findings and determine Chevron Canada's position on the noted issue.

3.0 CHEVRON CANADA NOISE MITIGATION STRATEGY FOR THEIR REFINERY IN BURNABY

Chevron Canada has undertaken various noise mitigation measures in the past including the recent installation of the FCCU Bypass Stack muffler. While these measures have assisted in reducing noise levels along their property line, our recent noise surveys indicate that further work is required. In response to the concerns raised, Chevron Canada has committed to undertake the following noise mitigation strategy:

Short Term Noise Mitigation Strategy:

- Installation of a noise reduction enclosure on a compressor motor in the alkylation plant;
- Noise insulation on the fan ducting on #4 Boiler;
- Noise insulation barrier for #4 Boiler firing platform;
- Noise attenuation barrier adjacent to the FCC orifice chamber;
- Redirection of a vent valve on the auxiliary air blower on the FCC Unit;
- Enclosures on control valves in the Gas Recovery Unit and the Rheniformer.

The above measures are anticipated to be completed by the end of 1994 August.

The Health Department will be undertaking a noise survey after the implementation of the short term noise mitigation measures to determine their effectiveness. Where applicable, Chevron Canada will be required to identify other areas requiring noise attenuation and implement additional noise mitigative measures.

Long Term Noise Mitigation Strategy:


- Design and implement modifications in the FCC Regenerator Outlet which may include replacement of the CO Boiler.

According to Chevron Canada Limited, this work will take up to one year.

4.0 CONCLUSION

Recognizing concerns of the neighbouring residents regarding noise from Chevron Canada Limited Refinery in Burnaby, Health Department staff have investigated all complaints and worked with Chevron Canada Limited to implement a noise mitigation strategy.

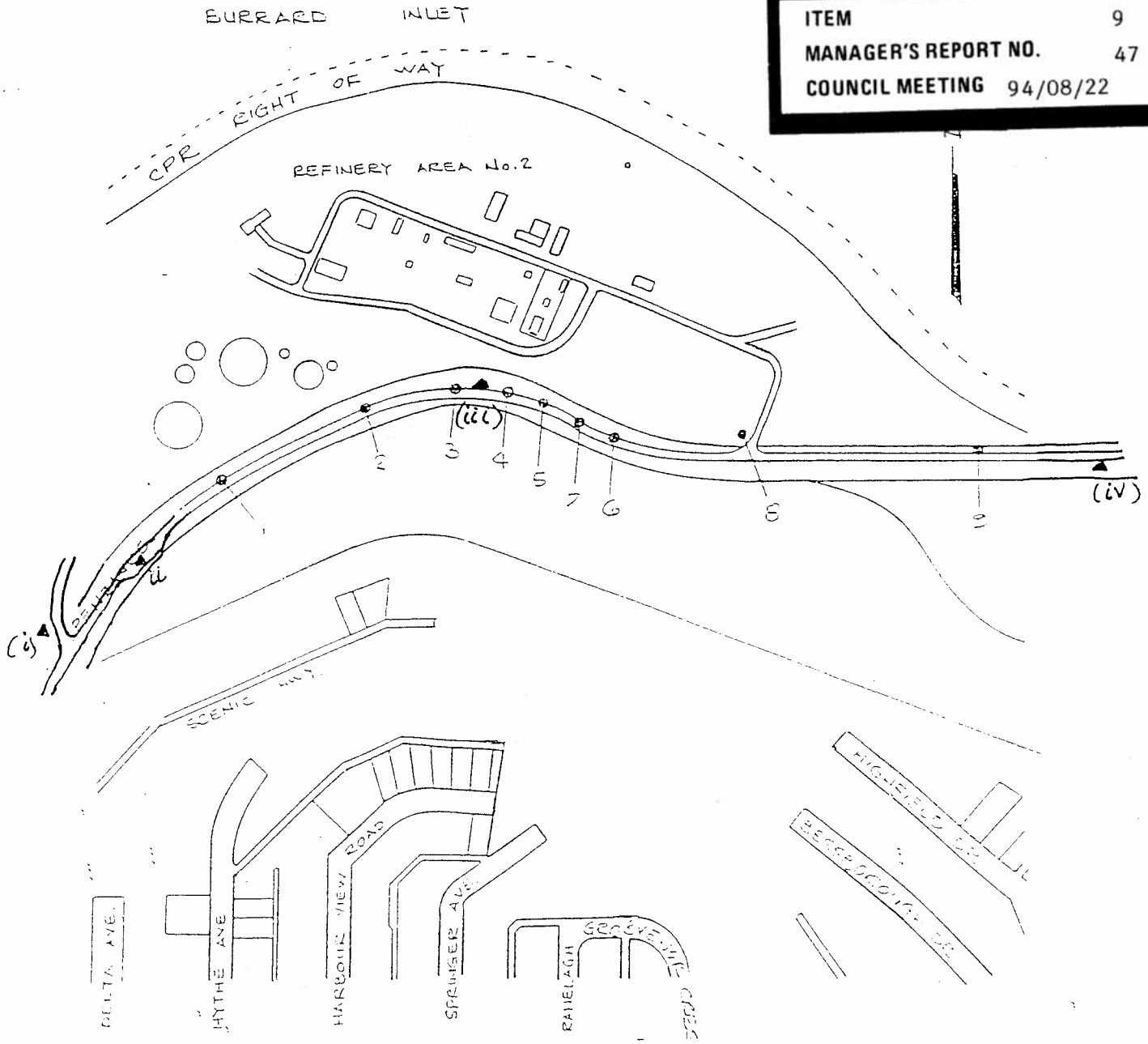
As in the past, staff will continue to monitor the effectiveness of the aforementioned short term noise mitigation measures implemented and respond appropriately.


Arlene King, M.D., C.C.F.P., M.H.Sc., F.R.C.P.(C)
MEDICAL HEALTH OFFICER

DD/AK/js
Attachment

cc: () Director Administrative
& Community Services
() Chief Environmental Health Officer

ITEM	9
MANAGER'S REPORT NO.	47
COUNCIL MEETING	94/08/22



● Property line stations 1 - 9

- Station 1 - near the bypass valve sign
- Station 2 - across from fin fan cooler
- Station 3 - across from furnace
- Station 4 - across from pole # 9
- Station 5 - across from culvert
- Station 6 - near entrance to main gate at water valve flush box
- Station 7 - west of Station 6 at fire hydrant
- Station 8 - by the entrance to main gate between the upper and lower level parking lot
- Station 9 - east end of Penzance Drive by the contractor's gate

* Noise levels at Stations 2,3, and 4 are in excess of the Burnaby Noise or Sound abatement bylaw.

▲ Approximate locations of where additional noise measurements were taken:

- Station i - dirt road entrance
- Station ii - first road shoulder