Chevron Canada Limited Refinery Expansion -11. Re: Air Quality

Chevron Canada Ltd. has purchased and installed an SO2 monitoring device which is designed to measure emissions of sulfur dioxide in the air. Following is a letter from Dr. A.D. McIntyre of B.C. Research concerning monitoring results of measurements that have recently been recorded with this equipment.

RECOMMENDATION:

THAT a copy of this report item be sent to the President of the Burnaby S.P.E.C., Chevron Canada Limited and all parties that have expressed an interest in refinery modernization and expansion.

B.C. RESEARCH 10.13

3650 Wesbrook Crescent, Vancouver 167, Canada.

Phone (604) 224-4331 . Coble 'RESEARCHBC' . Telex 04-507748

June 9, 1972

JUN- 3 1972

MUNICIPAL MANAGER'S OFFICE

Dr. W.F. Sunderland, D.P.H., Medical Health Officer, Burnaby Municipal Hall, 4949 Canada Way, Burnaby 2, B.C.

Dear Dr. Sunderland:

We have reviewed the data forwarded with your letter of May 16 regarding measurements carried out by the Standard Oil Company of B.C. on ambient air concentrations of sulfur dioxide. The measurements were carried out with a Philips SO2 Monitor which provides a continuous record of sulfur dioxide concentration. The Monitor was situated between the tank farm and the truck loading rack.

These measurements, covering the period March 7 to April 30, indicate a very low level of sulfur dioxide, i.e., 0.01 to 0.03 ppm. We note that this level is the same as measured in downtown Vancouver over the period 1960-1969, i.e., 0.01 to 0.04 ppm. As a point of comparison we note that in eastern cities of both Canada and the United States sulfur dioxide concentrations reach levels at least 10 times higher because of the generation of electricity from fossil fuels and because of the greater population density and industrialization in these cities.

An examination of the recorder charts shows some small peak concentrations of sulfur dioxide, generally of short duration. We have suggested to Standard Oil that they examine wind records to determine whether any correlation with these peaks exists.

Young very truly,

B.C. RESEARCH

The Artice

18

A.D. Melntyre, Hend Division of Applied Chemistry

 $Ab \in \mathfrak{st}$