CAP Meeting – September 18, 2013

Health Considerations of living near Chevron's Burnaby Refinery

Reference material: Air emissions from the Chevron North Burnaby refinery: Human health impact assessment – July 2002 – UBC School of Occupational and Environmental Hygiene

CAP's Objective: Since the majority of CAP members are new to the panel and were not members in 2002 when the study was presented, we would like to hear about some of the data concerning human health impact by an employee of Fraser Health with support from the GVRD with updated air emissions data. The fact is the study did identify concerns to human health. We are not asking either the GVRD or Fraser Health to ascertain whether a risk exists or not, but simply to explain to members of CAP the health risks identified, as noted in our questions to follow.

Please address and comment on the following excerpts from the report.

Sulphur dioxide (Summary Page 1, Figure 3.7, Table 3.16, Page 52)
"We found that 1-hour peak concentrations of sulphur dioxide were more frequent at the Capitol Hill monitoring location than at any other monitoring location in the GVRD. ....we estimated that about 15 to 35 North Burnaby residents with asthma might experience a worsening of their asthma on any one of about 25-30 days each year as a result of sulphur dioxide peaks."

GVRD

Please provide up-to-date data of sulphur dioxide levels.

Fraser Health

On Page 52 of the study, it appears to identify Sulphur Dioxide levels as a health risk for persons with asthma. Please comment on the symptoms of asthma, the possible remedies and any recommendations to avoid asthma on days with high sulphur dioxide peaks.

Also, is Fraser Health aware of any health concerns regarding sulphur dioxide which have been documented since the study in 2002?

Volatile organic compounds (Summary Page 2, Tables 5.1 & 5.2, Page 62, Figure 5.2)

"Benzene is regarded as a proven human carcinogen, 1,3 butadiene is regarded as a probable human carcinogen."

GVRD

The amount of data from VOC monitoring stations near the refinery, available in 2002 for this study was very limited. Please provide up-to-date levels of Benzene from these monitoring stations. Please explain how and when benzene is released.

Fraser Health

Page 85 of the study concludes that exposure to benzene may be associated with a very small increase in cancer risk over that expected in other GVRD residential areas. What types of cancers are associated with exposure to benzene? Please comment on any other known health concerns associated with exposure to Benzene.

If possible, please comment on any link between benzene levels and human health which may have been documented since the date of the study in 2002.

Volatile organic compounds (Summary Page 2, Table 5.2, Figure 5.3)

"...1,3-butadiene is regarded as a probable human carcinogen."

GVRD

The amount of data from the monitoring stations near the refinery available in 2002 for this study was very limited. Please provide up-to-date levels of 1,3 butadiene from these monitoring stations.

Fraser Health

Page 82 of the study concludes that exposure to 1,3-butadiene may be associated with a very small increase in cancer risk over that expected in other GVRD residential areas. What types of cancers are associated with exposure to 1,3-butadiene? Please comment on any other known health concerns associated with exposure to 1,3-butadiene.

If possible, please comment on any link between 1,3-butadiene levels and human health which may have been documented since the date of the study in 2002.