

ITEM  
MANAGER'S REPORT NO.  
COUNCIL MEETING

22  
44  
1985 06 24

TO: MUNICIPAL MANAGER

1985 June 20

FROM: CHIEF PUBLIC HEALTH INSPECTOR

RE: CONCERNS REGARDING PREDICTED AIR EMISSIONS  
G.V.R.D. REFUSE INCINERATION PLANT

RECOMMENDATION:

1. THAT this report be received for the information of Council.

R E P O R T

During the 1985 June 17 meeting of Municipal Council, questions were raised during consideration of Manager's Report No. 43, Environmental Issues Concerning the G.V.R.D. Incineration Plant.

Following are responses to questions directed to Municipal staff. Questions which Council directed to the G.V.R.D. will be responded to during the scheduled 1985 June 24 joint meeting between Council, Municipal staff and representatives from G.V.R.D. and the City of New Westminster.

Questions:

1. "Air emissions from the refuse incineration plant will affect the City of New Westminster, Surrey, as well as the Municipality of Burnaby. Have these areas been drawn into the discussion with the G.V.R.D.?"

Response: Staff from the City of New Westminster will be attending the scheduled 1985 June 24 meeting to discuss issues concerning the refuse incineration plant.

It should be noted that G.V.R.D. Engineering has made application to the G.V.R.D. Air Quality Control for an air emissions permit. It is through the air emissions permit application process that a municipality or city receiving plant air emissions is able to voice objections formally to the Director, Air Quality Control, G.V.R.D.

2. In the G.V.R.D. response to "Hazardous Wastes Entering the Refuse Incineration Stream", Manager's Report No. 43, page 104, stated "Containers, overhead-loaded into packers, will be the only avenue for unobserved ingress of any significant amounts of 'hazardous' materials, and only education and threat of certain consequences (liability) can be used to minimize this possibility." Who has the liability of the carrier, the municipalities, Provincial Waste Management, or the G.V.R.D.?

Response: This question has been referred to the G.V.R.D. staff for discussion at the scheduled 1985 June 24 meeting.

3. Various concerns were raised regarding the chart detailing the predicted plant air emissions and their effect on community ambient air.

Response:

(a) Ambient Air Testing

The G.V.R.D. Air Quality Control does not have monitoring stations within the Burnaby south slope residential section of this Municipality. The G.V.R.D. were requested to estimate the existing community ambient air quality within this area in order that a comparison could be made as to effects the predicted air emissions from the refuse incineration plant would have on the Burnaby south slope community.

The predictions for plant air emissions versus the approximate existing ambient air quality reveal that air emissions from the refuse incineration plant will not have a deteriorating effect on ambient air quality within the Burnaby south slope area.

The G.V.R.D. recognizes the need for establishing factual ambient air quality data for those areas of this municipality and other communities that will be receiving air emissions from the refuse incineration plant. As mentioned in Manager's Report No. 43, the G.V.R.D. will be commencing monitoring, either through a mobile vehicle or fixed sites, prior to the startup of the Burnaby refuse incineration plant.

The G.V.R.D. are prepared to discuss this subject in more detail during the 1985 June 24 scheduled meeting.

(b) Predicted One-Hour Ambient Air Quality Concentrations

The G.V.R.D. was requested to predict the highest one-hour or peak air contaminant concentration values in order to illustrate the worst case scenario. A 24-hour figure would not illustrate peak concentration values, as these would be hidden within an averaged 24-hour figure.

The G.V.R.D.'s one-hour or peak concentration value data predicts that ambient air quality will not be affected during peak emissions from the refuse incineration plant.

(c) Regulations Used for Comparisons

The regulatory figures quoted within the prediction chart were chosen by G.V.R.D. staff as, during the time of air dispersal modelling, they were the only regulatory values in North America for specific air emission discharges from refuse incineration plants.

We have been advised by the G.V.R.D. Air Quality Control that the refuse incineration plant will meet the Lower Mainland Refuse Project, Technical Committee's recommendations for both stack emissions and ambient air concentrations.

We have asked the G.V.R.D. to discuss the air emission regulations, with which they will have to comply, at the 1985 June 24 meeting.

4. "Where would the effluent go from the scrubbing of plant air emissions?"

Response:

Although the exact type of scrubbing system (i.e. wet or dry) has not yet been decided upon or if, in fact, the technical aspects of the scrubbing system will produce a liquid effluent, any effluent from the refuse incineration plant will be directed to the sanitary sewer under permit. Regulations are in force at this time as to the quality of discharge to a sanitary sewer system. We would emphasize that at no time will the refuse incineration plant be discharging to the storm sewer system.

5. "Have the G.V.R.D. investigated the use of non-toxic tracing gas to determine the refuse incineration plant air emission dispersal patterns?"

Response:

Non-toxic tracing gas has been used previously in the Lower Mainland for determining plant air emission dispersal patterns. We have questioned the G.V.R.D., Air Quality Control, as to whether they intend to use tracing gas for determining air dispersal patterns from the refuse incineration plant emissions. G.V.R.D., Air Quality Control, are studying this subject and will be replying to our question.

At the 1985 June 24 meeting, G.V.R.D. staff will be able to answer further questions or discuss in more detail the above responses to previous concerns raised by Council.

GVH:1a

cc: Director Administrative & Community Services  
Director Planning & Building Inspection  
Medical Health Officer

*George V. Harvie.*

G.V. Harvie, C.P.H.I.(C)  
CHIEF PUBLIC HEALTH INSPECTOR

