

ITEM SUPPLEMENTARY 16
MANAGER'S REPORT NO. 75
COUNCIL MEETING 85/11/25

RE: PROPOSED SOLID WASTE INCINERATOR
COMMITMENTS MADE BY GREATER VANCOUVER REGIONAL DISTRICT

MUNICIPAL MANAGER'S RECOMMENDATION:

1. *THAT the recommendation of the Director Planning & Building Inspection be adopted.*

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SUPPLEMENTARY

1985 NOVEMBER 22

TO: MUNICIPAL MANAGER

FROM: DIRECTOR PLANNING & BUILDING INSPECTION

SUBJECT: PROPOSED SOLID WASTE INCINERATOR
COMMITMENTS MADE BY GREATER VANCOUVER REGIONAL DISTRICT

RECOMMENDATION:

1. THAT a copy of this report be sent to the Greater Vancouver Regional District, c/o Mr. A. D. Purdon, Chief Engineer and Manager of Operations.

SUMMARY

Staff discussions with representatives of the Regional District over recent months have resulted in an understanding on various broad issues, on which specific commitments have now been received. These issues relate primarily to development of the plant and its site services, certain administrative and procedural matters, and environmental monitoring and control of the plant's operation.

These commitments are summarized in this report for the information of Council.

R E P O R T

BACKGROUND

Council has received numerous reports in the course of the development of plans for the proposed GVRD Solid Waste Incinerator that is intended to be developed in the Big Bend Industrial Area, on a site zoned M3 Heavy Industrial District. The facility is one component in the implementation of the GVRD's Solid Waste Management Plan as adopted in 1981, which called in part for the acquisition of a site and preparation of designs for an incinerator with energy recovery provisions. The project is also in accordance with one of the recommendations of the Lower Mainland Refuse Project, which included such measures as more incineration, recycling, and resource recovery, and a reduced dependence on landfill disposal; a revised GVRD Solid Waste Management Plan reflecting these recommendations is to be presented to the GVRD Administration Board on 1985 November 27.

The Burnaby Incinerator was the subject of a tendering process which resulted in the awarding of a tender in May 1985, for a 140,000 tonne/annum plant with energy recovery and sale to Belkin Paperboard. A subsequent call by the GVRD for further proposals for disposal of refuse by any means resulted in firm proposals for increasing the capacity of two resource recovery plants and for adding a third "line" to the refuse incineration plant increasing its capacity from 140,000 t/a to 210,000 t/a. The offer was accepted by the GVRD, but a final decision on whether to proceed with the larger plant has not yet been made; a provision exists that would require the GVRD to pay cancellation costs to the contractor should the decision be made to revert to the 140,000 t/a plant capacity.

The revised GVRD Solid Waste Management Plan that is to be considered by the GVRD Administration Board on November 27 includes the 210,000 t/a Burnaby Incinerator; we are advised that this Plan has been adopted by the Regional Solid Waste Committee and is being recommended to the Board.

In the consultation that has taken place between GVRD staff representatives and Burnaby staff in the Environmental Health, Engineering, and Planning & Building Inspection Departments, there are certain fundamental points upon which agreement has been reached.

LIST OF COMMITMENTS

The following commitments have been received from the GVRD:

1. SITE SERVICING

The GVRD will satisfy all requirements of subdivision approval for the creation of the site, including construction of a full-standard, industrial access road (Thorne Avenue), municipal water and storm and sanitary sewers, and underground hydro and telephone servicing. Payment will be made of the requisite 4% inspection fee for servicing works and as-constructed drawings will be filed with the Director Engineering.

2. FLOODPROOFING OF SITE

The site will be raised to meet the requirements for floodproofing in accordance with Burnaby's requirements.

3. INCOMING REFUSE

The Corporation and the plant operator will endeavour to exclude all hazardous and chemical wastes. Ultimately this control is the responsibility of the Municipality and the refuse collectors. All requirements of the Burnaby Solid Wastes Bylaw will be adhered to.

4. NOISE LEVEL

The plant will be designed and operated to meet the Burnaby Noise or Sound Abatement Bylaw requirements. Acoustical consultants have been engaged by the GVRD to conduct a study and report; the results of this study were received on 1985 November 20. Staff of Environmental Health are reviewing the study as prepared by Barron & Associates, Acoustical Consultants Ltd., who state that based on the equipment specified, the requirements of the Burnaby Bylaw can be met and the plant will not present a noise problem for the Burnaby south slopes community.

The GVRD has confirmed that in addition to ensuring that the specifications are met, it will undertake any measures necessary to satisfy the Burnaby Bylaw.

5. AIR POLLUTION MONITORING

Two permanent air monitoring stations will be established by the GVRD in Burnaby's South Slope area to continuously record and monitor all key parameters including:

- particulates (dust)
- hydrogen chloride (HCl)
- hydrogen fluoride (HF)
- sulphur dioxide (SO₂)
- nitrous oxides (NO_x)
- trace metals

These monitoring stations will be placed in operation in the spring of 1986 and operate for more than 2 years before plant startup to ensure a record of air quality in the area prior to plant operation.

Additionally, the GVRD will initiate a mobile monitoring system operating in a wide radius around the plant, to go into operation at least one year before and after startup of the plant.

The GVRD has stated that it recognizes that it would be inappropriate for it to be the regulatory agency for air emissions in this instance. As a result the GVRD, as part of the overall Waste Management Plan, will be formally requesting the Provincial Ministry of Environment to become the regulatory agency for this facility.

6. AIR POLLUTION CONTROL

Acid flue gas scrubbing (dry scrubbers) plus particulate collectors (fabric filters) are included in the plant for each furnace/boiler line. We are advised that these devices satisfy California regulations which require incinerators to have the "best available control technology".

The gas emission limits recommended by the Incineration Emissions Committee of the Lower Mainland Refuse Project will be met, as will West German and Swiss limits where additionally applicable. The GVRD assures that the plant will be shut down if the prescribed emission standards are not being met.

Continuous recorded monitoring of emissions will be conducted at the plant, of the following parameters:

- particulates (dust)
- hydrogen chloride (HCl) as the key acid gas parameter
- oxygen content, carbon monoxide and combustion temperature (as indicators of combustion efficiency and completeness).

This information will be made available to Environmental Health who will evaluate the data on a regular basis.

7. EFFLUENT DISCHARGE FROM SITE

No refuse-related effluent discharge will take place to the land, to ditches, or to storm or sanitary sewers or any other receiving area. Only conventional storm water runoff and sanitary waste (plumbing) discharges to the sanitary sewer will be permitted.

ITEM	SUPPL	16
MANAGER'S REPORT NO.		75
COUNCIL MEETING	85/11/25	

154

8. ARCHITECTURAL TREATMENT

An architect has been engaged to work with the design engineers and contractor, consulting on exterior design in order to achieve an attractive appearance. Landscape architects have been engaged to develop a professional landscape treatment for the site. These consultants will work with Municipal staff through the Preliminary Plan Approval process.

9. BUILDING PERMITS AND MUNICIPAL INSPECTIONS

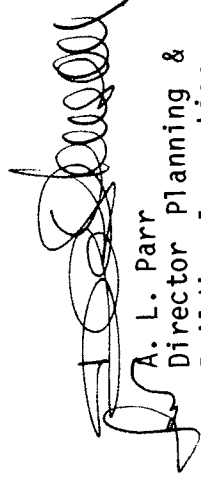
The project will be the subject of the normal applications for Building and related permits, and Municipal inspections will be conducted on the structure and all components of the plant that are regulated by the National Building Code, the Fire Code, Electrical Code, etc., and the Burnaby Building Bylaws. The relevant permit fees will be paid.

CONCLUSION

The foregoing summarizes the conditions to which the GVRD has committed itself concerning issues of significant interest to Burnaby in conjunction with the development and on-going operation of the incinerator facility.

Within the context of the overall Solid Waste Management Plan, and in light of the results of staff investigations, the comments of Environmental Health, including the recent report to Council (1985 November 18), and the commitments given by the GVRD, your staff can see no reason to withhold support for the 210,000 t/a refuse incinerator facility.

Additional discussions and work with GVRD staff, the contractor, and the various environmental and technical consultants will continue, to ensure that these commitments are implemented to Burnaby's satisfaction and to address any other issues that may arise.



A. L. Parr
Director Planning &
Building Inspection

DGS:lf

cc: Chief Public Health Inspector
Director Engineering
Chief Building Inspector
Chief Fire Prevention Officer