

7. Re: Greater Vancouver Regional District's
Air Pollution Control Bylaw No. 92

The Greater Vancouver Regional District on March 7, 1973, adopted Bylaw No. 92 entitled "Air Pollution Control Bylaw". Attached for the information of Council is a press release dated March 8, 1973, a copy of the Bylaw and two application forms that will be filled out by those persons who plan to install incinerators and heating units in proposed structures (the Building Department will make forms available to the public). Additional details regarding administrative procedure are included in the explanatory notes section of the attached Bylaw.

Mr. C. W. Carlisle, G.V.R.D. Director of Finance and Administration, in a letter to the Manager dated March 7, 1973, advises as follows:

"There should be no trouble in coordinating permits under the Regional Bylaw for commercial and industrial heating and incineration. A District Inspector has been designated to keep in touch with your Municipality and visit you as required. He will be able to advise you on the suitability of approving development or building permits with respect to this District's responsibilities.

Coordination concerning industrial emissions under the Pollution Control Act will be more cumbersome. It takes approximately 120 days to process such a permit after an application has been made. In some cases the granting of a Pollution Control Permit may be the controlling factor which determines if a development can proceed. For the protection of your interests, those of the District, and those of the public, some notification should be given to those parties contemplating industrial developments to the effect that industrial emissions are covered by the Provincial Pollution Control Act administered by the Regional District. Your people who have had a greater experience with the public can probably best decide how this is to be accomplished."

The Chief Building Inspector advises that he is now in the process of cooperating with the G.V.R.D. in the implementation of Bylaw 92.

This is for the information of Council.



Greater Vancouver Regional District

2294 WEST TENTH AVENUE VANCOUVER 9, BRITISH COLUMBIA TELEPHONE 731 1155

ITEM 7

MANAGER'S REPORT NO. 21

COUNCIL MEETING Mar. 19/73

Thursday, March 8, 1973

The Greater Vancouver Regional District has officially taken over responsibility for air pollution control in the metropolitan area.

GVRD directors gave final approval to a bylaw that places enforcement and administration of all forms of air pollution, except vehicle emissions, under the authority of the Regional District. Provincial approval of the bylaw has already been obtained.

A regional bylaw covers domestic, commercial and institutional heating installations and incinerators having a maximum capacity of five tons an hour while the provincial Pollution Control Act controls industrial emissions.

Enforcement and administration of both the regional bylaw and the Pollution Control Act, within the Greater Vancouver area, are now under the jurisdiction of Frank Bunnell, GVRD Director of Operations and Regional Director of Pollution Control.

According to the legislation the regional regulations would take precedence over any existing municipal bylaws on air pollution control. However, outdoor burning of leaves or foliage for domestic purposes or burning for land-clearing is under control of local municipalities through their fire bylaws.

Permit forms can be obtained from municipal halls.

Enforcement of pollution control regulations will be carried out by officers of the Regional District who will make routine inspections and act on complaints.

The regional bylaw provides that a permit be obtained for the installation, operation and modification of all domestic, commercial and institutional heating installations and incinerators covered by the bylaw.

One clause in the regional bylaw states that "the emissions from an incinerator shall be vented into the air through a chimney or duct used exclusively for that purpose." This regulation will be applied particularly to all new incinerator operations and primarily affects apartment blocks.

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For further information, please contact:

Bud Elsie 736-3368

GREATER VANCOUVER REGIONAL DISTRICT

BRITISH COLUMBIA

Members

District of Burnaby
District of Coquitlam
District of Delta
Village of Lions Bay
City of New Westminster
City of North Vancouver
City of Port Coquitlam
City of Port Moody
Township of Richmond
District of Surrey
City of Vancouver
District of West Vancouver
City of White Rock
Electoral Area "A"
Electoral Area "B"
Electoral Area "C"

AIR POLLUTION CONTROL

BY-LAW NO. 92

Air Pollution Control in the Greater Vancouver Regional District

Explanatory Notes

1. In the Greater Vancouver Regional District, air pollution is controlled by two separate legislations.
 - a) The Provincial Pollution Control Act which applies to all industrial emissions and to incinerators having a capacity greater than five tons per hour.
 - b) The Air Pollution Control By-law which applies to domestic, commercial, and institutional heating installations and incinerators for the disposal of domestic and commercial wastes having a capacity of five tons per hour or less.

Both of these are administered by the Greater Vancouver Regional District as discussed below.

Outdoor burning of leaves or foliage for domestic purposes or burning for land-clearing or from land grading is under the control of local municipalities through their fire by-laws.

2. The Pollution Control Act is provincial legislation administered through the Regional District by the appointment of a Regional Director of Pollution Control who has the powers necessary for the carrying out of the Act for industrial air emissions in the Regional District. In brief, the Act states that no person shall cause or permit the emission into the air of any contaminant from an industrial source without a permit or approval from the Director. Permits are obtained on application to the Director. Copies of this application must be advertised and a copy is circulated to the municipality in which the emission is located.

There is provision in the Act and its Regulations, for the filing of objections to the granting of any permit and for appeal to the Provincial Pollution Control Board from any decision of the Director in the granting or refusing of a permit.

There are no limitations or standards set out in the Act for emissions. Each application is to be considered on an individual basis with due regard to the existing quality of the environment at each particular location, guidelines set out by the Pollution Control Board, and all other information available to the Director.

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3. The Air Pollution Control By-law applies to domestic, commercial, and institutional heating installations and domestic and commercial waste incinerators. Limitations for emissions from these sources are set out in the by-law. It is also a requirement of the by-law that installation and operating permits be obtained from the Regional District for the installation or modification of all domestic, commercial, and institutional heating installations with a capacity of 300,000 B.T.U.'s per hour or more and for incinerators for the disposal of domestic or commercial waste having a capacity of five tons per hour or less (all other incinerators come under the Pollution Control Act). Forms of application for permits will be available to all municipal permit offices so that the public can obtain these directly at the time they obtain other applications. The application can then be made by mail to the Regional District office. Should a municipality wish to receive copies of applications originating in their municipality, these will be supplied on a continuing basis at the request of the municipality.

4. The enforcement of the Pollution Control Act and the Air Pollution Control By-law is carried out by officers of the Regional District who make routine inspections and act on complaints. They can be reached at the Regional District Office - telephone 731-1155, any normal working day between the hours of 8:00 a.m. and 4:00 p.m. Outside of these hours, the Regional District maintains a report centre for the receipt of telephone complaints. The telephone number is 929-3616.

5. In accordance with the Letters Patent of the Regional District, the powers, duties, and obligations of the municipalities to control emission of smoke, dust, gas, etc. to the atmosphere have been transferred to the exclusive jurisdiction of the Regional District. This, in no way, affects or limits the member municipalities' rights regarding fire by-laws to control outdoor burning or building by-laws to control heating or incineration installations for other than air emissions.

GREATER VANCOUVER REGIONAL DISTRICT

BY-LAW NO. 92

The Board of Directors of the Greater Vancouver Regional District in open meeting assembled enacts as follows:

1. This By-law may be cited as the "Air Pollution Control By-law".
2. This By-law applies to the installation and operation of and to any discharge or emission into the air from
 - a) Domestic, commercial or institutional heating installations; and
 - b) Incinerators for the disposal of domestic or commercial waste, having a capacity of five tons per hour or less.
3. In this By-law, unless the context otherwise requires
 - a) "Air" means the atmosphere, but does not include the atmosphere within a building;
 - b) "Air Contaminant" means any substance whether gaseous, liquid, solid, odorous or any combination of any of them
 - (i) that is foreign to or in excess of the natural constituents of the air, or
 - (ii) affects the natural, physical, chemical or biological quality of the airand that is, or may be injurious to health or safety or comfort of a person or injurious or damaging to property or to plant and animal life, or that may interfere with visibility or the normal conduct of transport or business or is obnoxious to the public.
 - c) "Air Pollution" means the presence of substances or contaminants in the air of such character as to substantially alter or impair the usefulness of the air.
 - d) "Board" means the Board of Directors of the Regional District.

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- e) "Director" means the Regional Director of Pollution Control, and includes any Assistant Director and any person appointed by the Board as Acting Director;
- f) "Inspector" means any person appointed by the Director to be an inspector for the purposes of this By-law;
- g) "Multiple-Chambered Incinerator" means a structure used to dispose of combustible refuse by burning, and consisting of three or more, refractory-lined combustion furnaces in series, physically separated by refractory walls;
- h) "Order" includes any decision or direction given in writing;
- i) "Particulate Matter" means any material which is emitted as liquid or solid particles, or both, but does not include water or water vapour;
- j) "Permit" means a permit issued under this By-law;
- k) "Regional District" means Greater Vancouver Regional District.

4. Schedule "A" annexed hereto, being the Microringelmann Chart is declared to be and to form an integral part of this By-law, and the density indications of the said chart shall constitute the standard smoke chart for the Regional District.

5. a) Subject to the provisions of Section 17, no person may install, construct, reconstruct, convert, alter or add to any domestic, commercial or institutional heating installation having an input in excess of 300,000 B.T.U. per hour or any incinerator for the disposal of domestic or commercial waste, having a capacity of five tons per hour or less, until an application including suitable plans and specifications has been filed with the Director and a permit therefor has been issued by him, except that a permit shall not be required for minor alterations which do not involve a change in capacity, mode of operation or method of combustion.

b) All drawings submitted shall be drawn to scale and shall be fully dimensioned, explicit and complete. The plans or specifications shall show clearly and in detail the following:

- (i) The equipment or control apparatus covered by the application;
- (ii) Any equipment connected or attached to or serving or served by

- (iii) The plot plan, including distance and height of buildings within a distance of 100 feet from the place where the equipment is to be installed;
- (iv) The proposed means for preventing or controlling the emission of air contaminants;

6. a) No installation permit shall be granted unless the applicant shows to the satisfaction of the Director that the equipment or control apparatus is designed, and will be so installed or altered, to operate without causing a violation of the provisions of this By-law.

b) No person shall operate or permit to be operated any new device, equipment or apparatus capable of being a cause of air pollution or designed for the purpose of controlling or regulating air pollution, until the Director has issued an operating permit in respect thereof. No such permit shall be issued unless the device, equipment or apparatus operates without causing a violation of the provisions of this By-law.

c) The issuance of any installation permit or operating permit shall not exempt the person to whom such permit has been issued from prosecution for any violation of this By-law.

d) The applicant shall provide such facilities as may reasonably be necessary for sampling, together with access thereto for testing purposes, in order to secure information that will disclose the nature, extent and quantity of emissions or discharge into the atmosphere.

7. a) No person shall burn any material in any incinerator within the Regional District except in a multiple-chambered incinerator or in approved equipment which will function in a manner equivalent to a multiple-chambered incinerator.

b) The Director may require that any incinerator be equipped with an auxiliary heat source which shall be operated at all times when the incinerator is in use.

c) The emissions from an incinerator shall be vented into the air through a chimney or duct used exclusively for that purpose.

8. No person shall burn or permit to be burned in any heating installation or incinerator any fuel or waste except the fuel or waste for which the heating installation or incinerator was designed, nor otherwise or under the

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same at greater capacity or in any other manner than that specified in the application for a permit for the installation and/or operation of such heating installation or incinerator.

9. Any plant using solid or liquid fuel which has a maximum rated input of more than 3,000,000 B.T.U. per hour shall be equipped with a smoke indicator approved by the Director.

10. No owner or occupier of any building or premises shall discharge or allow to be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one thirty-minute period from any one source of emission, any substance which is

a) as dark or darker in shade than that designated No. 2 on Microringelmann Chart; or

b) of such opacity as to obscure the view of an observer to a degree equal to or greater than 40%; determined by a standard where 0% opacity is perfect transparency and 100% opacity is perfectly opaque.

11. No person shall cause or permit the emission into the air of any air contaminant.

12. No owner or occupier of any building or premises shall discharge or allow to be discharged into the atmosphere from any one source covered by this By-law any emission or discharge in excess of the following scale:

a) 150 grains of particulate matter per 1,000 cubic feet at 68° Fahrenheit adjusted to 12% CO₂ from flue gases emanating from an incinerator or fuel burning equipment;

b) any sulphur compounds, calculated as SO₂ (sulphur dioxide), exceeding 0.2% by volume from any single source of emission.

13. The Director may require the owner or occupant of any property to fit dust collectors or pollution control apparatus or otherwise to make such alterations to equipment or control apparatus in or upon the property or to make such changes in the manner of operating the equipment or con-

14. a) The Director and/or inspector or inspectors may with or without assistants and/or instruments and/or equipment enter at any time in and upon any land or premises to inspect, regulate, test, close or lock any heating installation or incinerator;

b) No person may interfere with, obstruct or prevent the Director or any inspector or inspectors from entering into any building or premises for the purpose of inspecting, regulating, testing, closing or locking any heating installation or incinerator;

c) No person may remove or otherwise interfere with any instrument or equipment on any lands or premises for the purpose of testing the operation of any equipment covered by this By-law or the emissions therefrom.

15. The permit fees payable under this By-law shall be as specified in Schedule "B" attached hereto and shall be paid before the issuance of any such permit.

16. The Director may make arrangements with any municipality within the Regional District whereunder such municipality may receive applications hereunder for permits for any installations within such municipality and collect the fees as herein prescribed therefor and, subject to the approval of the Director, issue permits and retain for its own municipal purposes the fees so collected.

17. No permit shall be required for the installation completed within three months after the passing of this By-law of a heating installation or incinerator, or for the operation of an installation, authorized, licensed or permitted under a by-law of a municipality in effect before the operative date of this By-law, provided, however, that such installation shall nevertheless comply with the standards imposed by this By-law for the operation of such installation.

18. Every person who violates any of the provisions of this By-law, or who suffers or permits any act or thing to be done in contravention or in violation of any of the provisions of this By-law, or who neglects to do or refrains from doing anything required to be done by any of the provisions of this By-law, or who does any act which violates any of the provisions of this By-law, shall be guilty of an infraction thereof and liable on summary conviction of a fine of not more than five hundred dollars (\$500.00) or to imprisonment for six (6) months or to both such fine and such imprisonment.

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Read a first time this 29th day of November, 1972.

Read a second time this 29th day of November, 1972.

Read a third time this 29th day of November, 1972.

Received the Approval of Lieutenant-Governor-in-Council this 6th day of February, 1973.

Reconsidered and Adopted this 7th day of March, 1973.

Robert W. Prittie
Chairman

G.W. Carlisle
Secretary

SCHEDULE "A"

MICRORINGLEMANN CHART

(Official Chart on File in Secretary's Office)

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SCHEDULE "B"

For permits for the installation, construction, reconstruction, conversion,
alteration of or addition to

1. any domestic, commercial or institutional heating
installation having an input in excess of 300,000
B.T.U. per hour \$ 25.00
2. any incinerator for the disposal of domestic waste
having a capacity of five tons per hour or less \$ 50.00

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GREATER VANCOUVER REGIONAL DISTRICT

APPLICATION FOR APPROVAL
OF HEATING INSTALLATION

CONTROL SERVICE
NUMBER _____

Building Owner: _____ DATE: _____

Address: _____

Location of proposed installation: _____

_____ City or Municipality

Type of building - Hotel, Apt. etc.: _____

Boiler or Furnace:

Maker's name: _____

Catalogue No. _____

Rating: _____ H.P.

Heat Input: _____ M.B.T.U. per hour.

Fuel used: _____

Auxiliary fuel used: _____
Gas, Light oil, etc.

Chimney - Inside Measurements: _____ inches.

Make of Smoke Indicator: _____

Any plant using solid or liquid fuel which has a maximum rated input of more than 3,000,000 B.T.U. per hour shall be equipped with a Smoke Indicator approved by the Director.

Fee \$25.00

Name of applicant: _____

Postal address: _____

An operating permit does not exempt the owner or operator from prosecution if there is a violation of the Bylaw.

This application with the fee of \$25.00 is to be forwarded to the Regional District offices at 2294 West 10th Ave., Vancouver 9, B.C.

For mailing purposes please address as follows:

Air Pollution Control,
Greater Vancouver Regional District,
2294 West 10th Avenue,
Vancouver 9, B.C.

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MANAGER'S REPORT NO. 21

COUNCIL MEETING Mar. 19/73

GREATTER VANCOUVER REGIONAL DISTRICT
APPLICATION FOR APPROVAL OF
INCINERATOR INSTALLATION

CONTROL SERVICE
NUMBER _____

DATE: _____

Building Owner: _____

Address: _____

Location of proposed installation: _____

_____ City or Municipality

Building to be served: (Check one)

_____ Apt. Bldg.	_____ Vet. Hospital
_____ School	_____ Rest Home
_____ Hospital	_____ Food Market
_____ Hotel	_____ Commercial Bldgs.

Number of suites or rooms: _____

Type of waste: _____ (Give numbers 0 to 4) - (see reverse side)

Daily waste: _____ lbs. Burning time: _____ hrs./day

Make of Incinerator: _____ Model & Rating: _____

Auxiliary Heat: Primary: _____ BTUs/hr.

Secondary: _____ BTUs/hr.

Primary Chamber area: _____ sq. ft.

Secondary Chamber area: _____ sq. ft.

Grate area: _____ sq. ft.

Stack: - inside dimensions: _____ sq. ins.

Stack Height: _____ ft.

Type of Collector to be installed: _____

What provisions have been made for air supply into the room:

Name of Applicant: _____

Postal Address: _____

Fee: \$50.00

Drawings required:

A sketch showing the point of emission with relation to the immediate buildings.

Sectional drawings of Incinerator showing all internal dimensions, burner locations, charging doors, temperature controls, location of test holes, etc.

An operating permit does not exempt the owner or operator from prosecution if there is a violation of the Bylaw.

SEE REVERSE SIDE...

(Continued on next page)

TYPES OF WASTE

TYPE	DESCRIPTION	Moisture Content	Incombustible Solids	B.T.U. Value Lb.	Lbs. Per Cu. Ft.
0	TRASH, a mixture of highly combustible waste; paper, cardboard cartons, wood boxes, and combustible floor sweepings, from commercial and industrial activities. Contains up to 10% by weight of plastic bags, coated paper, laminated paper, treated corrugated cardboard, oily rags and plastic or rubber scraps.	10%	5%	8500	8-10
1	RUBBISH, a mixture of combustible waste; paper, cardboard cartons, wood scrap, foliage and combustible floor sweepings, from domestic, commercial and industrial activities. Contains up to 20% by weight of restaurant or cafeteria waste, but little or no treated papers, plastic or rubber wastes.	25%	10%	6500	8-10
2	REFUSE, consisting of an approximately even mixture of rubbish and garbage by weight, common to apartment and residential occupancy.	50%	7%	4300	15-20
3	GARBAGE, consisting of animal and vegetable wastes from restaurants, cafeterias, hotels, hospitals, markets, and like installations.	70%	5%	2500	30-35
4	HUMAN AND ANIMAL REMAINS, consisting of carcasses, organs and solid organic wastes from hospitals, laboratories, abattoirs, animal pounds, etc.	85%	5%	1000	45-55

ESTIMATES FOR INCINERATION REQUIREMENTS

CLASSIFICATION	BUILDING TYPES	QUANTITIES OF WASTE PRODUCED
INDUSTRIAL BUILDINGS	Factories Warehouses	Survey must be made 2 lbs. per sq. ft. per day
COMMERCIAL BUILDINGS	Office Buildings Department Stores Shopping Centers Supermarkets Restaurants Drug Stores Banks	1 lb. per 100 sq. ft. per day 4 lbs. per 100 sq. ft. per day Study of plans or survey required 9 lbs. per 100 sq. ft. per day 2 lbs. per meal per day 5 lbs. per 100 sq. ft. per day Study of plans or survey required
RESIDENTIAL	Private Homes Apartment Buildings	5 lbs. basic & 1 lb. per bedroom 4 lbs. per sleeping room per day
SCHOOLS	Grade Schools High Schools Universities	10 lbs. per room & 1/2 lb. per pupil per day 8 lbs. per room & 1/2 lbs. per pupil per day Survey Required
INSTITUTIONS	Hospitals Nurses Homes Homes for Aged Rest Homes	25 lbs. per bed per day 5 lbs. per person per day 5 lbs. per person per day 5 lbs. per person per day
HOTELS, ETC.	Hotels - 1st Class Hotels - Medium Class Motels Trailer Parks	3 lbs. per room and 2 lbs. per meal per day 1 1/2 lbs. per room and 1 lb. per meal per day 2 lbs. per room per day 6 to 10 lbs. per trailer per day
MISCELLANEOUS	Veterinary Hospitals Industrial Plants Municipalities	Study of plans or survey required
ESTIMATE:		7 hours operation per shift for industrial installations. 6 hours operation per day for commercial buildings, institutions & hotels. 4 hours operation per day for schools. 3 hours operation per day for apartment buildings.

This application with the fee of \$50.00 is to be forwarded to the Regional District offices at 2294 West 10th Ave., Vancouver 9, B.C.

For mailing purposes please address as follows:
 Air Pollution Control,
 Greater Vancouver Regional District,
 2294 West 10th Avenue,
 Vancouver 9, B.C.