greater WELLINGTON
REGIONAL COUNCIL

8 Discharge permit application to discharge contaminants to air

Please answer all questions fully. You should discuss your application with one of Greater Wellington's resource advisors before completing this form.

Please provide an accurate plan showing the location of the site, existing works or works to be constructed, property boundaries and neighbouring properties.

Part A: general

1. **Process details**

(1) Please supply a detailed flow chart and description of the process that either results in a discharge to the atmosphere or could potentially result in a discharge to air.

(2) Please state number, height, diameter, location, etc, of any discharge points.
(If a chimney is proposed, give height and dimensions of surrounding buildings.)

(3) Please state the usual duration of the discharge (or discharges) and any variation, where appropriate:

(4) Has any equipment been placed on the discharge points to remove/alter the contaminants from the waste flows? Yes ☐ No ☐

If yes, please give details:

Part A: general (continued)

2. **Discharge details**

(1) Please supply (as far as possible) air discharge details for all contaminants, including NOx, CO2, SO2, CFCs, halons, methane, particulates, etc (refer to Clean Air Act 1972 – First Schedule for Air Pollutants) under the following headings:

Name of contaminant/gas				
Concentration (ppm, mg/Nm^3)				
Mass emission rate (kg/hr)				
Frequency of discharge				
Flow rate (m^3/hr)				
Efflux velocity (m/s)				
Particle size distribution				

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Particle size distribution				

[Concentrations and volumetric flow rates should be calculated at 0°C, 1 atm pressure and a dry gas basis.]

(2) Has there been carried out, or do you have access to, any background monitoring, monitoring of the discharges, impacts of the discharges? Yes ☐ No ☐

[If yes, please supply a copy/summary of the information obtained.]

(3) Has any meteorological data relevant to the site been obtained? Yes ☐ No ☐

[If yes, please give details and, if possible, a copy/summary of the information obtained.]

(4) Describe the type of land use surrounding the site (eg, north, residential – closest 500m; south, industrial, etc):

Part B: assessment of effects on the environment

Where your discharge could have a significant adverse effect on the environment a more detailed environmental assessment is required in accordance with the Fourth Schedule of the Resource Management Act 1991.

1. Comment on the possible effect the discharge may have on the quality of the receiving air, persons living or working in the area and local biota (plant and animal life):

[Continue on a separate page if necessary]

2. Within a reasonable radius or in the vicinity of the discharge are there any:

(1)	Residential developments?	Yes ☐	No ☐
(2)	Production land (eg, crops, dairy farming)?	Yes ☐	No ☐
(3)	Recreational activities carried out (eg, sports grounds, parks, etc)?	Yes ☐	No ☐
(4)	Sources of similar or other discharges to air?	Yes ☐	No ☐
(5)	Areas of particular aesthetic or scientific value (eg, scenic views, etc)?	Yes ☐	No ☐
(6)	Areas or aspects of significance to iwi that you are aware of?	Yes ☐	No ☐
(7)	Commercial activities (eg, office blocks)?	Yes ☐	No ☐

If you have answered yes to any of the above, describe what effects your discharge may have and the steps you propose to take to mitigate these:

[Continue on a separate page if necessary]

3. What alternative methods of disposal or discharge locations have you considered?

4. Why did you choose the proposed location?

Part B: assessment of effects on the environment (continued)

5. How will the equipment controlling the discharge be operated and maintained to prevent equipment failure, and what measures will be implemented to ensure that the effects of any malfunction are remedied?

[Continue on a separate page if necessary]

6. What, if any, monitoring do you propose to carry out to ensure that your discharge does not have any adverse effect?

[Continue on a separate page if necessary]

Air discharge permit information (required for Industry Groups)

Combustion processes

- Describe combustion processes and details of boiler or heat unit.
- Heat release rate (kilowatts, megawatts)
- Contaminants discharged to the atmosphere.
- Concentration of contaminants in discharge (ppm).
- Height of discharge point (chimney).
- Describe fitting on top of chimney (cone, rain excluded, China man's hat).
- Frequency of discharge.
- Describe air pollution control equipment.
- Velocity of flue gas.
- Monitoring system (for checking and recording discharge).
- Location of discharge points in relation to factory and boundaries.
- Condition of boiler or heat unit, chimney and details of last service.

Quarries

- Describe quarrying process.
- Type of rock being mined.
- Open cast extraction capacity (tonnes/hour).
- Size reduction and screening capacity (tonnes/hour).
- Storage capacity (tonnes/hour).
- Dust control measures.
- Monitoring systems (for checking and recording dust emissions).
- Frequency of discharge (ie, hours of operation).
- Quarry management plan.

Wood processing industries

- Describe the process and contaminants discharged to atmosphere.
- Describe air pollution control equipment (including height of discharge point, exit velocity).
- Monitoring system (for checking and recording discharge).
- Particulate emission test (to determine dust concentration and mass emission levels discharged from the stack, measure over three runs, with all wood sanding equipment working at the same time).
- Frequency of discharge (ie, hours of operation).
- Location of discharge points in relation to the premises and neighbouring premises.

Chemical manufacturing blending processes/electroplating

- Describe the process.
- Describe contaminants/gases discharged to atmosphere and their concentrations.
- Describe air pollution control equipment.
- Monitoring system (for checking and recording discharge).
- Frequency of discharge (ie, hours of operation).
- Location of discharge points in relation to the premises and neighbouring premises.

Air discharge permit information (continued)

Abrasive blasting

- Describe the process and details of blasting chamber, blasting media used.
- Describe air pollution control equipment and height of discharge point, velocity of gases, fitting on top of chimney.
- Describe contaminants discharged to the atmosphere.
- Particulate emission tests (to determine dust concentration and mass emission levels discharged from the stock, measured over three runs).
- Monitoring system (for checking and recording discharge).
- Frequency of discharge (ie, hours of operation).
- Location of discharge points in relation to the premises and neighbouring premises.

Wool scourers and tanneries

- Describe the process.
- Describe contaminants/gases discharged to atmosphere and their concentrations.
- Describe air pollution control equipment and height of discharge point, fitting on top of chimney.
- Monitoring system (for checking and recording discharge).
- Describe raw material capacity of operation.
- Frequency of discharge (ie, hours of operation).
- Location of discharge points in relation to the premises and neighbouring premises.

Spray painting process

- Describe the process and details of spray painting booth.
- Describe air pollution control equipment and height of discharge point, velocity of gases, fitting on top of chimney.
- Describe contaminants discharged to atmosphere.
- Frequency of discharge (ie, hours of operation).
- Monitoring system (for checking and recording discharge).
- Location of discharge points in relation to the premises and neighbouring premises.

Concrete manufacturing plants

- Describe the process.
- Describe contaminants/gases discharged to atmosphere.
- Give details of raw material capacity (tonnes/hour).
- Dust control measures.
- Frequency of discharge (ie, hours of operation).
- Monitoring system (for checking and recording dust).

Air discharge permit information (continued)

Rendering process

- Describe the rendering process (high/low temperature, drying, etc.).
- Describe combustion process (if applicable, ie, type of combustion process, fuel uses, fuel combustion rate, contaminants released to air, exit velocity, concentration).
- Describe air pollution control equipment.
- Height and number of discharge points, and any fitting on top of chimney.
- Frequency of discharge (ie, hours of operation).
- Monitoring system (for checking and recording discharge).
- Location of discharge points in relation to the premises and neighbouring premises.

Asphalt production

- Describe the process.
- Describe contaminants/gases discharged to atmosphere.
- Give details of raw material capacity (tonnes/hour).
- Describe air pollution control equipment (dust controls, etc.).
- Frequency of discharge (ie, hours of operation).
- Monitoring systems.

Coffee roasting processes/vegetable frying processes

- Describe roasting process (roast or frying cycle, maximum raw material capacity (kg/hr)).
- Describe combustion process (if applicable, ie, type of combustion process, fuel uses, fuel combustion rate, contaminants released to the atmosphere, concentration of contaminants in ppm, exit velocity).
- Describe air pollution control equipment.
- Height and number of discharge points, and any fitting on top of chimney.
- Frequency of discharge (ie, hours of operation).
- Monitoring system (for checking and recording discharge).
- Location of discharge points in relation to the premises and neighbouring premises.

Other processes

- Describe the process.
- Describe contaminants/gases discharged to atmosphere.
- Describe air pollution control equipment.
- Frequency of discharge (ie, hours of operation).
- Monitoring systems.

For office use only

Consent No. _____

Renewal: Yes ☐ No ☐