



5a Discharge permit application to discharge contaminants to air

Please answer all questions fully. Officers from Greater Wellington's Environmental Regulation department are available to assist with filling out this form or to clarify information to include with your application. Additional guidance on the level of information required for various activities is provided in pages 7 to 9.

This form is required to be filled out in conjunction with Form 1 Resource Consent Application

Part A: General information on nature and scale of your activity

1. Process details

- (1) Please supply a detailed flow chart and description of the processes and operations that either result in a discharge to the atmosphere or could potentially result in a discharge to air. (See pages 7-9 for further information on the industry-specific details required.)
- (2) Please provide details on the methods of discharge from point discharges (e.g. stacks, vents, chimneys), fugitive emissions (e.g. leaks in equipment or gaps in buildings), and diffuse discharges (e.g. stockpiles, oxidation ponds). These details should include the number, height (above ground level), diameter, location, etc, of any discharge points.

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

- (4) If applicable, please state the quantity of materials processed and the amount of fuel consumed that leads to the discharge (or discharges) including typical and maximum amounts:

- (5) If applicable, please state the maximum continuous design rating for each process or piece of equipment associated with the discharge:

Part A: general (continued)

- (6) Has any equipment been placed on the discharge points to remove/alter the contaminants (including gas, dust, and odour) from the waste flows? Yes No

If yes, please give details: (Any details should include any manufacturer's specifications of pollution control or abatement equipment and the expected or measured efficiencies of contaminant removal.)

2. Discharge details

Note: To supply an adequate level of information for this section you may need to seek professional assistance from an appropriately qualified person (e.g. air quality scientist). Emission/stack testing may be required with air dispersion modelling which models predicted ground level concentrations of contaminants for normal and worst case situations.

- (1) Please supply (as far as possible) air discharge details for all contaminants, including (but not limited to) NO₂, CO, SO₂, particulates (PM₁₀ & PM_{2.5}), etc (refer to Clean Air Act 1972 – First Schedule for Air Pollutants and Regional Air Quality Management Plan – Appendix 1) 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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[Concentrations and volumetric flow rates should be calculated at 0°C, 1 atm pressure and a dry gas basis.]

Part A: general (continued)

- (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 topography of the area and dimensions or building and structures in the area of the discharge that may influence wind flow and the dispersion of contaminants.

- (5) Describe the type of land use and activities surrounding the site. Particular attention should be paid to activities that may be sensitive to the discharge (e.g. residential areas, hospitals, schools, office buildings etc.)

3. Locality map and plans

Please show the location of your proposed discharge(s) on a scaled map. Please also provide detailed site plans and elevation drawings that clearly show all aspects of the proposed discharge(s) and any processes and operations leading to the discharge(s). Any submitted maps or plans will need to show the discharge(s) in relation to roads, property boundaries and buildings, waterways, the nearest town, and any other relevant features of the surrounding environment.

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).

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.

Air discharge permit information (continued)

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.