

# Form 5a: Discharge permit application to discharge contaminants to air



Please answer all questions fully. The questions provide a guide in order to satisfy the minimum information requirements that must be included with your application as prescribed in Schedule 4 of the Resource Management Act 1991 (RMA). Depending on the scale of your proposed activity, more detailed information and an Assessment of Environmental Effects (AEE) will be required to support the resource consent application. Additional guidance on the level of information required for various activities is provided in pages 9 to 11.

Officers from the Greater Wellington Regional Council's (GWRC) Environmental Regulation department are available to assist with filling out this form or to clarify information to include with your application. Some basic/standard pre-application advice is provided at no cost.

**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. Is this application a renewal of an existing discharge permit?

Yes     No    If Yes, what is the discharge permit number: WAR/WGN

### 2. 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 9-11 for further information on the industry-specific details required.)

(2) Please provide details on the methods of discharge from point discharges (eg, stacks, vents, chimneys), fugitive emissions (eg, leaks in equipment or gaps in buildings), and diffuse discharges (eg, 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 type and 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:

- (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.)


### 3. 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 (eg, air quality scientist). Emission/stack testing may be required with air dispersion modelling of predicted ground level concentrations of contaminants for normal and worst case scenarios.

- (1) Please supply (as far as possible) air discharge details for all contaminants, including (but not limited to) NO<sub>2</sub>, CO, SO<sub>2</sub>, particulates (PM<sub>10</sub> & PM<sub>2.5</sub>), O<sub>3</sub>, VOCs, metals etc under the following headings:

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

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

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

- (2) Has a comparison been carried out with ambient contaminant levels?  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 of buildings 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 (eg, residential areas, hospitals, schools, marae, churches and mosques, retirement villages, office buildings etc.)

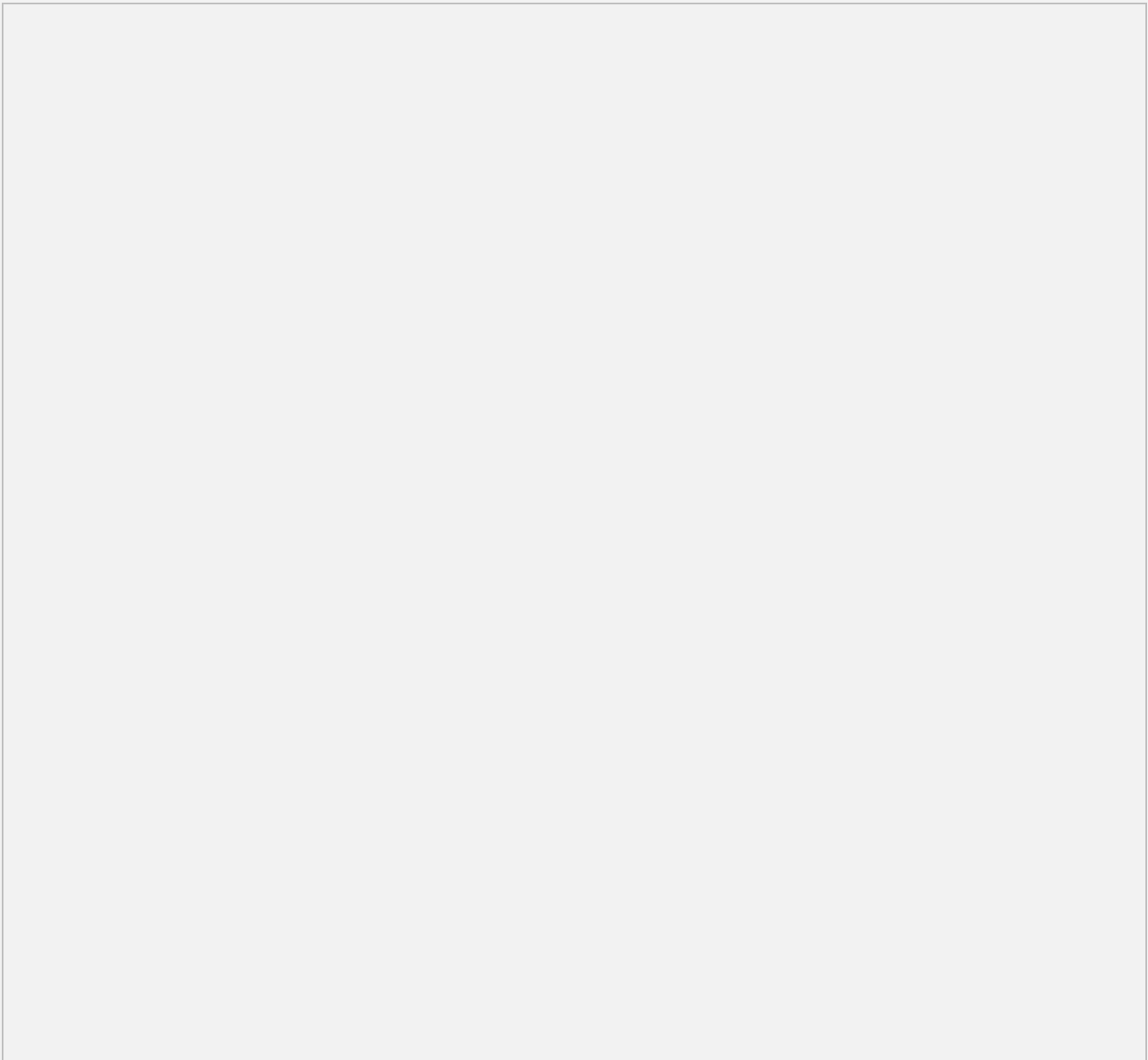
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**4. Locality map and plans**

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 and any other relevant features of the surrounding environment.





**2. Within a radius reasonable to the nature and scale of your activity, are there any:**

- (1) Sensitive receptors such as residential developments, schools, daycares and kindergartens, hospitals or medical centres, main streets, marae, churches?  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 of aspects of significance to mana whenua?  Yes  No
- (7) Commercial activities (eg, office blocks)?  Yes  No

What radius have you used in answering the above questions?

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:

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[continue of a separate page if necessary]

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

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**4. Why did you choose the proposed method and location?**

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## Part C: Assessment against statutory documents

### 1. Part 2 of Resource Management Act 1991 (RMA)

Provide an assessment against Part 2 (Purpose and Principles) of the RMA

<http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231904.html>

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### 2. National Environmental Standard (NES) or National Policy Statement (NPS)

Have you provided an assessment of the proposal against the relevant objectives and policies of any National Environmental Standard eg, National Environmental Standards for Air Quality 2004 and the National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat

(<https://environment.govt.nz/acts-and-regulations/regulations/>) or National Policy Statement

(<https://environment.govt.nz/acts-and-regulations/national-policy-statements/>)?

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### 3. Regional Policy Statement (RPS)

Have you provided an assessment of the proposal against the relevant objectives and policies of any proposed or operative Regional Policy Statement (<http://www.gw.govt.nz/rps/>)?

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### 4. Natural Resources Plan (NRP)

Have you provided an assessment of the proposal against the relevant objectives, policies and rules of the operative or proposed Natural Resources Plan (<https://www.gw.govt.nz/your-region/plans-policies-and-bylaws/plans-and-reports/environmental-plans/natural-resources-plan/>)?

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**5. Other relevant statutory documents**

Have you provided an assessment against all other relevant statutory documents?

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**6. Permitted activities**

Will you be undertaking any permitted activities as part of the proposed activity?

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**7. Other activities that are part of the proposal**

Are there any other activities that are part of the discharge which may require consent?

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**8. Value of investment**

If you are applying to replace an existing consent, please provide an assessment of the value of the investment to which the activity relates.

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## Part D: Monitoring and management of your activity

### 1. What monitoring and management do you propose to ensure any potential adverse effects on the environment are avoided, remedied or mitigated?

In particular please include an Air Quality Management Plan (AQMP) for the activity that covers the following minimum requirements::

- All procedures to ensure the operation will comply with any proposed consent conditions or standards
- How 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
- The methods and monitoring programmes that will be adopted for emissions testing, dust deposition testing, and/or site boundary odour assessments, including how these records will be kept
- Procedures for investigating and responding to any complaints relating to the discharges to air from surrounding landowners/occupiers
- Details of maintenance and servicing schedules
- All key contact information

Note: At a minimum a draft AQMP is required for all applications, unless special circumstances apply. Where any existing AQMP is in place, a recently reviewed version will need to be supplied with any application.

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## Specific information required by industry group

### Combustion processes

- Assess your proposal against the NES for Greenhouse Gas Emissions from Industrial Process Heat 2023.
- 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).
- 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.

### 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.

## **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.