

# Form 'B' – Assessments of Environmental Effects

## Application to Discharge Greenhouse Gases from Industrial Heat Devices

### Requirement under the National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat, 2023

**General Information**

The Ministry for the Environment and the Ministry of Business, Innovation and Employment have released a National Policy Statement (NPS-GHG) and National Environmental Standard for Greenhouse Gas (GHG) Emissions from Industrial Process Heat (NES-GHG), which came into force 27 July 2023.

Councils are now required to consider the environmental effects of GHG emissions from industrial process heat when assessing air discharge resource consent applications. The regulations affect industries that use fossil fuels in heat devices to generate industrial process heat, that produce greenhouse gas emissions. Examples may include:

- including in the manufacturing of products (metals, chemicals etc)
- processing of raw materials (milk into milk powder, wood pulp into paper, woollscour, fellmongery etc.
- horticulture when industrial heat is used to grow plants or other photosynthesising organisms indoors.

The NES-GHG can be found at:

<https://www.legislation.govt.nz/regulation/public/2023/0165/latest/LMS605249.html>

The NPS-GHG can be found at: <https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-for-greenhouse-gas-emissions-from-industrial-process-heat/>

**Specific Consenting Requirements**

If the total projected annual greenhouse gas (GHG) emissions from all site heat devices exceed 500 tonnes of carbon dioxide equivalent of greenhouse gases, a resource consent **must** be sought under to the NES-GHG.

A separate AEE and emissions plan, in accordance with Schedule 4 of the Resource Management Act 1991 and the NES-GHG requirements, will need to be prepared and submitted alongside this application form.

If the total projected annual greenhouse gas (GHG) emissions from all site heat devices exceed 2,000 tonnes of carbon dioxide equivalent of greenhouse gases, the emissions plan must also be reviewed by a Suitably Experienced Practitioner.

Application guidance, prepared by the Ministry for the Environment and the Energy Efficiency and Conservation Authority, is available at the following locations: -

- <https://www.eeca.govt.nz/regulations/emissions-plan-guidance/>
- <https://environment.govt.nz/acts-and-regulations/regulations/national-environmental-standards-for-greenhouse-gases-from-industrial-process-heat/>

**Applicant Name** : \_\_\_\_\_ (from form A, Q1.4)

**1. Details of the Changes of Conditions Requested**

or NA New consent  (move to Q 2)

**1.1. What is the number of the consent you wish to change?** \_\_\_\_\_

**1.2. Attach a copy of the consent, with annotations showing the changes you are requesting, or state specifically the changes you wish to make below.**

Condition #	Change Requested
_____	_____
_____	_____
_____	_____
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_____	_____

*Now go through the form and confirm the details of your discharge, as some will change as a result of the change of conditions.*

## 2. GREENHOUSE EMISSIONS FROM HEAT DEVICES

### 2.1. Provide details of the heat device(s)<sup>1</sup> operated on site

*Include additional sheets if more than two heat devices used at a site*

	Heat Device 1	Heat Device 2
<b>Identifier</b>		
<b>Existing heat device?<sup>2</sup></b>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>
<b>If an existing heat device, or a device commissioned since 27 July 2023, what year was the device commissioned?</b>		
<b>Fuel used</b>	<input type="checkbox"/> Coal <input type="checkbox"/> Diesel <input type="checkbox"/> Liquid petroleum gas <input type="checkbox"/> Oil <input type="checkbox"/> Peat <input type="checkbox"/> Plastic <input type="checkbox"/> Used oil <input type="checkbox"/> Other (please state)	<input type="checkbox"/> Coal <input type="checkbox"/> Diesel <input type="checkbox"/> Liquid petroleum gas <input type="checkbox"/> Oil <input type="checkbox"/> Peat <input type="checkbox"/> Plastic <input type="checkbox"/> Used oil <input type="checkbox"/> Other (please state)
<b>Heat output (gross)</b>		
<b>Operation times (hours per day and days per year)</b>		
<b>How often does the operation run during the day and year?</b>		
<b>Projected annual emissions of carbon dioxide equivalent of greenhouse gases emitted.</b>  <ul style="list-style-type: none"> <li>- Provide calculations as part of the AEE</li> <li>- A basic free tool is available here: <a href="https://www.emissionimpossible.co.nz/new-s-archive/nes-ghg-industry">https://www.emissionimpossible.co.nz/new-s-archive/nes-ghg-industry</a> .</li> <li>- We recommend seeking independent expert advice if you require a resource consent.</li> </ul>		

### 2.2. What is the total projected annual greenhouse gas (GHG) emissions from all site heat devices?

\_\_\_\_\_tonnes carbon dioxide equivalent greenhouse gas per year.

**Note:** If the total projected annual greenhouse gas (GHG) emissions from all site heat devices does not exceed 500 tonnes of carbon dioxide equivalent of greenhouse gases, **no consent is required**. If other resource consents are required for the discharge of air, provide calculations showing that less than 500 tonnes carbon dioxide equivalent / year is emitted (i.e. the site is a low emission site), along with **Q2** of this form to continue as a permitted activity.

<sup>1</sup> A 'heat device' is defined as:

- a) means a device that produces industrial process heat (for example, a boiler, furnace, engine, or other combustion device); but
- b) does not include a device used for the primary purpose of—
  - i. generating electricity, including a generator used for back-up electricity or for maintaining the electricity network; or
  - ii. transmitting electricity, including in mobile and fixed substations

<sup>2</sup> 'Existing heat devices' are defined as:

- a) means a device that, before 27 July 2023, is installed and operational, or able to be operated, at a site; and
- b) includes a device described in paragraph (a) after it is upgraded or improved; but
- c) does not include a device that, on or after 27 July 2023, is installed in replacement of a device described in paragraph (a)

### 3. EMISSION PLAN

#### Guidance

All sites where the total projected annual greenhouse gas (GHG) emissions from all site heat devices exceeds **500 tonnes** carbon dioxide equivalent per year require resource consent and an **emission plan** to be prepared.

The legislation does not require emissions plans to be created by any specific person. Some guidance for preparation of emission plans are available here:

- <https://www.eeca.govt.nz/regulations/emissions-plan-guidance/>
- <https://www.eeca.govt.nz/assets/EECA-Resources/Product-regulations/NDIGHG-Emissions-Plan-Guidance-March-2024.pdf>

#### 3.1. Emission Plan included? *(please attach a separate document)*

Yes  No

See Regulation 15 of the NES-GHG for the requirements of emission plans:

<https://www.legislation.govt.nz/regulation/public/2023/0165/latest/LMS605249.html>

#### The Emission Plan must include, but is not limited to the following:

*Note: We will not accept applications for that do not have emission plans with the following information at a sufficient level of detail.*

	Included?	Location in the Emission Plan (page number or section)
The purpose of the activity to which the heat device(s) relate	<input type="checkbox"/>	
The number of heat devices (excluding back-up devices), their age and fuel source (if any).	<input type="checkbox"/>	
The thermal energy that is (or will be) produced, and the thermal energy that can be produced, by each device (broken down by fuel source where there is more than one device)	<input type="checkbox"/>	
For new devices, an assessment of any technically feasible and financially viable lower-emissions alternatives	<input type="checkbox"/>	
An assessment of the BPO to prevent or minimise any actual or likely adverse climate change effect of the activity and all other non-backup devices on, or proposed, for the site	<input type="checkbox"/>	
An assessment of any energy efficiency improvements that are available for the activity - Whether, and how, any of those improvements will be made	<input type="checkbox"/> <input type="checkbox"/>	
A transition pathway that sets out actions to prevent or minimise greenhouse gas emissions from the activity and their climate change effects	<input type="checkbox"/>	
appropriate emissions reductions targets for the scale, type, and site-specific circumstances of the activity (unless the BPO provides no reasonable prospect of reducing the emissions during the term of the resource consent)	<input type="checkbox"/>	

If the site is a high emission site (**exceeds 2,000 tonnes carbon dioxide equivalent per year**), go to questions Q4. If the site is not a high emission site, go to Q5.

#### 4. HIGH EMISSION SITES – SUITABLY QUALIFIED PERSON (SQP) REVIEW OF EMISSION PLAN

##### Guidance

If the site is a high emission site (exceeds 2,000 tonnes carbon dioxide equivalent per year), the emissions plan needs to be reviewed by a Suitably Qualified Person (SQP).

Attributes of a SQP are provided by MFE here: <https://environment.govt.nz/assets/publications/climate-change/National-Direction-for-Greenhouse-Gas-Emissions-from-Industrial-Process-Heat-Attributes-of-a-suitably-qualified-person-.pdf>

Regulation 14(5) of the National Environmental Standard for Greenhouse Gas Emissions from Industrial Process Heat defines a suitably qualified person as being a person who the relevant consent authority considers to have suitable expertise and is suitably qualified.

Addendum 1 (Q8) has been prepared for prospective SQPs to fill in and sign prior to being accepted as a SQP by Hawke's Bay Regional Council.

All applicants should check whether the person undertaking the review is a SQP prior to engaging them by using this form and Addendum 1 (Q8).

**4.1. If total projected annual greenhouse gas (GHG) emissions from all site heat devices exceeds 2,000 tonnes carbon dioxide equivalent per year has the Emission Plan been reviewed by a Suitably Qualified Practitioner (SQP)?** Yes  No

If yes, go to Q5.1.

If no, please seek review from a SQP.

We will not accept applications for applications for consent for high emission that have not has the emission plan reviewed by a SQP.

**4.2. Does the SQP fulfil the requirements outlined in Addendum 1 (Q8) and has the SQP been approved by Hawke's Bay Regional Council?** Yes  No

If yes, include completed Addendum 1 (Q8) and go to Q5.1

**Completed Addendum 1 included?**  (tick)

If no, please seek review from a SQP.




(**Note:** Where an activity cannot comply with the relevant rules of the RRMP and resource consent is required, please fill in a separate application form for other discharges - <https://www.hbrc.govt.nz/assets/Document-Library/Consents/Application-Forms/Application-Form-B-Discharge-Contaminants.pdf> )

**5.3. Is the activity in the Coastal Margin?**    Yes  No

**5.4. Site plan.** Provide a detailed plan of the layout of the proposed site and any associated discharge area that clearly shows the source(s) of the discharge, distances from the source to property boundaries, bores, surface water bodies and any other significant features. Please label it clearly, and ensure it has a scale.

**Site plan attached**

**5.5. Describe the receiving environment.** Provide information about other nearby discharges to air, nature of the airshed the activity is occurring in, surrounding land uses, include sensitive receptors (residential dwellings, aged care facilities, hospitals, daycare, schools etc).

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## 6. ASSESSMENT OF ENVIRONMENTAL EFFECTS (AEE)

The Resource Management Act (RMA) 1991, requires resource consent applications to include an assessment of environmental effects (AEE) in accordance with Schedule 4 of the Resource Management Act 1991, identifying the actual and potential effects that an activity may have on the environment.

In addition, the applicant is required to identify the ways in which those effects can be avoided, remedied or mitigated.

Schedule 4 can be viewed at: <https://www.legislation.govt.nz/act/public/1991/0069/latest/DLM242008.html>

### 6.1. AEE Included? (please attach a separate document)

Yes  No

Where relevant, the AEE must include, but is not limited to the following:

Requirement	Included?	Section of AEE or page number
An assessment of the actual or potential effects of the proposed activity on the environment	<input type="checkbox"/>	
An assessment of the actual or potential effects of the proposed activity on neighbouring area include historic sites, cultural sites (such as wāhi tapu), recreational areas etc.	<input type="checkbox"/>	
Visual effects (may be caused by visible discharge from heat device etc) and/or landscape effects (deposition of matter onto land from an aerial discharge etc)	<input type="checkbox"/>	
Effects of the proposed activity/operation on the habitats of plants and animals.	<input type="checkbox"/>	
If the activity is existing, have there been any complaints about the proposed activity? If so, please describe.	<input type="checkbox"/>	
Effects of the proposal downwind, under prevailing wind conditions	<input type="checkbox"/>	
Assessment of possible alternative locations or alternatives methods for undertaking the activity and reasons why they were discounted	<input type="checkbox"/>	
Describe the methods or actions to be used to reduce or prevent these environmental effects (include a plan(s) of any discharge control system used)	<input type="checkbox"/>	
Describe the methods to reduce the actual or potential effects	<input type="checkbox"/>	
Include plans of the emission control system, if applicable	<input type="checkbox"/>	
Describe contingency plans in the event of a breakdown, such as a back-up system, stopping the process, alarms to warn of a problem, etc	<input type="checkbox"/>	
Describe the maintenance schedule for the control equipment	<input type="checkbox"/>	
Provide an odour management plan	<input type="checkbox"/>	
Proposed mitigation methods	<input type="checkbox"/>	
Alternative contaminant control methods or discharge locations you have considered	<input type="checkbox"/>	
Identification of any person affected by the activity and any consultation with any parties	<input type="checkbox"/>	
Describe the type of waste generated by the proposed activity, and how the waste will be managed	<input type="checkbox"/>	



## 7. ASSESSMENT AGAINST RELEVANT OBJECTIVES AND POLICIES

The Resource Management Act (RMA) 1991, requires resource consent applications to include an assessment against relevant objectives and policies in planning documents including NPS, NES and Regional Plans in accordance with Schedule 4 of the Resource Management Act 1991.

Schedule 4 can be viewed at: <https://www.legislation.govt.nz/act/public/1991/0069/latest/DLM242008.html>

- Relevant objectives and policies of the Regional Resource Management Plan can be found here: <https://www.hbrc.govt.nz/assets/Document-Library/Plans/Regional-Resource-Management-Plan/View-RRMP/New-Chapter-5.pdf>
- Relevant objectives and policies of the National Policy Statement can be found here: <https://environment.govt.nz/assets/publications/climate-change/National-Policy-Statement-for-Greenhouse-Gas-Emissions-from-Industrial-Process-Heat-2023.pdf>

7.1. **Policy Assessment Included?** (please attach a separate document)

Yes  No

**ADDENDUM 1**

**8. REQUIREMENT FOR A SUITABLY QUALIFIED PRACTITIONER (SQP)**

This checklist has been developed Ministry for the Environment Guidance here: <https://environment.govt.nz/assets/publications/climate-change/National-Direction-for-Greenhouse-Gas-Emissions-from-Industrial-Process-Heat-Attributes-of-a-suitably-qualified-person-.pdf>

Prospective SQPs should complete the below form and return to Hawke’s Bay Regional Council with appropriate details of experience and evidence.

Hawke’s Bay Regional Council reserved the right to get an Emission Plan or application independently reviewed. Council will not be publishing a list of accepted SQPs and will be assessed on a case by case basis.

Addendum 1 should be included in applications for discharges from high emission sites (projected annual greenhouse gas (GHG) emissions from all site heat devices exceeds 2,000 tonnes carbon dioxide equivalent per year). If a SQP has already been previously accepted by HBRC, Addendum 1 should still be completed and signed by the SQP to ensure they have the correct level of experience for the specific type of industry or business.

**8.1. Where a SQP review is required, is the SQP a certified energy and carbon professional AND has an advanced industrial energy systems optimisation endorsement, certified and endorsed by the Carbon and Energy Professionals?** Yes  No

Found here: <https://cep.org.nz/find-an-expert/>

*Note: We encourage people who consider themselves SQPs to become a member of an industry body. Information provided by a person who is endorsed by the Carbon and Energy Professionals is preferred.*

If yes, go to Q8.4, if no go to Q8.2.

**8.2. Does the SQP have either**

(a) Recognised international certification in energy and carbon management and at least 5 years of experience in the field of energy and carbon management; or Yes  No

(b) At least 10 years of experience in the field of energy and carbon management Yes  No

*Note: evidence of qualification and /or work history should be provided to support the SQP application*

If yes to either Q8.2(a) or (b) go to 8.3. If no to both Q8.3(a) and (b), seek a review from a SQP who has suitable qualifications of experience.

**8.3. Does the SQP have the following skills (with evidence provided)**

Provide details and location of supporting evidence.

Requirement	Included?	Details Supporting Evidence Provided?
High level of technical, analytical and practical skills and experience in relevant (largely manufacturing or industrial) business sectors and industrial processes.	<input type="checkbox"/>	
<i>Note: Depending on the nature of an activity, some SQPs may be considered suitably qualified for some types of activity but not others. The SQP should ensure they have a sufficient level of experience to consult on the activity related to the current consent.</i>		

Significant proven expertise in identifying energy usage issues in an organisation, including working with a range of fuel types and technologies and on complex systems.	<input type="checkbox"/>	
Proven ability to provide robust and actionable options analysis, pragmatic solutions, advice and planning to enable clients to identify technically and economically viable investments for their businesses.	<input type="checkbox"/>	
Experience in using relevant tools and indicators such as: process integration (pinch analysis), marginal abatement cost curves (MACC), levelised cost of energy (LCOE) calculations.	<input type="checkbox"/>	
Proven ability to support identified options with robust capital and operating cost estimates, ideally by providing evidence of projects built delivering to estimates/business case outcomes.	<input type="checkbox"/>	
Proven ability to focus on short-term initiatives but equally on medium and long-term planning.	<input type="checkbox"/>	
Demonstrates the ability to apply an innovative perspective and to support a move from standard practices to this wider, strategic perspective.	<input type="checkbox"/>	
Evidence of extensive skills and experience in developing business plans and costing for industrial projects relating to energy emissions or usage, within an industrial, manufacturing or otherwise relevant context, including calculating key indicators such as: net present value (NPV), internal rate of return (IRR), levelised cost of energy (LCOE), marginal abatement cost (MAC).	<input type="checkbox"/>	
Robust and well substantiated example(s) of discounted cashflow analysis for a relevant project.	<input type="checkbox"/>	
Evidence of savings reports produced for clients.	<input type="checkbox"/>	
Clear evidence of familiarity with the New Zealand business financial and regulatory environment.	<input type="checkbox"/>	

If yes to all the above, ensure evidence is provided and proceed to Q8.4.

If no, seek a review from a SQP who has suitable qualifications of experience.

#### 8.4. SQP Sign Off –

**To be completed by SQP:** I hereby declare that the above and evidence provided is true and accurate and consider that I satisfy the requirements to be considered a SQP under the National Environmental Standard for Greenhouse Gas Emissions from Industrial Process Heat.

**Signature of SQP** \_\_\_\_\_

**Name** \_\_\_\_\_ **Date** \_\_\_\_\_

Please print full name of SQP

#### Notes:

- Regulation 14(5) of the National Environmental Standard for Greenhouse Gas Emissions from Industrial Process Heat allows a consent authority to consider whether a person is a suitably qualified person (SQP).
- We reserve the right to get emissions plan and applications reviewed, even if the emission plan has been prepared by a SQP.