



New Zealand Gazette

OF THURSDAY, 25 MARCH 2010

WELLINGTON: FRIDAY, 26 MARCH 2010 — ISSUE NO. 34

MINISTRY FOR THE ENVIRONMENT

NEW ZEALAND EMISSIONS TRADING SCHEME: INDUSTRIAL ALLOCATION NOTICES CALLING FOR DATA

PURSUANT TO SECTION 161D OF THE
CLIMATE CHANGE RESPONSE ACT 2002

This Supplement to the *New Zealand Gazette* contains 8 notices calling for data on the following activities (one notice for each activity):

1. Aluminium smelting
2. Production of carbamide (urea)
3. Production of chlorine gas and sodium hydroxide (caustic soda) solution
4. Production of glass containers
5. Production of high purity ethanol
6. Production of hydrogen peroxide
7. Production of burnt lime
8. Production of methanol

The notices contained in this supplement require information to be provided on emissions and revenue for the activity specified in each notice. This information is required by the Minister for Climate Change Issues in order to determine the emissions-intensity of each activity and the allocative baseline or baselines of the products of each activity.

Call for Provision of Data (Aluminium Smelting) Notice 2010

Pursuant to section 161D of the Climate Change Response Act 2002, I, Hon Nick Smith, Minister for Climate Change Issues, give the following notice requiring information on aluminium smelting to determine the emissions-intensity of this activity and the allocative baseline or baselines of the products of the activity.

Notice

1. Title and commencement—(1) This notice may be cited as the Call for Provision of Data (Aluminium Smelting) Notice 2010.

(2) This notice takes effect from and including 26 March 2010.

2. Interpretation—(1) Unless the context otherwise requires:

Act means the Climate Change Response Act 2002.

Activity outputs are the outputs used for the calculation of the revenue of the activity and mean the outputs specified in clause 2(2)(a) of this notice.

Bases of preparation means the form available at
www.climatechange.govt.nz/industrialallocation

Data collection rules means the methodologies for calculating revenue and emissions from the activity specified in Schedule 1 of this notice.

Declaration means the statement of declaration located at
www.climatechange.govt.nz/industrialallocation

Excluded emissions means the emissions specified in Schedule 3 of this notice.

Financial years means the financial years beginning on 1 July and ending on 30 June for each of the periods 2006/2007, 2007/2008 and 2008/2009 during which the person carried out the activity.

Included emissions means the emissions specified in Schedule 2 of this notice from the sources listed in Emissions Rule 1 of Schedule 1.

Product (basis of allocation) means tonnes of primary aluminium (Al) as weighed after electrolysis but before casting with a purity equal to or greater than 98 per cent, and which result from carrying out the activity as defined.

Specified Template means the table template located at
www.climatechange.govt.nz/industrialallocation

(2) **Activity** means the physical and chemical transformation of alumina (aluminium oxide, Al_2O_3) into saleable aluminium metal (Al)

where:

(a) the output of this activity is saleable aluminium metal.

(3) **Saleable** has its ordinary meaning as understood by participants in the relevant market, subject to subclauses (a) to (d):

(a) Saleable is an output produced to a level at which it would ordinarily be considered by participants in the relevant market:

(i) to be the output of the process; and

(ii) to have a commercial value as that output.

(b) A sub-standard product which is discarded is taken not to be saleable or of saleable quality.

(c) An output which is recycled back while carrying out the activity as defined to produce a new output is not saleable or of saleable quality.

(d) Material which is scrapped or lost before it is packaged as a product that is saleable or of saleable quality:

(i) is not saleable or of saleable quality; and

(ii) is not to be included in an amount of product (basis of allocation).

(4) Expressions defined in the Act have the same meaning in this notice as they do in the Act unless the context otherwise requires.

3. Data required to be provided—(1) Any person carrying out the activity on the date of this notice must provide to the Ministry for the Environment data for the financial years for the activity in the form of the specified template, calculated in accordance with the data collection rules, together with the completed declaration and bases of preparation.

(2) In calculating the data for the activity, the person must include only the included emissions and must exclude the excluded emissions.

4. Deadline for provision of data—The data required by clause 3 of this notice must be provided to the Ministry for the Environment within 60 working days of the date of this notice.

Schedule 1

Revenue Rules

1. Revenue must be calculated as the quantity of activity outputs, for each of the financial years, multiplied by an appropriate market price, exclusive of GST, for each activity output for each of the financial years.
2. Quantity of activity output(s) is either the direct measure of activity output or is calculated from units sold and changes in inventory. The same methodology must be used for all years.
3. The market price must be a 'plant gate' price for the activity output. It is the fair value of the product, as defined under the New Zealand Accounting Standard NZ IAS 18, adjusted for transport costs to reflect the market into which it is sold. It must be calculated for each of the financial years either from the revenue received from all external activity output sales during each of the financial years, divided by the number of units of external activity output sales during each of these years; or by using an observable market price for each of the financial years that is appropriate to the duration of time when the output was produced in those years. An observable market price must be based on a relevant price listed on an international exchange, a price obtained from an industry analyst's report or a price derived from government or industry body statistics.
4. Market price must be converted from foreign currencies to New Zealand dollars at the historical rate appropriate to the period of activity output.
5. A weight may be applied to the market price, as calculated in accordance with revenue rules 3 and 4, in each of the financial years. Where a weighting is used, a weight of 0.7 will be applied in the financial year with the highest market price and a weight of 1.15 will be applied in the other two financial years.

Emissions Rules

1. Data must be supplied for each financial year from only the following emissions sources, expressed in tonnes of CO₂ equivalent:
 - (a) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil as part of the activity;
 - (b) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil to generate steam that is used as part of the activity;
 - (c) the direct use of geothermal fluid as part of the activity, including the direct use of geothermal fluid to generate steam that is used as part of the activity;
 - (d) any of the activities listed in Part 4 of Schedule 3 of the Act carried out as part of the activity; and
 - (e) the use of electricity used as part of the activity.

2. Emissions must be calculated using the applicable formulae and emission factors specified in these data collection rules and in the specified template. Direct measures cannot be used as a substitute.
3. Emissions from the direct use of natural gas/coal as a feedstock must be calculated as zero when either (1) the feedstock is used to produce an obligation fuel defined in the Climate Change (Liquid Fossil Fuels) Regulations 2008, or (2) the production of the output is eligible to earn emission units under the Climate Change (Other Removal Activities) Regulations 2009.
4. Emissions for which no obligation exists under the Act due to an exemption made by Order in Council under section 60 of the Act must be calculated as zero.
5. Total emissions from a heat/steam plant must be allocated to an activity in proportion to its use of the output of the plant. Total emissions from a co-generation plant must be split between heat/steam and electricity emissions on the basis of relative efficiencies of production, using efficiency rates of 80% for steam and 35% for electricity, then the heat/steam emissions must be allocated to the activity in proportion to its use of the output of heat from the plant.

Emissions allocated to heat/steam production must be estimated using the following formula:

$$E_H = \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_p}} * E_T \quad \text{and} \quad E_p = E_T - E_H$$

Where:

E_H = emissions allocated to steam production

H = steam output (energy)

e_H = assumed efficiency of steam production

P = delivered electricity generation (energy)

e_p = assumed efficiency of electricity generation

E_T = total direct emissions of the CHP system

E_p = emissions allocated to electricity production

6. The following specific formulae must be used in estimating direct emissions:

Coal

Emissions = $(A_L \times CV_L \times EF_L) + (A_{SB} \times CV_{SB} \times EF_{SB}) + (A_B \times CV_B \times EF_B)$

where:

A = tonnes of coal consumed for different varieties, including L = lignite, SB = sub-bituminous, B = bituminous

CV = calorific value of the coal class used

EF = relevant emission factor for the relevant coal class.

Natural gas

Emissions = $A \times EF$

where:

A = consumption of natural gas (in terajoules, or tonnes if LPG)

EF = emission factor for natural gas (use either one for the appropriate field(s), if known, or the national average if the gas field(s) is not known).

Geothermal fluid

Emissions = $A \times EF$

where:

A = consumption of geothermal fluid (in tonnes)

EF = emission factor for geothermal fluid.

Used or waste oil

Emissions = $A \times CV \times EF$

where:

A = consumption of used or waste oil (in tonnes)

CV = calorific value of the used or waste oil

EF = emission factor for the used or waste oil.

7. Emissions from industrial processes must be calculated using the formulae set out in Part 3 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
8. The emission factors used in calculating emissions must be those listed in Schedule 2 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
9. Indirect emissions from electricity use must be calculated using the following formula:
Emissions = $A \times EAF$
where:
A = consumption of electricity (in MWh)
EAF = electricity allocation factor.
10. For eligibility purposes, electricity emissions must be estimated using an electricity allocation factor of 1 tonne of CO₂-e per megawatt hour of consumption.
11. For allocative baseline purposes electricity emissions must be estimated using an electricity allocation factor of 0.52 tonnes of CO₂-e per megawatt hour of consumption.
12. Best endeavours must be used in calculating emissions. Simplified and reasonable emission calculation methods of the person's own design can be used for specified small emissions sources that are either excluded or included emissions, and are, in aggregate, estimated to be no more than 5% of total emissions from the activity at the site, provided that a 5% change in total estimated emissions would not change the eligibility status of the activity, if the activity of the person was considered in isolation when making a decision about eligibility. All methods used must be disclosed in the bases of preparation.
13. All emissions associated with the activity must be counted, regardless of whether the output is of saleable quality.

Data Preparation Rules

1. The methods, assumptions and calculations used to produce the data must be disclosed in the bases of preparation along with the data in the specified template.
2. Where uncertainties arise when determining emission and revenue data, these uncertainties must be declared in the bases of preparation.

Schedule 2**Included emissions**

Emissions that must be included in any information provided in response to this notice are:

- (a) direct emissions from, and electricity use of, machinery, equipment and processes which are integral to, and essential for, the physical, chemical and/or biological transformation involved in the activity as described, including, for example:
 - machinery used to move materials within and as part of the activity
 - control rooms, laboratories, maintenance workshops
 - machinery used to create non-electrical energy for use in the activity as defined
 - the processing of by-products where they involve the recovery of materials for re-use within the activity or are necessary for the activity to proceed as defined
 - onsite processing of waste materials from the activity to comply with regulatory obligations;
- (b) the direct use of any coal, natural gas, geothermal fluid, used oil, or waste oil, or the use of electricity, to generate steam that is used as part of the activity as defined;
- (c) waste heat recovery that is part of the activity as defined;
- (d) electrolysis, including using a process commonly referred to as the Hall-Héroult Process;
- (e) alloying and casting of primary aluminium into saleable aluminium metal; and
- (f) the production of anodes.

Schedule 3**Excluded emissions**

Emissions that may not be included in any information provided in response to this notice are emissions resulting from:

- (a) the use of machinery and equipment, and other processes that are not integral to, nor essential to, the physical, chemical and/or biological transformation taking place when the activity as defined is carried out;
- (b) any extraction or production of raw materials that are subsequently used when the activity as defined is carried out;
- (c) the transportation of inputs used in the activity to storage at the location where the activity as defined is carried out;
- (d) the transportation of outputs of the activity from storage at the location where the activity as defined is carried out to another location;
- (e) the transportation of intermediate products between different locations where the activity as defined is carried out;

- (f) operations that are complementary to the activity as defined, including (but not limited to) packaging, head office operations, and administration and marketing (whether carried out at the same location where the activity is carried out or at a different location);
- (g) the generation of electricity at the location where the activity as defined is carried out;
- (h) the production of alumina (aluminium oxide, Al_2O_3);
- (i) the production of cathodes;
- (j) the production of alloying materials;
- (k) the smelting and associated casting of secondary aluminium metal (Al); and
- (l) further downstream processing of aluminium metal (Al) beyond the boundary of the activity.

Dated at Wellington this 26th day of March 2010.

HON NICK SMITH, Minister for Climate Change Issues.

Explanatory Note

This note is not part of the notice but is intended to indicate its general effect.

This notice, which comes into effect on 26 March 2010, requires any person carrying out aluminium smelting (as that activity is defined in the notice) to provide the information requested by the Minister in accordance with the data collection rules specified in the notice including only the emissions set out in Schedule 2 of the notice from the sources listed in Emissions Rule 1 of Schedule 1 of the notice, and excluding those emissions set out in Schedule 3 of the notice.

The information is being requested to assist the Minister to determine if the activity meets the criteria listed in section 161D(3)(a) of the Act.

The specified template, declaration and bases of preparation required by this notice, together with the guidance document for filling in these documents can be downloaded from
www.climatechange.govt.nz/industrialallocation

It is noted that for the purposes of supplying data in response to this notice submitters are required for allocative baseline purpose in relation to electricity emissions, to estimate emissions using an allocation factor of 0.52 tonnes of CO_2 -e per megawatt hour of consumption. However, the Minister has discretion under section 161C(4) of the Act to adjust the number of whole tonnes of included emissions provided by persons carrying out the activity after the Minister has taken into account any electricity-related contract in force at the date of this notice which affects the electricity cost increase that a person will face due to the obligation imposed by the Act on participants to surrender units, or any information relating to any such contracts. The Minister has issued the Call for the Provision of Electricity-Related Contracts and Related Information (Aluminium Smelting) Notice 2010 requesting electricity-related contracts in force at the date of that notice and information relating to such contracts.

The specified template, declaration and bases of preparation must be completed and returned to the Ministry for the Environment within 60 working days of the date of this notice. The Ministry would prefer to receive this information by email to industrialallocation@mfe.govt.nz. If you consider that providing the information by email would cause difficulties, you may return data on CD by mail or in person

to the Ministry for the Environment, 23 Kate Sheppard Place, Wellington. Original signed copies of the declaration must also be provided. Please contact the Ministry on 0800 499 700 for any further assistance.

While the notice does not require the source information and records on which the data in the specified template is based, it would be prudent to retain this information for a period of seven years. The Minister is able to request any further information that he considers necessary to enable the verification of the accuracy of the information provided under this notice.

Persons to whom this notice applies should note that, under section 161D(7) of the Act, failure without reasonable excuse to supply the data and information required by this notice will mean that if the activity is subsequently prescribed as an eligible industry activity, those persons (and associated persons) may not be eligible to be allocated New Zealand units in respect of that activity.

In addition, it is an offence to knowingly provide altered, false, incomplete or misleading information (section 132 of the Act) or, with the intent to deceive and for the purpose of obtaining a material benefit or avoiding a material detriment, to fail to provide information or to provide altered, false, incomplete or misleading information (section 133 of the Act).

Call for the Provision of Data (Production of Carbamide (Urea)) Notice

Pursuant to section 161D of the Climate Change Response Act 2002, I, Hon Nick Smith, Minister for Climate Change Issues, give the following notice requiring information on the Production of Carbamide (Urea) to determine the emissions-intensity of this activity and the allocative baseline or baselines of the products of the activity.

Notice

1. Title and commencement—(1) This notice may be cited as the Call for the Provision of Data (Production of Carbamide (Urea)) Notice 2010.

(2) This notice takes effect from and including 26 March 2010.

2. Interpretation—(1) Unless the context otherwise requires:

Act means the Climate Change Response Act 2002.

Activity outputs are the outputs used for the calculation of the revenue of the activity and mean the outputs specified in clauses 2(2)(a) and (b) of this notice.

Bases of preparation means the form available at

www.climatechange.govt.nz/industrialallocation

Data collection rules means the methodologies for data collection specified in Schedule 1 of this notice.

Declaration means the statement of declaration located at

www.climatechange.govt.nz/industrialallocation

Excluded emissions means the emissions specified in Schedule 3 of this notice.

Financial years means the financial years beginning on 1 July and ending on 30 June for each of the periods 2006/2007, 2007/2008 and 2008/2009 during which the person carried out the activity.

Included emissions means the emissions specified in Schedule 2 of this notice from the sources listed in Emissions Rule 1 of Schedule 1.

Product (basis of allocation) means the total tonnes of dry weight carbamide ($\text{CO}(\text{NH}_2)_2$, urea) that are:

- (a) produced by carrying on the activity; and
- (b) of saleable quality.

Specified Template means the table template located at

www.climatechange.govt.nz/industrialallocation

(2) **Activity** means the production of carbamide (urea) by the chemical transformation of hydrocarbons (or other hydrogen and carbon feedstocks) and nitrogen to produce carbamide solution ($\text{CO}(\text{NH}_2)_2(\text{aq})$, urea), where the concentration of carbamide ($\text{CO}(\text{NH}_2)_2$, urea) is greater than or equal to 80 per cent with respect to mass, and subsequent production of the following outputs:

- (a) carbamide solutions ($\text{CO}(\text{NH}_2)_2(\text{aq})$, urea); and/or
- (b) saleable granulated, prilled or other solid forms of carbamide ($\text{CO}(\text{NH}_2)_2(\text{s})$, urea).

(3) **Saleable** has its ordinary meaning as understood by participants in the relevant market, subject to subclauses (a) to (d):

- (a) Saleable is an output produced to a level at which it would ordinarily be considered by participants in the relevant market:
 - (i) to be the output of the process; and
 - (ii) to have a commercial value as that output.
- (b) A sub-standard product which is discarded is taken not to be saleable or of saleable quality.
- (c) An output which is recycled back while carrying out the activity as defined to produce a new output is not saleable or of saleable quality.
- (d) Material which is scrapped or lost before it is packaged as a product that is saleable or of saleable quality:
 - (i) is not saleable or of saleable quality; and
 - (ii) is not to be included in an amount of product (basis of allocation).

(4) Expressions defined in the Act have the same meaning in this notice as they do in the Act unless the context otherwise requires.

3. Data required to be provided—(1) Any person carrying out the activity on the date of this notice must provide to the Ministry for the Environment data for the financial years for the activity in the form of the specified template, calculated in accordance with the data collection rules, together with the completed declaration and bases of preparation.

(2) In calculating the data for the activity, the person must include only the included emissions and must exclude the excluded emissions.

4. Deadline for provision of data—The data required by clause 3 of this notice must be provided to the Ministry for the Environment within 30 working days of the date of this notice.

Schedule 1

Revenue Rules

1. Revenue must be calculated as the quantity of activity outputs, for each of the financial years, multiplied by an appropriate market price, exclusive of GST, for each activity output for each of the financial years.
2. Quantity of activity output(s) is either the direct measure of activity output or is calculated from units sold and changes in inventory. The same methodology must be used for all years.
3. The market price must be a 'plant gate' price for the activity output. It is the fair value of the product, as defined under the New Zealand Accounting Standard NZ IAS 18, adjusted for transport costs to reflect the market into which it is sold. It must be calculated for each of the financial years either from the revenue received from all external activity output sales during each of the financial years, divided by the number of units of external activity output sales during each of these years; or by using an observable market price for each of the financial years that is appropriate to the duration of time when the output was produced in those years. An observable market price must be based on a relevant price listed on an international exchange, a price obtained from an industry analyst's report or a price derived from government or industry body statistics.
4. Market price must be converted from foreign currencies to New Zealand dollars at the historical rate appropriate to the period of activity output.
5. A weight may be applied to the market price, as calculated in accordance with revenue rules 3 and 4, in each of the financial years. Where a weighting is used, a weight of 0.7 will be applied in the financial year with the highest market price and a weight of 1.15 will be applied in the other two financial years.

Emissions Rules

1. Data must be supplied for each financial year from only the following emissions sources, expressed in tonnes of CO₂ equivalent:
 - (a) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil as part of the activity;
 - (b) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil to generate steam that is used as part of the activity;
 - (c) the direct use of geothermal fluid as part of the activity, including the direct use of geothermal fluid to generate steam that is used as part of the activity;

- (d) any of the activities listed in Part 4 of Schedule 3 of the Act carried out as part of the activity; and
 - (e) the use of electricity used as part of the activity.
2. Emissions must be calculated using the applicable formulae and emission factors specified in these data collection rules and in the specified template. Direct measures cannot be used as a substitute.
 3. Emissions from the direct use of natural gas/coal as a feedstock must be calculated as zero when either (1) the feedstock is used to produce an obligation fuel defined in the Climate Change (Liquid Fossil Fuels) Regulations 2008, or (2) the production of the output is eligible to earn emission units under the Climate Change (Other Removal Activities) Regulations 2009.
 4. Emissions for which no obligation exists under the Act due to an exemption made by Order in Council under section 60 of the Act must be calculated as zero.
 5. Total emissions from a heat/steam plant must be allocated to an activity in proportion to its use of the output of the plant. Total emissions from a co-generation plant must be split between heat/steam and electricity emissions on the basis of relative efficiencies of production, using efficiency rates of 80% for steam and 35% for electricity, then the heat/steam emissions must be allocated to the activity in proportion to its use of the output of heat from the plant.

Emissions allocated to heat/steam production must be estimated using the following formula:

$$E_H = \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_P}} * E_T \quad \text{and} \quad E_P = E_T - E_H$$

Where:

E_H = emissions allocated to steam production

H = steam output (energy)

e_H = assumed efficiency of steam production

P = delivered electricity generation (energy)

e_P = assumed efficiency of electricity generation

E_T = total direct emissions of the CHP system

E_P = emissions allocated to electricity production

6. The following specific formulae must be used in estimating direct emissions:

Coal

Emissions = $(A_L \times CV_L \times EF_L) + (A_{SB} \times CV_{SB} \times EF_{SB}) + (A_B \times CV_B \times EF_B)$

where:

A = tonnes of coal consumed for different varieties, including L = lignite, SB = sub-bituminous, B = bituminous

CV = calorific value of the coal class used

EF = relevant emission factor for the relevant coal class.

Natural gas

Emissions = $A \times EF$

where:

A = consumption of natural gas (in terajoules, or tonnes if LPG)

EF = emission factor for natural gas (use either one for the appropriate field(s), if known, or the national average if the gas field(s) is not known).

Geothermal fluid

$$\text{Emissions} = A \times \text{EF}$$

where:

A = consumption of geothermal fluid (in tonnes)

EF = emission factor for geothermal fluid.

Used or waste oil

$$\text{Emissions} = A \times \text{CV} \times \text{EF}$$

where:

A = consumption of used or waste oil (in tonnes)

CV = calorific value of the used or waste oil

EF = emission factor for the used or waste oil.

7. Emissions from industrial processes must be calculated using the formulae set out in Part 3 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
8. The emission factors used in calculating emissions must be those listed in Schedule 2 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
9. Indirect emissions from electricity use must be calculated using the following formula:
$$\text{Emissions} = A \times \text{EAF}$$

where:
A = consumption of electricity (in MWh)
EAF = electricity allocation factor.
10. For eligibility purposes, electricity emissions must be estimated using an electricity allocation factor of 1 tonne of CO₂-e per megawatt hour of consumption.
11. For allocative baseline purposes, electricity emissions must be estimated using an electricity allocation factor of 0.52 tonnes of CO₂-e per megawatt hour of consumption.
12. Best endeavours must be used in calculating emissions. Simplified and reasonable emission calculation methods of the person's own design can be used for specified small emissions sources that are either excluded or included emissions, and are, in aggregate, estimated to be no more than 5% of total emissions from the activity at the site, provided that a 5% change in total estimated emissions would not change the eligibility status of the activity, if the activity of the person was considered in isolation when making a decision about eligibility. All methods used must be disclosed in the bases of preparation.
13. All emissions associated with the activity must be counted, regardless of whether the output is of saleable quality.

Data Preparation Rules

1. The methods, assumptions and calculations used to produce the data must be disclosed in the bases of preparation along with the data in the specified template.
2. Where uncertainties arise when determining emission and revenue data, these uncertainties must be declared in the bases of preparation.

Schedule 2**Included emissions**

Emissions that must be included in any information provided in response to this notice are:

- (a) direct emissions from, and electricity use of, machinery, equipment and processes which are integral to, and essential for, the physical, chemical and/or biological transformation involved in the activity as described, including, for example:
 - machinery used to move materials within and as part of the activity, including mobile equipment
 - control rooms, laboratories, maintenance workshops
 - machinery used to create non-electrical energy for use in the activity as defined
 - the processing of by-products where they involve the recovery of materials for re-use within the activity or are necessary for the activity to proceed as defined
 - onsite processing of waste materials from the activity to comply with regulatory obligations;
- (b) the direct use of any coal, natural gas, geothermal fluid, used oil, or waste oil, or the use of electricity, to generate steam that is used as part of the activity as defined;
- (c) waste heat recovery that is part of the activity as defined;
- (d) chemical transformation of a hydrocarbon feedstock (or other hydrogen feedstock) to hydrogen (H₂);
- (e) the compression of air that is used as part of the activity as defined;
- (f) the extraction of nitrogen from air, where the nitrogen is used as part of the activity as defined;
- (g) the extraction of carbon dioxide gas (CO₂) prior to the synthesis of ammonia gas (NH₃);
- (h) the liquefaction of anhydrous ammonia (NH₃);
- (i) recycling of unreacted/intermediary ammonia synthesis gases;
- (j) production of nitrogen and oxygen for consumption in the activity as defined;
- (k) solvent recovery system (or equivalent) used to recover the un-reacted or intermediary gases;
- (l) compression of anhydrous ammonia (NH₃) and carbon dioxide (CO₂) gases prior to urea reactor; and
- (m) conversion of carbamide solution with a concentration of carbamide (CO(NH₂)₂, urea) greater than or equal to 80 per cent with respect to mass to either granulated, prilled or other solid product form, or aqueous solution.

Schedule 3**Excluded emissions**

Emissions that may not be included in any information provided in response to this notice are emissions resulting from:

- (a) the use of machinery and equipment, and other processes that are not integral to, nor essential to, the physical, chemical and/or biological transformation taking place when the activity as defined is carried out;
- (b) any extraction or production of raw materials that are subsequently used when the activity as defined is carried out;
- (c) the transportation of inputs used in the activity to storage at the location where the activity as defined is carried out;
- (d) the transportation of outputs of the activity from storage at the location where the activity as defined is carried out to another location;
- (e) the transportation of intermediate products between different location where the activity as defined is carried out;
- (f) operations that are complementary to the activity as defined, including (but not limited to) packaging, head office operations, and administration and marketing (whether carried out at the same location where the activity is carried out or at a different location); and
- (g) the generation of electricity at the location where the activity as defined is carried out.

Dated at Wellington this 26th day of March 2010.

HON NICK SMITH, Minister for Climate Change Issues.

Explanatory Note

This note is not part of the notice but is intended to indicate its general effect.

This notice, which comes into effect on 26 March 2010, requires any person carrying out the production of carbamide (urea) (as that activity is defined in the notice) to provide the information requested by the Minister in accordance with the data collection rules specified in the notice including only the emissions set out in Schedule 2 of the notice from the sources listed in Emissions Rule 1 of Schedule 1 of the notice, and excluding those emissions set out in Schedule 3 of the notice.

The information is being requested to assist the Minister to determine if the activity meets the criteria listed in section 161D(3)(a) of the Act.

The specified template, declaration and bases of preparation required by this notice, together with the guidance document for filling in these documents can be downloaded from
www.climatechange.govt.nz/industrialallocation

The specified template, declaration and bases of preparation must be completed and returned to the Ministry for the Environment within 30 working days of the date of this notice. The Ministry would prefer to receive this information by email to industrialallocation@mfe.govt.nz. If you consider that providing the information by email would cause difficulties, you may return data on CD by mail or in person to the Ministry for the Environment, 23 Kate Sheppard Place, Wellington. Original signed copies of the declaration must also be provided. Please contact the Ministry on 0800 499 700 for any further assistance.

While the notice does not require the source information and records on which the data in the specified template is based, it would be prudent to retain this information for a period of seven years. The Minister is able to request any further information that he considers necessary to enable the verification of the accuracy of the information provided under this notice.

Persons to whom this notice applies should note that, under section 161D(7) of the Act, failure without reasonable excuse to supply the data and information required by this notice will mean that if the activity is subsequently prescribed as an eligible industry activity, those persons (and associated persons) may not be eligible to be allocated New Zealand units in respect of that activity.

In addition, it is an offence to knowingly provide altered, false, incomplete or misleading information (section 132 of the Act) or, with the intent to deceive and for the purpose of obtaining a material benefit or avoiding a material detriment, to fail to provide information or to provide altered, false, incomplete or misleading information (section 133 of the Act).

**Call for the Provision of Data (Production of Chlorine Gas and Sodium Hydroxide
(Caustic Soda) Solution) Notice 2010**

Pursuant to section 161D of the Climate Change Response Act 2002, I, Hon Nick Smith, Minister for Climate Change Issues, give the following notice requiring information on the Production of Chlorine Gas and Sodium Hydroxide (Caustic Soda) Solution to determine the emissions-intensity of this activity and the allocative baseline or baselines of the products of the activity.

Notice

1. Title and commencement—(1) This notice may be cited as the Call for the Provision of Data (Production of Chlorine Gas and Sodium Hydroxide (Caustic Soda) Solution) Notice 2010.

(2) This notice takes effect from and including 26 March 2010.

2. Interpretation—(1) Unless the context otherwise requires:

Act means the Climate Change Response Act 2002.

Activity outputs are the outputs used for the calculation of the revenue of the activity and mean the outputs specified in clauses 2(2)(a) and (b) of this notice.

Bases of preparation means the form available at
www.climatechange.govt.nz/industrialallocation

Data collection rules means the methodologies for data collection specified in Schedule 1 of this notice.

Declaration means the statement of declaration located at
www.climatechange.govt.nz/industrialallocation

Excluded emissions means the emissions specified in Schedule 3 of this notice.

Financial years means the financial years beginning on 1 July and ending on 30 June for each of the periods 2006/2007, 2007/2008 and 2008/2009 during which the person carried out the activity.

Included emissions means the emissions specified in Schedule 2 of this notice from the sources listed in Emissions Rule 1 of Schedule 1.

Product (basis of allocation) means the total tonnes of 100 per cent equivalent dry weight sodium hydroxide (NaOH, caustic soda) that are:

- (a) produced by carrying on the activity;
- (b) not recycled back into the activity; and
- (c) of saleable quality.

Specified Template means the table template located at
www.climatechange.govt.nz/industrialallocation

(2) **Activity** means the production of chlorine gas and sodium hydroxide (caustic soda) solution by the chemical transformation of sodium chloride solution (NaCl(aq), brine) to chlorine (Cl₂(l,g)) and sodium hydroxide solution (NaOH(aq), caustic soda solution) where the sodium hydroxide (NaOH) production is 1:1.13 times the production of chlorine (Cl₂) by mass, where the outputs include:

- (a) chlorine (Cl₂(l,g)); and
- (b) sodium hydroxide solution (NaOH(aq), caustic soda solution), which must have a concentration of sodium hydroxide (NaOH) equal to or greater than 14 per cent with respect to mass.

The chemical reaction involved in this chemical transformation is:



(3) **Saleable** has its ordinary meaning as understood by participants in the relevant market, subject to subclauses (a) to (d):

- (a) Saleable is an output produced to a level at which it would ordinarily be considered by participants in the relevant market:
 - (i) to be the output of the process; and
 - (ii) to have a commercial value as that output.
- (b) A sub-standard product which is discarded is taken not to be saleable or of saleable quality.
- (c) An output which is recycled back while carrying out the activity as defined to produce a new output is not saleable or of saleable quality.

- (d) Material which is scrapped or lost before it is packaged as a product that is saleable or of saleable quality:
 - (i) is not saleable or of saleable quality; and
 - (ii) is not to be included in an amount of product (basis of allocation).
- (4) Expressions defined in the Act have the same meaning in this notice as they do in the Act unless the context otherwise requires.

3. Data required to be provided—(1) Any person carrying out the activity on the date of this notice must provide to the Ministry for the Environment data for the financial years for the activity in the form of the specified template, calculated in accordance with the data collection rules, together with the completed declaration and bases of preparation.

(2) In calculating the data for the activity, the person must include only the included emissions and must exclude the excluded emissions.

4. Deadline for provision of data—The data required by clause 3 of this notice must be provided to the Ministry for the Environment within 40 working days of the date of this notice.

Schedule 1

Revenue Rules

1. Revenue must be calculated as the quantity of activity outputs, for each of the financial years, multiplied by an appropriate market price, exclusive of GST, for each activity output for each of the financial years.
2. Quantity of activity output(s) is either the direct measure of activity output or is calculated from units sold and changes in inventory. The same methodology must be used for all years.
3. The market price must be a 'plant gate' price for the activity output. It is the fair value of the product, as defined under the New Zealand Accounting Standard NZ IAS 18, adjusted for transport costs to reflect the market into which it is sold. It must be calculated for each of the financial years either from the revenue received from all external activity output sales during each of the financial years, divided by the number of units of external activity output sales during each of these years; or by using an observable market price for each of the financial years that is appropriate to the duration of time when the output was produced in those years. An observable market price must be based on a relevant price listed on an international exchange, a price obtained from an industry analyst's report or a price derived from government or industry body statistics.
4. Market price must be converted from foreign currencies to New Zealand dollars at the historical rate appropriate to the period of activity output.
5. A weight may be applied to the market price, as calculated in accordance with revenue rules 3 and 4, in each of the financial years. Where a weighting is used, a weight of 0.7 will be applied in the financial year with the highest market price and a weight of 1.15 will be applied in the other two financial years.

Emissions Rules

1. Data must be supplied for each financial year from only the following emissions sources, expressed in tonnes of CO₂ equivalent:
 - (a) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil as part of the activity;
 - (b) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil to generate steam that is used as part of the activity;

- (c) the direct use of geothermal fluid as part of the activity, including the direct use of geothermal fluid to generate steam that is used as part of the activity;
 - (d) any of the activities listed in Part 4 of Schedule 3 of the Act carried out as part of the activity; and
 - (e) the use of electricity used as part of the activity.
2. Emissions must be calculated using the applicable formulae and emission factors specified in these data collection rules and in the specified template. Direct measures cannot be used as a substitute.
 3. Emissions from the direct use of natural gas/coal as a feedstock must be calculated as zero when either (1) the feedstock is used to produce an obligation fuel defined in the Climate Change (Liquid Fossil Fuels) Regulations 2008, or (2) the production of the output is eligible to earn emission units under the Climate Change (Other Removal Activities) Regulations 2009.
 4. Emissions for which no obligation exists under the Act due to an exemption made by Order in Council under section 60 of the Act must be calculated as zero.
 5. Total emissions from a heat/steam plant must be allocated to an activity in proportion to its use of the output of the plant. Total emissions from a co-generation plant must be split between heat/steam and electricity emissions on the basis of relative efficiencies of production, using efficiency rates of 80% for steam and 35% for electricity, then the heat/steam emissions must be allocated to the activity in proportion to its use of the output of heat from the plant.

Emissions allocated to heat/steam production must be estimated using the following formula:

$$E_H = \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_P}} * E_T \quad \text{and} \quad E_P = E_T - E_H$$

Where:

E_H = emissions allocated to steam production

H = steam output (energy)

e_H = assumed efficiency of steam production

P = delivered electricity generation (energy)

e_P = assumed efficiency of electricity generation

E_T = total direct emissions of the CHP system

E_P = emissions allocated to electricity production

6. The following specific formulae must be used in estimating direct emissions:

Coal

Emissions = $(A_L \times CV_L \times EF_L) + (A_{SB} \times CV_{SB} \times EF_{SB}) + (A_B \times CV_B \times EF_B)$

where:

A = tonnes of coal consumed for different varieties, including L = lignite, SB = sub-bituminous, B = bituminous

CV = calorific value of the coal class used

EF = relevant emission factor for the relevant coal class.

Natural gas

$$\text{Emissions} = A \times EF$$

where:

A = consumption of natural gas (in terajoules, or tonnes if LPG)

EF = emission factor for natural gas (use either one for the appropriate field(s), if known, or the national average if the gas field(s) is not known).

Geothermal fluid

$$\text{Emissions} = A \times EF$$

where:

A = consumption of geothermal fluid (in tonnes)

EF = emission factor for geothermal fluid.

Used or waste oil

$$\text{Emissions} = A \times CV \times EF$$

where:

A = consumption of used or waste oil (in tonnes)

CV = calorific value of the used or waste oil

EF = emission factor for the used or waste oil.

7. Emissions from industrial processes must be calculated using the formulae set out in Part 3 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
8. The emission factors used in calculating emissions must be those listed in Schedule 2 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
9. Indirect emissions from electricity use must be calculated using the following formula:
$$\text{Emissions} = A \times EAF$$

where:

A = consumption of electricity (in MWh)

EAF = electricity allocation factor.
10. For eligibility purposes, electricity emissions must be estimated using an electricity allocation factor of 1 tonne of CO₂-e per megawatt hour of consumption.
11. For allocative baseline purposes, electricity emissions must be estimated using an electricity allocation factor of 0.52 tonnes of CO₂-e per megawatt hour of consumption.
12. Best endeavours must be used in calculating emissions. Simplified and reasonable emission calculation methods of the person's own design can be used for specified small emissions sources that are either excluded or included emissions, and are, in aggregate, estimated to be no more than 5% of total emissions from the activity at the site, provided that a 5% change in total estimated emissions would not change the eligibility status of the activity, if the activity of the person was considered in isolation when making a decision about eligibility. All methods used must be disclosed in the bases of preparation.
13. All emissions associated with the activity must be counted, regardless of whether the output is of saleable quality.

Data Preparation Rules

1. The methods, assumptions and calculations used to produce the data must be disclosed in the bases of preparation along with the data in the specified template.

2. Where uncertainties arise when determining emission and revenue data, these uncertainties must be declared in the bases of preparation.

Schedule 2

Included emissions

Emissions that must be included in any information provided in response to this notice are:

- (a) direct emissions from, and electricity use of, machinery, equipment and processes which are integral to, and essential for, the physical, chemical and/or biological transformation involved in the activity as described, including, for example:
 - machinery used to move materials within and as part of the activity
 - control rooms, laboratories, maintenance workshops
 - machinery used to create non-electrical energy for use in the activity as defined
 - the processing of by-products where they involve the recovery of materials for re-use within the activity or are necessary for the activity to proceed as defined
 - onsite processing of waste materials from the activity to comply with regulatory obligations;
- (b) the direct use of any coal, natural gas, geothermal fluid, used oil, or waste oil, or the use of electricity, to generate steam that is used as part of the activity as defined;
- (c) waste heat recovery that is part of the activity as defined;
- (d) production of nitrogen for consumption in the activity as defined;
- (e) liquefaction of the chlorine gas; and
- (f) drying of the caustic soda solution to saleable concentration.

Schedule 3

Excluded emissions

Emissions that may not be included in any information provided in response to this notice are emissions resulting from:

- (a) the use of machinery and equipment, and other processes that are not integral to, nor essential to, the physical, chemical and/or biological transformation taking place when the activity as defined is carried out;
- (b) any extraction or production of raw materials that are subsequently used when the activity as defined is carried out;
- (c) the transportation of inputs used in the activity to storage at the location where the activity as defined is carried out;
- (d) the transportation of outputs of the activity from storage at the location where the activity as defined is carried out to another location;

- (e) the transportation of intermediate products between different location where the activity as defined is carried out;
- (f) operations that are complementary to the activity as defined, including (but not limited to) packaging, head office operations, and administration and marketing (whether carried out at the same location where the activity is carried out or at a different location); and
- (g) the generation of electricity at the location where the activity as defined is carried out.

Dated at Wellington this 26th day of March 2010.

HON NICK SMITH, Minister for Climate Change Issues.

Explanatory note

This note is not part of the notice but is intended to indicate its general effect.

This notice, which comes into effect on 26 March 2010, requires any person carrying out the production of chlorine gas and sodium hydroxide (caustic soda) solution and (as that activity is defined in the notice) to provide the information requested by the Minister in accordance with the data collection rules specified in the notice including only the emissions set out in Schedule 2 of the notice from the sources listed in Emissions Rule 1 of Schedule 1 of the notice, and excluding those emissions set out in Schedule 3 of the notice.

The information is being requested to assist the Minister to determine if the activity meets the criteria listed in section 161D(3)(a) of the Act.

The specified template, declaration and bases of preparation required by this notice, together with the guidance document for filling in these documents can be downloaded from
www.climatechange.govt.nz/industrialallocation

The specified template, declaration and bases of preparation must be completed and returned to the Ministry for the Environment within 40 working days of the date of this notice. The Ministry would prefer to receive this information by email to industrialallocation@mfe.govt.nz. If you consider that providing the information by email would cause difficulties, you may return data on CD by mail or in person to the Ministry for the Environment, 23 Kate Sheppard Place, Wellington. Original signed copies of the declaration must also be provided. Please contact the Ministry on 0800 499 700 for any further assistance.

While the notice does not require the source information and records on which the data in the specified template is based, it would be prudent to retain this information for a period of seven years. The Minister is able to request any further information that he considers necessary to enable the verification of the accuracy of the information provided under this notice.

Persons to whom this notice applies should note that, under section 161D(7) of the Act, failure without reasonable excuse to supply the data and information required by this notice will mean that if the activity is subsequently prescribed as an eligible industry activity, those persons (and associated persons) may not be eligible to be allocated New Zealand units in respect of that activity.

In addition, it is an offence to knowingly provide altered, false, incomplete or misleading information (section 132 of the Act) or, with the intent to deceive and for the purpose of obtaining a material benefit or avoiding a material detriment, to fail to provide information or to provide altered, false, incomplete or misleading information (section 133 of the Act).

Call for the Provision of Data (Production of Glass Containers) Notice 2010

Pursuant to section 161D of the Climate Change Response Act 2002, I, Hon Nick Smith, Minister for Climate Change Issues, give the following notice requiring information on the Production of Glass Containers to determine the emissions-intensity of this activity and the allocative baseline or baselines of the products of the activity.

Notice

1. Title and commencement—(1) This notice may be cited as the Call for the Provision of Data (Production of Glass Containers) Notice 2010.

(2) This notice takes effect from and including 26 March 2010.

2. Interpretation—(1) Unless the context otherwise requires:

Act means the Climate Change Response Act 2002.

Activity outputs are the outputs used for the calculation of the revenue of the activity and mean the outputs specified in clause 2(2)(a) of this notice.

Bases of preparation means the form available at
www.climatechange.govt.nz/industrialallocation

Data collection rules means the methodologies for data collection specified in Schedule 1 of this notice.

Declaration means the statement of declaration located at
www.climatechange.govt.nz/industrialallocation

Excluded emissions means the emissions specified in Schedule 3 of this notice.

Financial years means the financial years beginning on 1 July and ending on 30 June for each of the periods 2006/2007, 2007/2008 and 2008/2009 during which the person carried out the activity.

Included emissions means the emissions specified in Schedule 2 of this notice from the sources listed in Emissions Rule 1 of Schedule 1.

Product (basis of allocation) means the total tonnes of blown and pressed glass containers that are:

- (a) produced by carrying on the activity; and
- (b) of saleable quality.

Specified Template means the table template located at
www.climatechange.govt.nz/industrialallocation

(2) **Activity** means the production of glass containers by the physical and chemical transformation of silica (silicon dioxide (SiO₂)) and other raw and recycled materials (such as cullet) to produce blown or pressed glass containers, by controlled melting and forming in a contiguous process where the outputs include:

- (a) blown and pressed glass containers.

(3) **Saleable** has its ordinary meaning as understood by participants in the relevant market, subject to subclauses (a) to (d):

- (a) Saleable is an output produced to a level at which it would ordinarily be considered by participants in the relevant market:
 - (i) to be the output of the process; and
 - (ii) to have a commercial value as that output.
- (b) A sub-standard product which is discarded is taken not to be saleable or of saleable quality.
- (c) An output which is recycled back while carrying out the activity as defined to produce a new output is not saleable or of saleable quality.
- (d) Material which is scrapped or lost before it is packaged as a product that is saleable or of saleable quality:
 - (i) is not saleable or of saleable quality; and
 - (ii) is not to be included in an amount of product (basis of allocation).

(4) Expressions defined in the Act have the same meaning in this notice as they do in the Act unless the context otherwise requires.

3. Data required to be provided—(1) Any person carrying out the activity on the date of this notice must provide to the Ministry for the Environment data for the financial years for the activity in the form of the specified template, calculated in accordance with the data collection rules, together with the completed declaration and bases of preparation.

(2) In calculating the data for the activity, the person must include only the included emissions and must exclude the excluded emissions.

4. Deadline for provision of data—The data required by clause 3 of this notice must be provided to the Ministry for the Environment within 30 working days of the date of this notice.

Schedule 1

Revenue Rules

1. Revenue must be calculated as the quantity of activity outputs, for each of the financial years, multiplied by an appropriate market price, exclusive of GST, for each activity output for each of the financial years.
2. Quantity of activity output(s) is either the direct measure of activity output or is calculated from units sold and changes in inventory. The same methodology must be used for all years.
3. The market price must be a 'plant gate' price for the activity output. It is the fair value of the product, as defined under the New Zealand Accounting Standard NZ IAS 18, adjusted for transport costs to reflect the market into which it is sold. It must be calculated for each of the financial years either from the revenue received from all external activity output sales during each of the financial years, divided by the number of units of external activity output sales during each of these years; or by using an observable market price for each of the financial years that is appropriate to the duration of time when the output was produced in those years. An observable market price must be based on a relevant price listed on an international exchange, a price obtained from an industry analyst's report or a price derived from government or industry body statistics.
4. Market price must be converted from foreign currencies to New Zealand dollars at the historical rate appropriate to the period of activity output.
5. A weight may be applied to the market price, as calculated in accordance with revenue rules 3 and 4, in each of the financial years. Where a weighting is used, a weight of 0.7 will be applied in the financial year with the highest market price and a weight of 1.15 will be applied in the other two financial years.

Emissions Rules

1. Data must be supplied for each financial year from only the following emissions sources, expressed in tonnes of CO₂ equivalent:
 - (a) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil as part of the activity;
 - (b) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil to generate steam that is used as part of the activity;
 - (c) the direct use of geothermal fluid as part of the activity, including the direct use of geothermal fluid to generate steam that is used as part of the activity;
 - (d) any of the activities listed in Part 4 of Schedule 3 of the Act carried out as part of the activity; and
 - (e) the use of electricity used as part of the activity.

2. Emissions must be calculated using the applicable formulae and emission factors specified in these data collection rules and in the specified template. Direct measures cannot be used as a substitute.
3. Emissions from the direct use of natural gas/coal as a feedstock must be calculated as zero when either (1) the feedstock is used to produce an obligation fuel defined in the Climate Change (Liquid Fossil Fuels) Regulations 2008, or (2) the production of the output is eligible to earn emission units under the Climate Change (Other Removal Activities) Regulations 2009.
4. Emissions for which no obligation exists under the Act due to an exemption made by Order in Council under section 60 of the Act must be calculated as zero.
5. Total emissions from a heat/steam plant must be allocated to an activity in proportion to its use of the output of the plant. Total emissions from a co-generation plant must be split between heat/steam and electricity emissions on the basis of relative efficiencies of production, using efficiency rates of 80% for steam and 35% for electricity, then the heat/steam emissions must be allocated to the activity in proportion to its use of the output of heat from the plant.

Emissions allocated to heat/steam production must be estimated using the following formula:

$$E_H = \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_p}} * E_T \quad \text{and} \quad E_p = E_T - E_H$$

Where:

E_H = emissions allocated to steam production

H = steam output (energy)

e_H = assumed efficiency of steam production

P = delivered electricity generation (energy)

e_p = assumed efficiency of electricity generation

E_T = total direct emissions of the CHP system

E_p = emissions allocated to electricity production

6. The following specific formulae must be used in estimating direct emissions:

Coal

Emissions = $(A_L \times CV_L \times EF_L) + (A_{SB} \times CV_{SB} \times EF_{SB}) + (A_B \times CV_B \times EF_B)$

where:

A = tonnes of coal consumed for different varieties, including L = lignite, SB = sub-bituminous, B = bituminous

CV = calorific value of the coal class used

EF = relevant emission factor for the relevant coal class.

Natural gas

Emissions = $A \times EF$

where:

A = consumption of natural gas (in terajoules, or tonnes if LPG)

EF = emission factor for natural gas (use either one for the appropriate field(s), if known, or the national average if the gas field(s) is not known).

Geothermal fluid

$$\text{Emissions} = A \times \text{EF}$$

where:

A = consumption of geothermal fluid (in tonnes)

EF = emission factor for geothermal fluid.

Used or waste oil

$$\text{Emissions} = A \times \text{CV} \times \text{EF}$$

where:

A = consumption of used or waste oil (in tonnes)

CV = calorific value of the used or waste oil

EF = emission factor for the used or waste oil.

7. Emissions from industrial processes must be calculated using the formulae set out in Part 3 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
8. The emission factors used in calculating emissions must be those listed in Schedule 2 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
9. Indirect emissions from electricity use must be calculated using the following formula:
$$\text{Emissions} = A \times \text{EAF}$$

where:

A = consumption of electricity (in MWh)

EAF = electricity allocation factor.
10. For eligibility purposes, electricity emissions must be estimated using an electricity allocation factor of 1 tonne of CO₂-e per megawatt hour of consumption.
11. For allocative baseline purposes, electricity emissions must be estimated using an electricity allocation factor of 0.52 tonnes of CO₂-e per megawatt hour of consumption.
12. Best endeavours must be used in calculating emissions. Simplified and reasonable emission calculation methods of the person's own design can be used for specified small emissions sources that are either excluded or included emissions, and are, in aggregate, estimated to be no more than 5% of total emissions from the activity at the site, provided that a 5% change in total estimated emissions would not change the eligibility status of the activity, if the activity of the person was considered in isolation when making a decision about eligibility. All methods used must be disclosed in the bases of preparation.
13. All emissions associated with the activity must be counted, regardless of whether the output is of saleable quality.

Data Preparation Rules

1. The methods, assumptions and calculations used to produce the data must be disclosed in the bases of preparation along with the data in the specified template.
2. Where uncertainties arise when determining emission and revenue data, these uncertainties must be declared in the bases of preparation.

Schedule 2**Included emissions**

Emissions that must be included in any information provided in response to this notice are:

- (a) direct emissions from, and electricity use of, machinery, equipment and processes which are integral to, and essential for, the physical, chemical and/or biological transformation involved in the activity as described, including, for example:
 - machinery used to move materials within and as part of the activity
 - control rooms, laboratories, maintenance workshops
 - machinery used to create non-electrical energy for use in the activity as defined
 - the processing of by-products where they involve the recovery of materials for re-use within the activity or are necessary for the activity to proceed as defined
 - onsite processing of waste materials from the activity to comply with regulatory obligations;
- (b) the direct use of any coal, natural gas, geothermal fluid, used oil, or waste oil, or the use of electricity, to generate steam that is used as part of the activity as defined; and
- (c) waste heat recovery that is part of the activity as defined.

Schedule 3**Excluded emissions**

Emissions that may not be included in any information provided in response to this notice are emissions resulting from:

- (a) the use of machinery and equipment, and other processes that are not integral to, nor essential to, the physical, chemical and/or biological transformation taking place when the activity as defined is carried out;
- (b) any extraction or production of raw materials that are subsequently used when the activity as defined is carried out;
- (c) the transportation of inputs used in the activity to storage at the location where the activity as defined is carried out;
- (d) the transportation of outputs of the activity from storage at the location where the activity as defined is carried out to another location;
- (e) the transportation of intermediate products between different location where the activity as defined is carried out;
- (f) operations that are complementary to the activity as defined, including (but not limited to) packaging, head office operations, and administration and marketing (whether carried out at the same location where the activity is carried out or at a different location);
- (g) the generation of electricity at the location where the activity as defined is carried out;

- (h) collection of external recycled cullet from a location that is not the same as the activity and the subsequent processing and transport of the cullet not at the same location as the activity; and
- (i) secondary finishing of glass containers such as printing / labelling, treatment for chemical resistance and coating.

Dated at Wellington this 26th day of March 2010.

HON NICK SMITH, Minister for Climate Change Issues.

Explanatory note

This note is not part of the notice but is intended to indicate its general effect.

This notice, which comes into effect on 26 March 2010, requires any person carrying out the production of glass containers (as that activity is defined in the notice) to provide the information requested by the Minister in accordance with the data collection rules specified in the notice including only the emissions set out in Schedule 2 of the notice from the sources listed in Emissions Rule 1 of Schedule 1 of the notice, and excluding those emissions set out in Schedule 3 of the notice.

The information is being requested to assist the Minister to determine if the activity meets the criteria listed in section 161D(3)(a) of the Act.

The specified template, declaration and bases of preparation required by this notice, together with the guidance document for filling in these documents can be downloaded from
www.climatechange.govt.nz/industrialallocation

The specified template, declaration and bases of preparation must be completed and returned to the Ministry for the Environment within 30 working days of the date of this notice. The Ministry would prefer to receive this information by email to industrialallocation@mfe.govt.nz. If you consider that providing the information by email would cause difficulties, you may return data on CD by mail or in person to the Ministry for the Environment, 23 Kate Sheppard Place, Wellington. Original signed copies of the declaration must also be provided. Please contact the Ministry on 0800 499 700 for any further assistance.

While the notice does not require the source information and records on which the data in the specified template is based, it would be prudent to retain this information for a period of seven years. The Minister is able to request any further information that he considers necessary to enable the verification of the accuracy of the information provided under this notice.

Persons to whom this notice applies should note that, under section 161D(7) of the Act, failure without reasonable excuse to supply the data and information required by this notice will mean that if the activity is subsequently prescribed as an eligible industry activity, those persons (and associated persons) may not be eligible to be allocated New Zealand units in respect of that activity.

In addition, it is an offence to knowingly provide altered, false, incomplete or misleading information (section 132 of the Act) or, with the intent to deceive and for the purpose of obtaining a material benefit or avoiding a material detriment, to fail to provide information or to provide altered, false, incomplete or misleading information (section 133 of the Act).

Call for the Provision of Data (Production of High Purity Ethanol) Notice 2010

Pursuant to section 161D of the Climate Change Response Act 2002, I, Hon Nick Smith, Minister for Climate Change Issues, give the following notice requiring information on the Production of High Purity Ethanol to determine the emissions-intensity of this activity and the allocative baseline or baselines of the products of the activity.

Notice

1. Title and commencement—(1) This notice may be cited as the Call for the Provision of Data (Production of High Purity Ethanol) Notice 2010.

(2) This notice takes effect from and including 26 March 2010.

2. Interpretation—(1) Unless the context otherwise requires:

Act means the Climate Change Response Act 2002.

Activity outputs are the outputs used for the calculation of the revenue of the activity and mean the outputs specified in clause 2(2)(a) of this notice.

Bases of preparation means the form available at

www.climatechange.govt.nz/industrialallocation

Data collection rules means the methodologies for data collection specified in Schedule 1 of this notice.

Declaration means the statement of declaration located at

www.climatechange.govt.nz/industrialallocation

Excluded emissions means the emissions specified in Schedule 3 of this notice.

Financial years means the financial years beginning on 1 July and ending on 30 June for each of the periods 2006/2007, 2007/2008 and 2008/2009 during which the person carried out the activity.

Included emissions means the emissions specified in Schedule 2 of this notice from the sources listed in Emissions Rule 1 of Schedule 1.

Product (basis of allocation) means the total kilolitres of 100 per cent ethanol (C₂H₅OH) equivalent at 20°C assuming a density of ethanol (C₂H₅OH) of 789.24 kg/m³ at 20°C that are:

(a) produced by carrying on the activity; and

(b) of saleable quality.

Specified Template means the table template located at

www.climatechange.govt.nz/industrialallocation

(2) **Activity** means the production of high purity ethanol by the chemical transformation of fermentable sugars (such as C₆H₁₂O₆ or C₅H₁₀O₅ or C₁₂H₂₂O₁₁ or C₁₈H₃₂O₁₆) to ethanol (C₂H₅OH) and the subsequent purification process to obtain a solution of high purity ethanol where the outputs include:

(a) high purity ethanol, which must have a concentration of ethanol (C₂H₅OH) equal to or greater than 95 per cent with respect to volume.

(3) **Saleable** has its ordinary meaning as understood by participants in the relevant market, subject to subclauses (a) to (d):

(a) Saleable is an output produced to a level at which it would ordinarily be considered by participants in the relevant market:

(i) to be the output of the process; and

(ii) to have a commercial value as that output.

(b) A sub-standard product which is discarded is taken not to be saleable or of saleable quality.

(c) An output which is recycled back while carrying out the activity as defined to produce a new output is not saleable or of saleable quality.

(d) Material which is scrapped or lost before it is packaged as a product that is saleable or of saleable quality:

(i) is not saleable or of saleable quality; and

(ii) is not to be included in an amount of product (basis of allocation).

(4) Expressions defined in the Act have the same meaning in this notice as they do in the Act unless the context otherwise requires.

3. Data required to be provided—(1) Any person carrying out the activity on the date of this notice must provide to the Ministry for the Environment data for the financial years for the activity in the form of the specified template, calculated in accordance with the data collection rules, together with the completed declaration and bases of preparation.

(2) In calculating the data for the activity, the person must include only the included emissions and must exclude the excluded emissions.

4. Deadline for provision of data—The data required by clause 3 of this notice must be provided to the Ministry for the Environment within 30 working days of the date of this notice.

Schedule 1

Revenue Rules

1. Revenue must be calculated as the quantity of activity outputs, for each of the financial years, multiplied by an appropriate market price, exclusive of GST, for each activity output for each of the financial years.
2. Quantity of activity output(s) is either the direct measure of activity output or is calculated from units sold and changes in inventory. The same methodology must be used for all years.
3. The market price must be a 'plant gate' price for the activity output. It is the fair value of the product, as defined under the New Zealand Accounting Standard NZ IAS 18, adjusted for transport costs to reflect the market into which it is sold. It must be calculated for each of the financial years either from the revenue received from all external activity output sales during each of the financial years, divided by the number of units of external activity output sales during each of these years; or by using an observable market price for each of the financial years that is appropriate to the duration of time when the output was produced in those years. An observable market price must be based on a relevant price listed on an international exchange, a price obtained from an industry analyst's report or a price derived from government or industry body statistics.
4. Market price must be converted from foreign currencies to New Zealand dollars at the historical rate appropriate to the period of activity output.
5. A weight may be applied to the market price, as calculated in accordance with revenue rules 3 and 4, in each of the financial years. Where a weighting is used, a weight of 0.7 will be applied in the financial year with the highest market price and a weight of 1.15 will be applied in the other two financial years.

Emissions Rules

1. Data must be supplied for each financial year from only the following emissions sources, expressed in tonnes of CO₂ equivalent:
 - (a) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil as part of the activity;
 - (b) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil to generate steam that is used as part of the activity;
 - (c) the direct use of geothermal fluid as part of the activity, including the direct use of geothermal fluid to generate steam that is used as part of the activity;
 - (d) any of the activities listed in Part 4 of Schedule 3 of the Act carried out as part of the activity; and
 - (e) the use of electricity used as part of the activity.

2. Emissions must be calculated using the applicable formulae and emission factors specified in these data collection rules and in the specified template. Direct measures cannot be used as a substitute.
3. Emissions from the direct use of natural gas/coal as a feedstock must be calculated as zero when either (1) the feedstock is used to produce an obligation fuel defined in the Climate Change (Liquid Fossil Fuels) Regulations 2008, or (2) the production of the output is eligible to earn emission units under the Climate Change (Other Removal Activities) Regulations 2009.
4. Emissions for which no obligation exists under the Act due to an exemption made by Order in Council under section 60 of the Act must be calculated as zero.
5. Total emissions from a heat/steam plant must be allocated to an activity in proportion to its use of the output of the plant. Total emissions from a co-generation plant must be split between heat/steam and electricity emissions on the basis of relative efficiencies of production, using efficiency rates of 80% for steam and 35% for electricity, then the heat/steam emissions must be allocated to the activity in proportion to its use of the output of heat from the plant.

Emissions allocated to heat/steam production must be estimated using the following formula:

$$E_H = \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_p}} * E_T \quad \text{and} \quad E_p = E_T - E_H$$

Where:

E_H = emissions allocated to steam production

H = steam output (energy)

e_H = assumed efficiency of steam production

P = delivered electricity generation (energy)

e_p = assumed efficiency of electricity generation

E_T = total direct emissions of the CHP system

E_p = emissions allocated to electricity production

6. The following specific formulae must be used in estimating direct emissions:

Coal

Emissions = $(A_L \times CV_L \times EF_L) + (A_{SB} \times CV_{SB} \times EF_{SB}) + (A_B \times CV_B \times EF_B)$

where:

A = tonnes of coal consumed for different varieties, including L = lignite, SB = sub-bituminous, B = bituminous

CV = calorific value of the coal class used

EF = relevant emission factor for the relevant coal class.

Natural gas

Emissions = $A \times EF$

where:

A = consumption of natural gas (in terajoules, or tonnes if LPG)

EF = emission factor for natural gas (use either one for the appropriate field(s), if known, or the national average if the gas field(s) is not known).

Geothermal fluid

$$\text{Emissions} = A \times \text{EF}$$

where:

A = consumption of geothermal fluid (in tonnes)

EF = emission factor for geothermal fluid.

Used or waste oil

$$\text{Emissions} = A \times \text{CV} \times \text{EF}$$

where:

A = consumption of used or waste oil (in tonnes)

CV = calorific value of the used or waste oil

EF = emission factor for the used or waste oil.

7. Emissions from industrial processes must be calculated using the formulae set out in Part 3 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
8. The emission factors used in calculating emissions must be those listed in Schedule 2 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
9. Indirect emissions from electricity use must be calculated using the following formula:
$$\text{Emissions} = A \times \text{EAF}$$

where:

A = consumption of electricity (in MWh)

EAF = electricity allocation factor.
10. For eligibility purposes, electricity emissions must be estimated using an electricity allocation factor of 1 tonne of CO₂-e per megawatt hour of consumption.
11. For allocative baseline purposes, electricity emissions must be estimated using an electricity allocation factor of 0.52 tonnes of CO₂-e per megawatt hour of consumption.
12. Best endeavours must be used in calculating emissions. Simplified and reasonable emission calculation methods of the person's own design can be used for specified small emissions sources that are either excluded or included emissions, and are, in aggregate, estimated to be no more than 5% of total emissions from the activity at the site, provided that a 5% change in total estimated emissions would not change the eligibility status of the activity, if the activity of the person was considered in isolation when making a decision about eligibility. All methods used must be disclosed in the bases of preparation.
13. All emissions associated with the activity must be counted, regardless of whether the output is of saleable quality.

Data Preparation Rules

1. The methods, assumptions and calculations used to produce the data must be disclosed in the bases of preparation along with the data in the specified template.
2. Where uncertainties arise when determining emission and revenue data, these uncertainties must be declared in the bases of preparation.

Schedule 2**Included emissions**

Emissions that must be included in any information provided in response to this notice are:

- (a) direct emissions from, and electricity use of, machinery, equipment and processes which are integral to, and essential for, the physical, chemical and/or biological transformation involved in the activity as described, including, for example:
 - machinery used to move materials within and as part of the activity
 - control rooms, laboratories, maintenance workshops
 - machinery used to create non-electrical energy for use in the activity as defined
 - the processing of by-products where they involve the recovery of materials for re-use within the activity or are necessary for the activity to proceed as defined
 - onsite processing of waste materials from the activity to comply with regulatory obligations;
- (b) the direct use of any coal, natural gas, geothermal fluid, used oil, or waste oil, or the use of electricity, to generate steam that is used as part of the activity as defined;
- (c) waste heat recovery that is part of the activity as defined;
- (d) electricity use associated with fermentation; and
- (e) distillation and dehydration.

Schedule 3**Excluded emissions**

Emissions that may not be included in any information provided in response to this notice are emissions resulting from:

- (a) the use of machinery and equipment, and other processes that are not integral to, nor essential to, the physical, chemical and/or biological transformation taking place when the activity as defined is carried out;
- (b) any extraction or production of raw materials that are subsequently used when the activity as defined is carried out;
- (c) the transportation of inputs used in the activity to storage at the location where the activity as defined is carried out;
- (d) the transportation of outputs of the activity from storage at the location where the activity as defined is carried out to another location;
- (e) the transportation of intermediate products between different location where the activity as defined is carried out;
- (f) operations that are complementary to the activity as defined, including (but not limited to) packaging, head office operations, and administration and marketing (whether carried out at the same location where the activity is carried out or at a different location);

- (g) the generation of electricity at the location where the activity as defined is carried out;
- (h) upstream processing of inputs to the activity, including the production of sugar feed for fermentation;
- (i) downstream processing of ethanol, including denaturation and blending;
- (j) direct emissions associated with fermentation;
- (k) processing of by-products and waste products not otherwise included; and
- (l) production of yeast for fermentation.

Dated at Wellington this 26th day of March 2010.

HON NICK SMITH, Minister for Climate Change Issues.

Explanatory note

This note is not part of the notice but is intended to indicate its general effect.

This notice, which comes into effect on 26 March 2010, requires any person carrying out the production of high purity ethanol (as that activity is defined in the notice) to provide the information requested by the Minister in accordance with the data collection rules specified in the notice including only the emissions set out in Schedule 2 of the notice from the sources listed in Emissions Rule 1 of Schedule 1 of the notice, and excluding those emissions set out in Schedule 3 of the notice.

The information is being requested to assist the Minister to determine if the activity meets the criteria listed in section 161D(3)(a) of the Act.

The specified template, declaration and bases of preparation required by this notice, together with the guidance document for filling in these documents can be downloaded from
www.climatechange.govt.nz/industrialallocation

The specified template, declaration and bases of preparation must be completed and returned to the Ministry for the Environment within 30 working days of the date of this notice. The Ministry would prefer to receive this information by email to industrialallocation@mfe.govt.nz. If you consider that providing the information by email would cause difficulties, you may return data on CD by mail or in person to the Ministry for the Environment, 23 Kate Sheppard Place, Wellington. Original signed copies of the declaration must also be provided. Please contact the Ministry on 0800 499 700 for any further assistance.

While the notice does not require the source information and records on which the data in the specified template is based, it would be prudent to retain this information for a period of seven years. The Minister is able to request any further information that he considers necessary to enable the verification of the accuracy of the information provided under this notice.

Persons to whom this notice applies should note that, under section 161D(7) of the Act, failure without reasonable excuse to supply the data and information required by this notice will mean that if the activity is subsequently prescribed as an eligible industry activity, those persons (and associated persons) may not be eligible to be allocated New Zealand units in respect of that activity.

In addition, it is an offence to knowingly provide altered, false, incomplete or misleading information (section 132 of the Act) or, with the intent to deceive and for the purpose of obtaining a material benefit or avoiding a material detriment, to fail to provide information or to provide altered, false, incomplete or misleading information (section 133 of the Act).

Call for the Provision of Data (Production of Hydrogen Peroxide) Notice 2010

Pursuant to section 161D of the Climate Change Response Act 2002, I, Hon Nick Smith, Minister for Climate Change Issues, give the following notice requiring information on the Production of Hydrogen Peroxide to determine the emissions-intensity of this activity and the allocative baseline or baselines of the products of the activity.

Notice

1. Title and commencement—(1) This notice may be cited as the Call for the Provision of Data (Production of Hydrogen Peroxide) Notice 2010.

(2) This notice takes effect from and including 26 March 2010.

2. Interpretation—(1) Unless the context otherwise requires:

Act means the Climate Change Response Act 2002.

Activity outputs are the outputs used for the calculation of the revenue of the activity and mean the outputs specified in clause 2(2)(a) of this notice.

Bases of preparation means the form available at

www.climatechange.govt.nz/industrialallocation

Data collection rules means the methodologies for data collection specified in Schedule 1 of this notice.

Declaration means the statement of declaration located at

www.climatechange.govt.nz/industrialallocation

Excluded emissions means the emissions specified in Schedule 3 of this notice.

Financial years means the financial years beginning on 1 July and ending on 30 June for each of the periods 2006/2007, 2007/2008 and 2008/2009 during which the person carried out the activity.

Included emissions means the emissions specified in Schedule 2 of this notice from the sources listed in Emissions Rule 1 of Schedule 1.

Product (basis of allocation) means the total tonnes of 100 per cent equivalent hydrogen peroxide (H_2O_2) that are:

- (a) produced by carrying on the activity; and
- (b) of saleable quality.

Specified Template means the table template located at

www.climatechange.govt.nz/industrialallocation

(2) **Activity** means the production of hydrogen peroxide by the chemical transformation of hydrogen (H) feedstocks and oxygen (O) feedstocks to produce a crude aqueous hydrogen peroxide solution where the concentration of hydrogen peroxide ($\text{H}_2\text{O}_2(\text{aq})$) is equal to or greater than 39 per cent with respect to mass, and subsequent production of saleable aqueous hydrogen peroxide solutions where the outputs include:

- (a) aqueous hydrogen peroxide solutions, which must have a concentration of hydrogen peroxide ($\text{H}_2\text{O}_2(\text{aq})$) equal to or greater than 34 per cent with respect to mass.

(3) **Saleable** has its ordinary meaning as understood by participants in the relevant market, subject to subclauses (a) to (d):

- (a) Saleable is an output produced to a level at which it would ordinarily be considered by participants in the relevant market:
 - (i) to be the output of the process; and
 - (ii) to have a commercial value as that output.
- (b) A sub-standard product which is discarded is taken not to be saleable or of saleable quality.
- (c) An output which is recycled back while carrying out the activity as defined to produce a new output is not saleable or of saleable quality.
- (d) Material which is scrapped or lost before it is packaged as a product that is saleable or of saleable quality:
 - (i) is not saleable or of saleable quality; and
 - (ii) is not to be included in an amount of product (basis of allocation).

(4) Expressions defined in the Act have the same meaning in this notice as they do in the Act unless the context otherwise requires.

3. Data required to be provided—(1) Any person carrying out the activity on the date of this notice must provide to the Ministry for the Environment data for the financial years for the activity in the form of the specified template, calculated in accordance with the data collection rules, together with the completed declaration and bases of preparation.

(2) In calculating the data for the activity, the person must include only the included emissions and must exclude the excluded emissions.

4. Deadline for provision of data—The data required by clause 3 of this notice must be provided to the Ministry for the Environment within 30 working days of the date of this notice.

Schedule 1

Revenue Rules

1. Revenue must be calculated as the quantity of activity outputs, for each of the financial years, multiplied by an appropriate market price, exclusive of GST, for each activity output for each of the financial years.
2. Quantity of activity output(s) is either the direct measure of activity output or is calculated from units sold and changes in inventory. The same methodology must be used for all years.
3. The market price must be a 'plant gate' price for the activity output. It is the fair value of the product, as defined under the New Zealand Accounting Standard NZ IAS 18, adjusted for transport costs to reflect the market into which it is sold. It must be calculated for each of the financial years either from the revenue received from all external activity output sales during each of the financial years, divided by the number of units of external activity output sales during each of these years; or by using an observable market price for each of the financial years that is appropriate to the duration of time when the output was produced in those years. An observable market price must be based on a relevant price listed on an international exchange, a price obtained from an industry analyst's report or a price derived from government or industry body statistics.
4. Market price must be converted from foreign currencies to New Zealand dollars at the historical rate appropriate to the period of activity output.
5. A weight may be applied to the market price, as calculated in accordance with revenue rules 3 and 4, in each of the financial years. Where a weighting is used, a weight of 0.7 will be applied in the financial year with the highest market price and a weight of 1.15 will be applied in the other two financial years.

Emissions Rules

1. Data must be supplied for each financial year from only the following emissions sources, expressed in tonnes of CO₂ equivalent:
 - (a) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil as part of the activity;
 - (b) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil to generate steam that is used as part of the activity;
 - (c) the direct use of geothermal fluid as part of the activity, including the direct use of geothermal fluid to generate steam that is used as part of the activity;

- (d) any of the activities listed in Part 4 of Schedule 3 of the Act carried out as part of the activity; and
 - (e) the use of electricity used as part of the activity.
2. Emissions must be calculated using the applicable formulae and emission factors specified in these data collection rules and in the specified template. Direct measures cannot be used as a substitute.
 3. Emissions from the direct use of natural gas/coal as a feedstock must be calculated as zero when either (1) the feedstock is used to produce an obligation fuel defined in the Climate Change (Liquid Fossil Fuels) Regulations 2008, or (2) the production of the output is eligible to earn emission units under the Climate Change (Other Removal Activities) Regulations 2009.
 4. Emissions for which no obligation exists under the Act due to an exemption made by Order in Council under section 60 of the Act must be calculated as zero.
 5. Total emissions from a heat/steam plant must be allocated to an activity in proportion to its use of the output of the plant. Total emissions from a co-generation plant must be split between heat/steam and electricity emissions on the basis of relative efficiencies of production, using efficiency rates of 80% for steam and 35% for electricity, then the heat/steam emissions must be allocated to the activity in proportion to its use of the output of heat from the plant.

Emissions allocated to heat/steam production must be estimated using the following formula:

$$E_H = \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_P}} * E_T \quad \text{and} \quad E_P = E_T - E_H$$

Where:

E_H = emissions allocated to steam production

H = steam output (energy)

e_H = assumed efficiency of steam production

P = delivered electricity generation (energy)

e_P = assumed efficiency of electricity generation

E_T = total direct emissions of the CHP system

E_P = emissions allocated to electricity production

6. The following specific formulae must be used in estimating direct emissions:

Coal

Emissions = $(A_L \times CV_L \times EF_L) + (A_{SB} \times CV_{SB} \times EF_{SB}) + (A_B \times CV_B \times EF_B)$

where:

A = tonnes of coal consumed for different varieties, including L = lignite, SB = sub-bituminous, B = bituminous

CV = calorific value of the coal class used

EF = relevant emission factor for the relevant coal class.

Natural gas

Emissions = $A \times EF$

where:

A = consumption of natural gas (in terajoules, or tonnes if LPG)

EF = emission factor for natural gas (use either one for the appropriate field(s), if known, or the national average if the gas field(s) is not known).

Geothermal fluid

$$\text{Emissions} = A \times \text{EF}$$

where:

A = consumption of geothermal fluid (in tonnes)

EF = emission factor for geothermal fluid.

Used or waste oil

$$\text{Emissions} = A \times \text{CV} \times \text{EF}$$

where:

A = consumption of used or waste oil (in tonnes)

CV = calorific value of the used or waste oil

EF = emission factor for the used or waste oil.

7. Emissions from industrial processes must be calculated using the formulae set out in Part 3 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
8. The emission factors used in calculating emissions must be those listed in Schedule 2 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
9. Indirect emissions from electricity use must be calculated using the following formula:
$$\text{Emissions} = A \times \text{EAF}$$

where:

A = consumption of electricity (in MWh)

EAF = electricity allocation factor.
10. For eligibility purposes, electricity emissions must be estimated using an electricity allocation factor of 1 tonne of CO₂-e per megawatt hour of consumption.
11. For allocative baseline purposes, electricity emissions must be estimated using an electricity allocation factor of 0.52 tonnes of CO₂-e per megawatt hour of consumption.
12. Best endeavours must be used in calculating emissions. Simplified and reasonable emission calculation methods of the person's own design can be used for specified small emissions sources that are either excluded or included emissions, and are, in aggregate, estimated to be no more than 5% of total emissions from the activity at the site, provided that a 5% change in total estimated emissions would not change the eligibility status of the activity, if the activity of the person was considered in isolation when making a decision about eligibility. All methods used must be disclosed in the bases of preparation.
13. All emissions associated with the activity must be counted, regardless of whether the output is of saleable quality.

Data Preparation Rules

1. The methods, assumptions and calculations used to produce the data must be disclosed in the bases of preparation along with the data in the specified template.
2. Where uncertainties arise when determining emission and revenue data, these uncertainties must be declared in the bases of preparation.

Schedule 2**Included emissions**

Emissions that must be included in any information provided in response to this notice are:

- (a) direct emissions from, and electricity use of, machinery, equipment and processes which are integral to, and essential for, the physical, chemical and/or biological transformation involved in the activity as described, including, for example:
 - machinery used to move materials within and as part of the activity
 - control rooms, laboratories, maintenance workshops
 - machinery used to create non-electrical energy for use in the activity as defined
 - the processing of by-products where they involve the recovery of materials for re-use within the activity or are necessary for the activity to proceed as defined
 - onsite processing of waste materials from the activity to comply with regulatory obligations;
- (b) the direct use of any coal, natural gas, geothermal fluid, used oil, or waste oil, or the use of electricity, to generate steam that is used as part of the activity as defined;
- (c) waste heat recovery that is part of the activity as defined;
- (d) production of hydrogen for consumption in the activity as defined; and
- (e) compression of air for consumption in the activity as defined.

Schedule 3**Excluded emissions**

Emissions that may not be included in any information provided in response to this notice are emissions resulting from:

- (a) the use of machinery and equipment, and other processes that are not integral to, nor essential to, the physical, chemical and/or biological transformation taking place when the activity as defined is carried out;
- (b) any extraction or production of raw materials that are subsequently used when the activity as defined is carried out;
- (c) the transportation of inputs used in the activity to storage at the location where the activity as defined is carried out;
- (d) the transportation of outputs of the activity from storage at the location where the activity as defined is carried out to another location;
- (e) the transportation of intermediate products between different location where the activity as defined is carried out;

- (f) operations that are complementary to the activity as defined, including (but not limited to) packaging, head office operations, and administration and marketing (whether carried out at the same location where the activity is carried out or at a different location); and
- (g) the generation of electricity at the location where the activity as defined is carried out.

Dated at Wellington this 26th day of March 2010.

HON NICK SMITH, Minister for Climate Change Issues.

Explanatory note

This note is not part of the notice but is intended to indicate its general effect.

This notice, which comes into effect on 26 March 2010, requires any person carrying out the production of hydrogen peroxide (as that activity is defined in the notice) to provide the information requested by the Minister in accordance with the data collection rules specified in the notice including only the emissions set out in Schedule 2 of the notice from the sources listed in Emissions Rule 1 of Schedule 1 of the notice, and excluding those emissions set out in Schedule 3 of the notice.

The information is being requested to assist the Minister to determine if the activity meets the criteria listed in section 161D(3)(a) of the Act.

The specified template, declaration and bases of preparation required by this notice, together with the guidance document for filling in these documents can be downloaded from
www.climatechange.govt.nz/industrialallocation

The specified template, declaration and bases of preparation must be completed and returned to the Ministry for the Environment within 30 working days of the date of this notice. The Ministry would prefer to receive this information by email to industrialallocation@mfe.govt.nz. If you consider that providing the information by email would cause difficulties, you may return data on CD by mail or in person to the Ministry for the Environment, 23 Kate Sheppard Place, Wellington. Original signed copies of the declaration must also be provided. Please contact the Ministry on 0800 499 700 for any further assistance.

While the notice does not require the source information and records on which the data in the specified template is based, it would be prudent to retain this information for a period of seven years. The Minister is able to request any further information that he considers necessary to enable the verification of the accuracy of the information provided under this notice.

Persons to whom this notice applies should note that, under section 161D(7) of the Act, failure without reasonable excuse to supply the data and information required by this notice will mean that if the activity is subsequently prescribed as an eligible industry activity, those persons (and associated persons) may not be eligible to be allocated New Zealand units in respect of that activity.

In addition, it is an offence to knowingly provide altered, false, incomplete or misleading information (section 132 of the Act) or, with the intent to deceive and for the purpose of obtaining a material benefit or avoiding a material detriment, to fail to provide information or to provide altered, false, incomplete or misleading information (section 133 of the Act).

Call for the Provision of Data (Production of Burnt Lime) Notice 2010

Pursuant to section 161D of the Climate Change Response Act 2002, I, Hon Nick Smith, Minister for Climate Change Issues, give the following notice requiring information on the Production of Burnt Lime to determine the emissions-intensity of this activity and the allocative baseline or baselines of the products of the activity.

Notice

1. Title and commencement—(1) This notice may be cited as the Call for the Provision of Data (Production of Burnt Lime) Notice 2010.

(2) This notice takes effect from and including 26 March 2010.

2. Interpretation—(1) Unless the context otherwise requires:

Act means the Climate Change Response Act 2002.

Activity outputs are the outputs used for the calculation of the revenue of the activity and mean the outputs specified in clause 2(2)(a) of this notice.

Bases of preparation means the form available at

www.climatechange.govt.nz/industrialallocation

Data collection rules means the methodologies for data collection specified in Schedule 1 of this notice.

Declaration means the statement of declaration located at

www.climatechange.govt.nz/industrialallocation

Excluded emissions means the emissions specified in Schedule 3 of this notice.

Financial years means the financial years beginning on 1 July and ending on 30 June for each of the periods 2006/2007, 2007/2008 and 2008/2009 during which the person carried out the activity.

Included emissions means the emissions specified in Schedule 2 of this notice from the sources listed in Emissions Rule 1 of Schedule 1.

Product (basis of allocation) tonnes of burnt lime with calcium oxide (CaO) and/or magnesium oxide (MgO) mass content equal to or greater than 60 per cent which result from carrying out the activity as described and are of saleable quality.

Specified Template means the table template located at

www.climatechange.govt.nz/industrialallocation

(2) **Activity** means the physical and chemical transformation through the calcining process of calcium and magnesium sources (eg, calcium carbonate (CaCO₃) and magnesium carbonate (MgCO₃)) into saleable burnt lime where the output is:

(a) burnt lime with a calcium oxide (CaO) and/or magnesium oxide (MgO) mass content equal to or greater than 60 per cent.

(3) **Saleable** has its ordinary meaning as understood by participants in the relevant market, subject to subclauses (a) to (d):

(a) Saleable is an output produced to a level at which it would ordinarily be considered by participants in the relevant market:

(i) to be the output of the process; and

(ii) to have a commercial value as that output.

(b) A sub-standard product which is discarded is taken not to be saleable or of saleable quality.

(c) An output which is recycled back while carrying out the activity as defined to produce a new output is not saleable or of saleable quality.

(d) Material which is scrapped or lost before it is packaged as a product that is saleable or of saleable quality:

(i) is not saleable or of saleable quality; and

(ii) is not to be included in an amount of product (basis of allocation).

(4) Expressions defined in the Act have the same meaning in this notice as they do in the Act unless the context otherwise requires.

3. Data required to be provided—(1) Any person carrying out the activity on the date of this notice must provide to the Ministry for the Environment data for the financial years for the activity in the form of the specified template, calculated in accordance with the data collection rules, together with the completed declaration and bases of preparation.

(2) In calculating the data for the activity, the person must include only the included emissions and must exclude the excluded emissions.

4. Deadline for provision of data—The data required by clause 3 of this notice must be provided to the Ministry for the Environment within 30 working days of the date of this notice.

Schedule 1

Revenue Rules

1. Revenue must be calculated as the quantity of activity outputs, for each of the financial years, multiplied by an appropriate market price, exclusive of GST, for each activity output for each of the financial years.
2. Quantity of activity output(s) is either the direct measure of activity output or is calculated from units sold and changes in inventory. The same methodology must be used for all years.
3. The market price must be a 'plant gate' price for the activity output. It is the fair value of the product, as defined under the New Zealand Accounting Standard NZ IAS 18, adjusted for transport costs to reflect the market into which it is sold. It must be calculated for each of the financial years either from the revenue received from all external activity output sales during each of the financial years, divided by the number of units of external activity output sales during each of these years; or by using an observable market price for each of the financial years that is appropriate to the duration of time when the output was produced in those years. An observable market price must be based on a relevant price listed on an international exchange, a price obtained from an industry analyst's report or a price derived from government or industry body statistics.
4. Market price must be converted from foreign currencies to New Zealand dollars at the historical rate appropriate to the period of activity output.
5. A weight may be applied to the market price, as calculated in accordance with revenue rules 3 and 4, in each of the financial years. Where a weighting is used, a weight of 0.7 will be applied in the financial year with the highest market price and a weight of 1.15 will be applied in the other two financial years.

Emissions Rules

1. Data must be supplied for each financial year from only the following emissions sources, expressed in tonnes of CO₂ equivalent:
 - (a) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil as part of the activity;
 - (b) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil to generate steam that is used as part of the activity;
 - (c) the direct use of geothermal fluid as part of the activity, including the direct use of geothermal fluid to generate steam that is used as part of the activity;

- (d) any of the activities listed in Part 4 of Schedule 3 of the Act carried out as part of the activity; and
 - (e) the use of electricity used as part of the activity.
2. Emissions must be calculated using the applicable formulae and emission factors specified in these data collection rules and in the specified template. Direct measures cannot be used as a substitute.
 3. Emissions from the direct use of natural gas/coal as a feedstock must be calculated as zero when either (1) the feedstock is used to produce an obligation fuel defined in the Climate Change (Liquid Fossil Fuels) Regulations 2008, or (2) the production of the output is eligible to earn emission units under the Climate Change (Other Removal Activities) Regulations 2009.
 4. Emissions for which no obligation exists under the Act due to an exemption made by Order in Council under section 60 of the Act must be calculated as zero.
 5. Total emissions from a heat/steam plant must be allocated to an activity in proportion to its use of the output of the plant. Total emissions from a co-generation plant must be split between heat/steam and electricity emissions on the basis of relative efficiencies of production, using efficiency rates of 80% for steam and 35% for electricity, then the heat/steam emissions must be allocated to the activity in proportion to its use of the output of heat from the plant.

Emissions allocated to heat/steam production must be estimated using the following formula:

$$E_H = \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_P}} * E_T \quad \text{and} \quad E_P = E_T - E_H$$

Where:

E_H = emissions allocated to steam production

H = steam output (energy)

e_H = assumed efficiency of steam production

P = delivered electricity generation (energy)

e_P = assumed efficiency of electricity generation

E_T = total direct emissions of the CHP system

E_P = emissions allocated to electricity production

6. The following specific formulae must be used in estimating direct emissions:

Coal

Emissions = $(A_L \times CV_L \times EF_L) + (A_{SB} \times CV_{SB} \times EF_{SB}) + (A_B \times CV_B \times EF_B)$

where:

A = tonnes of coal consumed for different varieties, including L = lignite, SB = sub-bituminous, B = bituminous

CV = calorific value of the coal class used

EF = relevant emission factor for the relevant coal class.

Natural gas

Emissions = $A \times EF$

where:

A = consumption of natural gas (in terajoules, or tonnes if LPG)

EF = emission factor for natural gas (use either one for the appropriate field(s), if known, or the national average if the gas field(s) is not known).

Geothermal fluid

Emissions = A x EF

where:

A = consumption of geothermal fluid (in tonnes)

EF = emission factor for geothermal fluid.

Used or waste oil

Emissions = A x CV x EF

where:

A = consumption of used or waste oil (in tonnes)

CV = calorific value of the used or waste oil

EF = emission factor for the used or waste oil.

7. Emissions from industrial processes must be calculated using the formulae set out in Part 3 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
8. The emission factors used in calculating emissions must be those listed in Schedule 2 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
9. Indirect emissions from electricity use must be calculated using the following formula:
Emissions = A x EAF
where:
A = consumption of electricity (in MWh)
EAF = electricity allocation factor.
10. For eligibility purposes, electricity emissions must be estimated using an electricity allocation factor of 1 tonne of CO₂-e per megawatt hour of consumption.
11. For allocative baseline purposes, electricity emissions must be estimated using an electricity allocation factor of 0.52 tonnes of CO₂-e per megawatt hour of consumption.
12. Best endeavours must be used in calculating emissions. Simplified and reasonable emission calculation methods of the person's own design can be used for specified small emissions sources that are either excluded or included emissions, and are, in aggregate, estimated to be no more than 5% of total emissions from the activity at the site, provided that a 5% change in total estimated emissions would not change the eligibility status of the activity, if the activity of the person was considered in isolation when making a decision about eligibility. All methods used must be disclosed in the bases of preparation.
13. All emissions associated with the activity must be counted, regardless of whether the output is of saleable quality.

Data Preparation Rules

1. The methods, assumptions and calculations used to produce the data must be disclosed in the bases of preparation along with the data in the specified template.
2. Where uncertainties arise when determining emission and revenue data, these uncertainties must be declared in the bases of preparation.

Schedule 2**Included emissions**

Emissions that must be included in any information provided in response to this notice are:

- (a) Direct emissions, and electricity use of, machinery, equipment and processes which are integral to, and essential for, the physical, chemical and/or biological transformation involved in the activity as described, including, for example:
 - machinery used to move materials within and as part of the activity
 - control rooms, laboratories, maintenance workshops
 - machinery used to create non-electrical energy for use in the activity as defined
 - the processing of by-products where they involve the recovery of materials for re-use within the activity or are necessary for the activity to proceed as defined
 - onsite processing of waste materials from the activity to comply with regulatory obligations;
- (b) the direct use of any coal, natural gas, geothermal fluid, used oil, or waste oil, or the use of electricity, to generate steam that is used as part of the activity as defined;
- (c) waste heat recovery that is part of the activity as defined;
- (d) kiln dust production;
- (e) crushing, grinding and preparation of raw materials contiguous with the equipment required to conduct the transformation as described; and
- (f) reject product where this is not recycled in the process.

Schedule 3**Excluded emissions**

Emissions that may not be included in any information provided in response to this notice are emissions resulting from:

- (a) the use of machinery and equipment, and other processes that are not integral to, nor essential to, the physical, chemical and/or biological transformation taking place when the activity as defined is carried out;
- (b) any extraction or production of raw materials that are subsequently used when the activity as defined is carried out;
- (c) the transportation of inputs used in the activity to storage at the location where the activity as defined is carried out;
- (d) the transportation of outputs of the activity from storage at the location where the activity as defined is carried out to another location;
- (e) the transportation of intermediate products between different location where the activity as defined is carried out;

- (f) operations that are complementary to the activity as defined, including (but not limited to) packaging, head office operations, and administration and marketing (whether carried out at the same location where the activity is carried out or at a different location);
- (g) the generation of electricity at the location where the activity as defined is carried out;
- (h) crushing, grinding and preparation of raw materials not contiguous with the equipment required to conduct the transformation as described; and
- (i) downstream processing of burnt lime e.g. hydrated lime, lime slurry, finishing lime or lime putty.

Dated at Wellington this 26th day of March 2010.

HON NICK SMITH, Minister for Climate Change Issues.

Explanatory note

This note is not part of the notice but is intended to indicate its general effect.

This notice, which comes into effect on 26 March 2010 requires any person carrying out the production of burnt lime (as that activity is defined in the notice) to provide the information requested by the Minister in accordance with the data collection rules specified in the notice including only the emissions set out in Schedule 2 of the notice from the sources listed in Emissions Rule 1 of Schedule 1 of the notice, and excluding those emissions set out in Schedule 3 of the notice.

The information is being requested to assist the Minister to determine if the activity meets the criteria listed in section 161D(3)(a) of the Act.

The specified template, declaration and bases of preparation required by this notice, together with the guidance document for filling in these documents can be downloaded from
www.climatechange.govt.nz/industrialallocation

The specified template, declaration and bases of preparation must be completed and returned to the Ministry for the Environment within 30 working days of the date of this notice. The Ministry would prefer to receive this information by email to industrialallocation@mfe.govt.nz. If you consider that providing the information by email would cause difficulties, you may return data on CD by mail or in person to the Ministry for the Environment, 23 Kate Sheppard Place, Wellington. Original signed copies of the declaration must also be provided. Please contact the Ministry on 0800 499 700 for any further assistance.

While the notice does not require the source information and records on which the data in the specified template is based, it would be prudent to retain this information for a period of seven years. The Minister is able to request any further information that he considers necessary to enable the verification of the accuracy of the information provided under this notice.

Persons to whom this notice applies should note that, under section 161D(7) of the Act, failure without reasonable excuse to supply the data and information required by this notice will mean that if the activity is subsequently prescribed as an eligible industry activity, those persons (and associated persons) may not be eligible to be allocated New Zealand units in respect of that activity.

In addition, it is an offence to knowingly provide altered, false, incomplete or misleading information (section 132 of the Act) or, with the intent to deceive and for the purpose of obtaining a material benefit or avoiding a material detriment, to fail to provide information or to provide altered, false, incomplete or misleading information (section 133 of the Act).

Call for the Provision of Data (Production of Methanol) Notice 2010

Pursuant to section 161D of the Climate Change Response Act 2002, I, Hon Nick Smith, Minister for Climate Change Issues, give the following notice requiring information on the Production of Methanol to determine the emissions-intensity of this activity and the allocative baseline or baselines of the products of the activity.

Notice

1. Title and commencement—(1) This notice may be cited as the Call for the Provision of Data (Production of Methanol) Notice 2010.

(2) This notice takes effect from and including 26 March 2010.

2. Interpretation—(1) Unless the context otherwise requires:

Act means the Climate Change Response Act 2002.

Activity outputs are the outputs used for the calculation of the revenue of the activity and mean the outputs specified in clause 2(2)(a) of this notice.

Bases of preparation means the form available at

www.climatechange.govt.nz/industrialallocation

Data collection rules means the methodologies for data collection specified in Schedule 1 of this notice.

Declaration means the statement of declaration located at

www.climatechange.govt.nz/industrialallocation

Excluded emissions means the emissions specified in Schedule 3 of this notice.

Financial years means the financial years beginning on 1 July and ending on 30 June for each of the periods 2006/2007, 2007/2008 and 2008/2009 during which the person carried out the activity.

Included emissions means the emissions specified in Schedule 2 of this notice from the sources listed in Emissions Rule 1 of Schedule 1.

Product (basis of allocation) means the total tonnes of 100 per cent equivalent methanol (CH₃OH) that are:

- (a) produced by carrying on the activity; and
- (b) of saleable quality.

Specified Template means the table template located at

www.climatechange.govt.nz/industrialallocation

(2) **Activity** means the production of methanol by the chemical transformation of one or more of hydrocarbons, hydrogen feedstocks, carbon feedstocks, and oxygen feedstocks to produce liquid methanol (CH₃OH) where the outputs include:

- (a) liquid methanol (CH₃OH), which must have a concentration equal to or greater than 98 per cent with respect to mass.

(3) **Saleable** has its ordinary meaning as understood by participants in the relevant market, subject to subclauses (a) to (d):

- (a) Saleable is an output produced to a level at which it would ordinarily be considered by participants in the relevant market:
 - (i) to be the output of the process; and
 - (ii) to have a commercial value as that output.
- (b) A sub-standard product which is discarded is taken not to be saleable or of saleable quality.
- (c) An output which is recycled back while carrying out the activity as defined to produce a new output is not saleable or of saleable quality.
- (d) Material which is scrapped or lost before it is packaged as a product that is saleable or of saleable quality:
 - (i) is not saleable or of saleable quality; and
 - (ii) is not to be included in an amount of product (basis of allocation).

(4) Expressions defined in the Act have the same meaning in this notice as they do in the Act unless the context otherwise requires.

3. Data required to be provided—(1) Any person carrying out the activity on the date of this notice must provide to the Ministry for the Environment data for the financial years for the activity in the form of the specified template, calculated in accordance with the data collection rules, together with the completed declaration and bases of preparation.

(2) In calculating the data for the activity, the person must include only the included emissions and must exclude the excluded emissions.

4. Deadline for provision of data—The data required by clause 3 of this notice must be provided to the Ministry for the Environment within 30 working days of the date of this notice.

Schedule 1

Revenue Rules

1. Revenue must be calculated as the quantity of activity outputs, for each of the financial years, multiplied by an appropriate market price, exclusive of GST, for each activity output for each of the financial years.
2. Quantity of activity output(s) is either the direct measure of activity output or is calculated from units sold and changes in inventory. The same methodology must be used for all years.
3. The market price must be a 'plant gate' price for the activity output. It is the fair value of the product, as defined under the New Zealand Accounting Standard NZ IAS 18, adjusted for transport costs to reflect the market into which it is sold. It must be calculated for each of the financial years either from the revenue received from all external activity output sales during each of the financial years, divided by the number of units of external activity output sales during each of these years; or by using an observable market price for each of the financial years that is appropriate to the duration of time when the output was produced in those years. An observable market price must be based on a relevant price listed on an international exchange, a price obtained from an industry analyst's report or a price derived from government or industry body statistics.
4. Market price must be converted from foreign currencies to New Zealand dollars at the historical rate appropriate to the period of activity output.
5. A weight may be applied to the market price, as calculated in accordance with revenue rules 3 and 4, in each of the financial years. Where a weighting is used, a weight of 0.7 will be applied in the financial year with the highest market price and a weight of 1.15 will be applied in the other two financial years.

Emissions Rules

1. Data must be supplied for each financial year from only the following emissions sources, expressed in tonnes of CO₂ equivalent:
 - (a) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil as part of the activity;
 - (b) the direct oxidation or use as feedstock of any coal, natural gas, used oil, or waste oil to generate steam that is used as part of the activity;
 - (c) the direct use of geothermal fluid as part of the activity, including the direct use of geothermal fluid to generate steam that is used as part of the activity;
 - (d) any of the activities listed in Part 4 of Schedule 3 of the Act carried out as part of the activity; and
 - (e) the use of electricity used as part of the activity.

2. Emissions must be calculated using the applicable formulae and emission factors specified in these data collection rules and in the specified template. Direct measures cannot be used as a substitute.
3. Emissions from the direct use of natural gas/coal as a feedstock must be calculated as zero when either (1) the feedstock is used to produce an obligation fuel defined in the Climate Change (Liquid Fossil Fuels) Regulations 2008, or (2) the production of the output is eligible to earn emission units under the Climate Change (Other Removal Activities) Regulations 2009.
4. Emissions for which no obligation exists under the Act due to an exemption made by Order in Council under section 60 of the Act must be calculated as zero.
5. Total emissions from a heat/steam plant must be allocated to an activity in proportion to its use of the output of the plant. Total emissions from a co-generation plant must be split between heat/steam and electricity emissions on the basis of relative efficiencies of production, using efficiency rates of 80% for steam and 35% for electricity, then the heat/steam emissions must be allocated to the activity in proportion to its use of the output of heat from the plant.

Emissions allocated to heat/steam production must be estimated using the following formula:

$$E_H = \frac{\frac{H}{e_H}}{\frac{H}{e_H} + \frac{P}{e_P}} * E_T \quad \text{and} \quad E_P = E_T - E_H$$

Where:

E_H = emissions allocated to steam production

H = steam output (energy)

e_H = assumed efficiency of steam production

P = delivered electricity generation (energy)

e_P = assumed efficiency of electricity generation

E_T = total direct emissions of the CHP system

E_P = emissions allocated to electricity production

6. The following specific formulae must be used in estimating direct emissions:

Coal

Emissions = $(A_L \times CV_L \times EF_L) + (A_{SB} \times CV_{SB} \times EF_{SB}) + (A_B \times CV_B \times EF_B)$

where:

A = tonnes of coal consumed for different varieties, including L = lignite, SB = sub-bituminous, B = bituminous

CV = calorific value of the coal class used

EF = relevant emission factor for the relevant coal class.

Natural gas

Emissions = $A \times EF$

where:

A = consumption of natural gas (in terajoules, or tonnes if LPG)

EF = emission factor for natural gas (use either one for the appropriate field(s), if known, or the national average if the gas field(s) is not known).

Geothermal fluid

$$\text{Emissions} = A \times \text{EF}$$

where:

A = consumption of geothermal fluid (in tonnes)

EF = emission factor for geothermal fluid.

Used or waste oil

$$\text{Emissions} = A \times \text{CV} \times \text{EF}$$

where:

A = consumption of used or waste oil (in tonnes)

CV = calorific value of the used or waste oil

EF = emission factor for the used or waste oil.

7. Emissions from industrial processes must be calculated using the formulae set out in Part 3 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
8. The emission factors used in calculating emissions must be those listed in Schedule 2 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.
9. Indirect emissions from electricity use must be calculated using the following formula:
$$\text{Emissions} = A \times \text{EAF}$$

where:
A = consumption of electricity (in MWh)
EAF = electricity allocation factor.
10. For eligibility purposes, electricity emissions must be estimated using an electricity allocation factor of 1 tonne of CO₂-e per megawatt hour of consumption.
11. For allocative baseline purposes, electricity emissions must be estimated using an electricity allocation factor of 0.52 tonnes of CO₂-e per megawatt hour of consumption.
12. Best endeavours must be used in calculating emissions. Simplified and reasonable emission calculation methods of the person's own design can be used for specified small emissions sources that are either excluded or included emissions, and are, in aggregate, estimated to be no more than 5% of total emissions from the activity at the site, provided that a 5% change in total estimated emissions would not change the eligibility status of the activity, if the activity of the person was considered in isolation when making a decision about eligibility. All methods used must be disclosed in the bases of preparation.
13. All emissions associated with the activity must be counted, regardless of whether the output is of saleable quality.

Data Preparation Rules

1. The methods, assumptions and calculations used to produce the data must be disclosed in the bases of preparation along with the data in the specified template.
2. Where uncertainties arise when determining emission and revenue data, these uncertainties must be declared in the bases of preparation.

Schedule 2**Included emissions**

Emissions that must be included in any information provided in response to this notice are:

- (a) direct emissions from, and electricity use of, machinery, equipment and processes which are integral to, and essential for, the physical, chemical and/or biological transformation involved in the activity as described, including, for example:
 - machinery used to move materials within and as part of the activity
 - control rooms, laboratories, maintenance workshops
 - machinery used to create non-electrical energy for use in the activity as defined
 - the processing of by-products where they involve the recovery of materials for re-use within the activity or are necessary for the activity to proceed as defined
 - onsite processing of waste materials from the activity to comply with regulatory obligations;
- (b) the direct use of any coal, natural gas, geothermal fluid, used oil, or waste oil, or the use of electricity, to generate steam that is used as part of the activity as defined;
- (c) waste heat recovery that is part of the activity as defined;
- (d) production of oxygen for consumption in the activity as defined; and
- (e) production of nitrogen for consumption in the activity as defined.

Schedule 3**Excluded emissions**

Emissions that may not be included in any information provided in response to this notice are emissions resulting from:

- (a) the use of machinery and equipment, and other processes that are not integral to, nor essential to, the physical, chemical and/or biological transformation taking place when the activity as defined is carried out;
- (b) any extraction or production of raw materials that are subsequently used when the activity as defined is carried out;
- (c) the transportation of inputs used in the activity to storage at the location where the activity as defined is carried out;
- (d) the transportation of outputs of the activity from storage at the location where the activity as defined is carried out to another location;
- (e) the transportation of intermediate products between different location where the activity as defined is carried out;

- (f) operations that are complementary to the activity as defined, including (but not limited to) packaging, head office operations, and administration and marketing (whether carried out at the same location where the activity is carried out or at a different location); and
- (g) the generation of electricity at the location where the activity as defined is carried out.

Dated at Wellington this 26th day of March 2010.

HON NICK SMITH, Minister for Climate Change Issues.

Explanatory note

This note is not part of the notice but is intended to indicate its general effect.

This notice, which comes into effect on 26 March 2010, requires any person carrying out the production of methanol (as that activity is defined in the notice) to provide the information requested by the Minister in accordance with the data collection rules specified in the notice including only the emissions set out in Schedule 2 of the notice from the sources listed in Emissions Rule 1 of Schedule 1 of the notice, and excluding those emissions set out in Schedule 3 of the notice.

The information is being requested to assist the Minister to determine if the activity meets the criteria listed in section 161D(3)(a) of the Act.

The specified template, declaration and bases of preparation required by this notice, together with the guidance document for filling in these documents can be downloaded from
www.climatechange.govt.nz/industrialallocation

The specified template, declaration and bases of preparation must be completed and returned to the Ministry for the Environment within 30 working days of the date of this notice. The Ministry would prefer to receive this information by email to industrialallocation@mfe.govt.nz. If you consider that providing the information by email would cause difficulties, you may return data on CD by mail or in person to the Ministry for the Environment, 23 Kate Sheppard Place, Wellington. Original signed copies of the declaration must also be provided. Please contact the Ministry on 0800 499 700 for any further assistance.

While the notice does not require the source information and records on which the data in the specified template is based, it would be prudent to retain this information for a period of seven years. The Minister is able to request any further information that he considers necessary to enable the verification of the accuracy of the information provided under this notice.

Persons to whom this notice applies should note that, under section 161D(7) of the Act, failure without reasonable excuse to supply the data and information required by this notice will mean that if the activity is subsequently prescribed as an eligible industry activity, those persons (and associated persons) may not be eligible to be allocated New Zealand units in respect of that activity.

In addition, it is an offence to knowingly provide altered, false, incomplete or misleading information (section 132 of the Act) or, with the intent to deceive and for the purpose of obtaining a material benefit or avoiding a material detriment, to fail to provide information or to provide altered, false, incomplete or misleading information (section 133 of the Act).