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## 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 6 notices calling for data on the following activities (one notice for each activity):

1. Production of lactalbumin powder
2. Production of lactose
3. Production of milk minerals powder
4. Production of whey cheese product
5. Production of whey powder
6. Production of whey protein concentrate (high protein)

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 the Provision of Data (Production of Lactalbumin Powder) 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 Lactalbumin Powder 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 Lactalbumin Powder) Notice 2010.

(2) This notice takes effect from and including 18 May 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).

**Bases of preparation** means the form available at  
[www.climatechange.govt.nz/industrialallocation](http://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](http://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 lactalbumin powder that are:

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

**Specified Template** means the table template located at  
[www.climatechange.govt.nz/industrialallocation](http://www.climatechange.govt.nz/industrialallocation)

(2) **Activity** means the precipitation of whey proteins from whey, which consists of residual water and milk solids following the separation of curd from a milk based coagulation process such as cheese or casein curd manufacture, into lactalbumin powder, where the output is lactalbumin powder which must have the following characteristics:

- water content of no more than 5% w/w as is;
- milk-derived protein content of no less than 80% w/w as is; and
- the majority of proteins are substantially denatured by heat and/or pH changes.

(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 45 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 CO<sub>2</sub> 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:

EH = emissions allocated to steam production

H = steam output (energy)

eH = assumed efficiency of steam production

P = delivered electricity generation (energy)

ep = assumed efficiency of electricity generation

ET = total direct emissions of the CHP system

Ep = 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 emissions resulting from:

- (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 defined, 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
  - onsite processing of waste materials from the activity to comply with regulatory obligations
  - machinery, equipment or processes used for environment control, such as heating and carbon dioxide generation
  - the transfer of water, nutrient solution and discharge water used in the activity;
- (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 described.

**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 other saleable products using components of the feed material that are not contained in the final lactalbumin powder product.

Dated at Wellington this 18th day of May 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 18 May 2010, requires any person carrying out the production of lactalbumin powder (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](http://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 45 working days of the date of this notice. The Ministry would prefer to receive this information by email to [industrialallocation@mfe.govt.nz](mailto: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 Lactose) 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 Lactose 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 Lactose) Notice 2010.

(2) This notice takes effect from and including 18 May 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).

**Bases of preparation** means the form available at  
[www.climatechange.govt.nz/industrialallocation](http://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](http://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 lactose that are:

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

**Specified Template** means the table template located at  
[www.climatechange.govt.nz/industrialallocation](http://www.climatechange.govt.nz/industrialallocation)

(2) **Activity** means the separation and drying of lactose from permeate, where permeate consists of milk solids in a dilute aqueous solution separated from milk or whey by permeation through ultrafiltration membranes and has water content of no more than 96.5% w/w and milk-derived protein content of less than 0.5% w/w, and where the output is lactose which must meet the compositional parameters of the lactose component of Codex Standard 212-1999 for sugars.

(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 45 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 CO<sub>2</sub> 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:

EH = emissions allocated to steam production

H = steam output (energy)

eH = assumed efficiency of steam production

P = delivered electricity generation (energy)

ep = assumed efficiency of electricity generation

ET = total direct emissions of the CHP system

Ep = 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 emissions resulting from:

- (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 defined, 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
  - onsite processing of waste materials from the activity to comply with regulatory obligations
  - machinery, equipment or processes used for environment control, such as heating and carbon dioxide generation
  - the transfer of water, nutrient solution and discharge water used in the activity;
- (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 described.

**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; and

- (h) the production of other saleable products using components of the feed material that are not contained in the final lactose product.

Dated at Wellington this 18th day of May 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 18 May 2010, requires any person carrying out the production of lactose (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](http://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 45 working days of the date of this notice. The Ministry would prefer to receive this information by email to [industrialallocation@mfe.govt.nz](mailto: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 Milk Minerals Powder) 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 Milk Minerals Powder 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 Milk Minerals Powder) Notice 2010.

(2) This notice takes effect from and including 18 May 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).

**Bases of preparation** means the form available at  
[www.climatechange.govt.nz/industrialallocation](http://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](http://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 milk minerals powder that are:

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

**Specified Template** means the table template located at  
[www.climatechange.govt.nz/industrialallocation](http://www.climatechange.govt.nz/industrialallocation)

(2) **Activity** means the separation and drying of milk minerals into milk minerals powder from permeate, where permeate consists of milk solids in a dilute aqueous solution separated from milk or whey by permeation through ultrafiltration membranes and has water content of no more than 96.5% w/w and milk-derived protein content of less than 0.5% w/w, and where the output is milk minerals powder which must have water content of no more than 12% w/w as is and milk-derived mineral content of no less than 75% w/w as 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 45 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 CO<sub>2</sub> 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:

EH = emissions allocated to steam production

H = steam output (energy)

eH = assumed efficiency of steam production

P = delivered electricity generation (energy)

ep = assumed efficiency of electricity generation

ET = total direct emissions of the CHP system

Ep = 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***

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

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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 emissions resulting from:

- (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 defined, 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
  - onsite processing of waste materials from the activity to comply with regulatory obligations
  - machinery, equipment or processes used for environment control, such as heating and carbon dioxide generation
  - the transfer of water, nutrient solution and discharge water used in the activity;
- (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 described.

**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; and

- (h) the production of other saleable products using components of the feed material that are not contained in the final milk minerals powder product.

Dated at Wellington this 18th day of May 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 18 May 2010, requires any person carrying out the production of milk minerals powder (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](http://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 45 working days of the date of this notice. The Ministry would prefer to receive this information by email to [industrialallocation@mfe.govt.nz](mailto: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 Whey Cheese Product) 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 Whey Cheese Product 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 Whey Cheese Product) Notice 2010.

(2) This notice takes effect from and including 18 May 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).

**Bases of preparation** means the form available at  
[www.climatechange.govt.nz/industrialallocation](http://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](http://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 whey cheese product that are:

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

**Specified Template** means the table template located at  
[www.climatechange.govt.nz/industrialallocation](http://www.climatechange.govt.nz/industrialallocation)

(2) **Activity** means the physical and chemical transformation of whey, which consists of residual water and milk solids following the separation of curd from a milk based coagulation process such as cheese or casein curd manufacture, into whey cheese product, where the output is whey cheese product which must be a cheese-like solid product having water content of no more than 27% as is and a protein content of at least 9% as 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 45 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 CO<sub>2</sub> 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:

EH = emissions allocated to steam production

H = steam output (energy)

eH = assumed efficiency of steam production

P = delivered electricity generation (energy)

ep = assumed efficiency of electricity generation

ET = total direct emissions of the CHP system

Ep = 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 emissions resulting from:

- (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 defined, 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
  - onsite processing of waste materials from the activity to comply with regulatory obligations
  - machinery, equipment or processes used for environment control, such as heating and carbon dioxide generation
  - the transfer of water, nutrient solution and discharge water used in the activity;
- (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 described; and
- (d) blending of whey (including concentrated whey) with milk, cream or other raw materials of milk origin.

**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; and
- (h) the production of other saleable products using components of the feed material that are not contained in the final whey cheese product.

Dated at Wellington this 18th day of May 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 18 May 2010, requires any person carrying out the production of whey cheese product (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](http://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 45 working days of the date of this notice. The Ministry would prefer to receive this information by email to [industrialallocation@mfe.govt.nz](mailto: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 Whey Powder) 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 Whey Powder 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 Whey Powder) Notice 2010.

(2) This notice takes effect from and including 18 May 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).

**Bases of preparation** means the form available at  
[www.climatechange.govt.nz/industrialallocation](http://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](http://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 whey powder that are:

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

**Specified Template** means the table template located at  
[www.climatechange.govt.nz/industrialallocation](http://www.climatechange.govt.nz/industrialallocation)

(2) **Activity** means the physical and chemical transformation of whey, which consists of residual water and milk solids following the separation of curd from a milk based coagulation process such as cheese or casein curd manufacture, into whey powder, where the output is whey powder which must meet compositional standards in the Codex Standard 289-1995 for whey powders and have milk-derived protein content no greater than 33% w/w on an “as is” basis.

(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 45 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 CO<sub>2</sub> 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:

EH = emissions allocated to steam production

H = steam output (energy)

eH = assumed efficiency of steam production

P = delivered electricity generation (energy)

ep = assumed efficiency of electricity generation

ET = total direct emissions of the CHP system

Ep = 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 emissions resulting from:

- (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 defined, 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
  - onsite processing of waste materials from the activity to comply with regulatory obligations
  - machinery, equipment or processes used for environment control, such as heating and carbon dioxide generation
  - the transfer of water, nutrient solution and discharge water used in the activity;
- (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 described.

**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; and

- (h) the production of other saleable products using components of the feed material that are not contained in the final whey powder product.

Dated at Wellington this 18th day of May 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 18 May 2010, requires any person carrying out the production of whey powder (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](http://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 45 working days of the date of this notice. The Ministry would prefer to receive this information by email to [industrialallocation@mfe.govt.nz](mailto: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 Whey Protein Concentrate (High Protein)) 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 Whey Protein Concentrate (High Protein) 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 Whey Protein Concentrate (High Protein)) Notice 2010.

(2) This notice takes effect from and including 18 May 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).

**Bases of preparation** means the form available at  
[www.climatechange.govt.nz/industrialallocation](http://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](http://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 whey protein concentrate that are:

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

**Specified Template** means the table template located at  
[www.climatechange.govt.nz/industrialallocation](http://www.climatechange.govt.nz/industrialallocation)

(2) **Activity** means separation and drying of milk proteins and other milk solids from whey, which consists of residual water and milk solids following the separation of curd from a milk based coagulation process such as cheese or casein curd manufacture, into whey protein concentrate, where the output is whey protein concentrate which must have the following characteristics:

- water content of no more than 6% w/w as is;
- milk-derived protein content of between 60% and 89% w/w as is;
- the protein species are not fractionated by the process; ie the ratios of proteins in the feed material and in the product are similar;
- the proteins have not been altered apart from mild denaturing due to heat treatment; and
- the proteins are largely soluble.

(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 45 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 CO<sub>2</sub> 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:

EH = emissions allocated to steam production

H = steam output (energy)

eH = assumed efficiency of steam production

P = delivered electricity generation (energy)

ep = assumed efficiency of electricity generation

ET = total direct emissions of the CHP system

Ep = 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 CO<sub>2</sub>-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 CO<sub>2</sub>-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 emissions resulting from:

- (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 defined, 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
  - onsite processing of waste materials from the activity to comply with regulatory obligations
  - machinery, equipment or processes used for environment control, such as heating and carbon dioxide generation
  - the transfer of water, nutrient solution and discharge water used in the activity;
- (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 described.

## **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; and
- (h) the production of other saleable products using components of the feed material that are not contained in the final whey protein concentrate product.

Dated at Wellington this 18th day of May 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 18 May 2010, requires any person carrying out the production of whey protein concentrate (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](http://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 45 working days of the date of this notice. The Ministry would prefer to receive this information by email to [industrialallocation@mfe.govt.nz](mailto: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).*