

ONTARIO REGULATION
made under the
ENVIRONMENTAL PROTECTION ACT
INDUSTRY EMISSIONS — NITROGEN OXIDES AND SULPHUR DIOXIDE

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INTERPRETATION AND APPLICATION

Definitions and application

1. In this Regulation,

“air dried tonne of pulp” means an air dried tonne of pulp where the weight of the pulp is corrected to reflect the weight that the pulp would be if the pulp were composed of 10 per cent water and 90 per cent fibre;

“average annual production” means the amount of regulated product produced by a facility in a typical production year;

“barrel” means 42 standard U.S. gallons;

“carbon black” means carbon pellets or fine powder produced by pyrolysis of hydrocarbon feedstock;

“clinker” means the product of a Portland cement kiln from which finished cement is manufactured by milling and grinding;

“copper products” means copper products that are produced by refining smelted copper;

“emission reduction credits” means nitric oxide emission reduction credits, nitrogen oxides emission reduction credits or sulphur dioxide emission reduction credits;

“facility” includes all buildings, equipment, structure and stationary items, such as surfaces and storage piles, that,

- (a) are located on a single site, or
- (b) are located on two or more contiguous or adjacent sites that function as a single integrated site,

and includes a replacement facility;

“flat glass” means commercial glass that is produced from silica, soda and lime and that is formed using a float process;

“matte” means an impure metallic sulphide mixture produced by smelting copper or nickel concentrate;

“name plate capacity” means, with respect to a facility, the total of the design electricity generating capacities of all the generation units in the facility;

“nickel products” means nickel products that are produced by refining smelted nickel;

“nitric oxide emission allowances” means nitric oxide emission allowances acquired under Ontario Regulation 397/01 (Emissions Trading) made under the Act;

“nitric oxide emission reduction credits” means nitric oxide emission reduction credits created in accordance with the Ontario Emission Trading Code;

“nitrogen oxides emission reduction credits” means nitrogen oxides emission reduction credits created in accordance with the Ontario Emission Trading Code;

“nitrogen oxides” means the sum, calculated in accordance with subsection (2), of nitric oxide and nitrogen dioxide;

“nitrogen oxides budget” means, for a regulated sector and year, the amount recorded in the Registry for that sector and that year in accordance with section 10;

“nitrogen oxides new source set aside” means, for a year, the amount recorded in the Registry for that year in accordance with section 11;

“non-smog season” means the period from October 1 to April 30 in each year;

“Ontario Emissions Trading Code” means the Ministry of the Environment publication of that name, dated October 2001;

“operator of the Registry” has the same meaning as in Ontario Regulation 397/01 (Emissions Trading) made under the Act;

“petroleum feedstock” means feedstock processed in catalytic crackers or hydrotreater units to produce lubricating oils and greases;

“produced” in connection with a regulated product means,

- (a) with respect to carbon black, the producing of carbon pellets or fine powder by pyrolysis of hydrocarbon feedstock,
- (b) with respect to clinker, the producing of clinker in Portland cement kilns,
- (c) with respect to copper products, the producing of copper products by refining smelted copper,
- (d) with respect to ethylene, the producing of ethylene by the processing of natural gas liquid or feedstock from the refining of crude oil and its derivatives,
- (e) with respect to flat glass, the producing of commercial glass from silica, soda and lime and that is formed using a float process,
- (f) with respect to copper or nickel matte, the producing of matte by smelting copper or nickel concentrates,
- (g) with respect to nickel products, the producing of nickel products by refining smelted nickel,
- (h) with respect to oil, the refining of crude oil,
- (i) with respect to petroleum feedstock, the processing of petroleum feedstock in catalytic crackers or hydrotreater units to produce lubricating oils and greases,
- (j) with respect to pulp, the producing of pulp, and
- (k) with respect to shipped steel, the shipping of steel manufactured at the facility or a related facility;

“Registry” has the same meaning as in Ontario Regulation 397/01 (Emissions Trading) made under the Act;

“regulated sector” means,

- (a) the base metal smelting sector,
- (b) the carbon black sector,
- (c) the cement sector,
- (d) the glass sector,
- (e) the iron and steel sector,
- (f) the petroleum sector, or
- (g) the pulp and paper sector;

“Report EPS 1/PG/7” means the Environment Canada publication entitled “Protocols and Performance Specifications for Continuous Monitoring of Gaseous Emissions from Thermal Power Generation – Report EPS1/PG/7”, dated September 1993;

“site” means a property and includes nearby properties owned or leased by the same person where passage from one property to another involves crossing, but not travelling along, a public highway;

“smog season” means the period from May 1 to September 30 in each year;

“steel” means steel that is produced by smelting iron ore into pig iron and converting the pig iron to steel by removing carbon through combustion in furnaces;

“sulphur dioxide budget” means, for a facility and year or for a regulated sector and year, the amount recorded in the Registry for that facility or sector, as the case may be, and that year in accordance with section 21, 22, 23 or 24, as the case may be;

“sulphur dioxide new source set aside” means, for a year, the amount recorded in the Registry for that year in accordance with section 25;

(2) The amount of nitrogen oxides are calculated for the purpose of this Regulation according to the following formula:

$$A = (B \times 1.53) + C$$

where,

A = the total amount of nitrogen oxides expressed as nitrogen dioxide,

B = the relevant amount of nitric oxide,

C = the relevant amount of nitrogen dioxide.

(3) For the purpose of this Regulation,

- (a) the base metal smelting sector is composed of facilities at which matte is produced by smelting copper or nickel concentrates;
- (b) the carbon black sector is composed of facilities at which carbon black is produced;
- (c) the cement sector is composed of facilities at which clinker is produced in Portland cement kilns;
- (d) the flat glass sector is composed of facilities at which flat glass is produced;
- (e) the iron and steel sector is composed of facilities from which steel produced at the facility or related facility is shipped;
- (f) the petroleum sector is composed of facilities at which crude oil is refined, ethylene is produced or petroleum feedstock is processed in catalytic crackers or hydrotreater units to produce lubricating oils and greases; and
- (g) the pulp and paper sector is composed of facilities at which pulp is produced by the kraft process.

(4) For the purpose of this Regulation,

- (a) except as provided in clause (b), the regulated product of a facility in the base metal smelting sector is copper and nickel contained in matte produced at the facility;
- (b) the regulated products of the base metal smelting facility listed as Inco, Sudbury in the tables to this Regulation are copper products and nickel products;
- (c) the regulated product of a facility in the carbon black sector is carbon black;
- (d) the regulated product of a facility in the cement sector is clinker;
- (e) the regulated product of a facility in the glass sector is flat glass;
- (f) the regulated product of a facility in the iron and steel sector is shipped steel;

- (g) the regulated product of a facility in the petroleum sector that produces ethylene by the processing of natural gas liquid or feedstock from the refining of crude oil and its derivatives is ethylene;
 - (h) the regulated product of a facility in the petroleum sector that refines crude oil is oil;
 - (i) the regulated product of a facility in the petroleum sector that processes petroleum feedstock in catalytic crackers or hydrotreaters units to produce lubricating oils and greases is petroleum feedstock; and
 - (j) the regulated product of a facility in the pulp and paper sector is pulp.
- (5) For the purpose of this Regulation, a facility is a replacement facility if,
- (a) the facility is located at a site where another facility that produced a regulated product was previously located;
 - (b) the facility commences production of a regulated product within five years after the facility that was located at the site ceased production;
 - (c) the facility produces the same type of regulated product that was produced by the facility that was previously located at the site; and
 - (d) the owner of the facility that was previously located at the site had acquired emission allowances in respect of the facility under this Regulation.

GENERAL

Rounding of amounts

2. (1) For the purpose of this Regulation, the final result of any calculation made under this Regulation that is measured in tonnes and that is not a whole number when expressed in tonnes shall be rounded down to the nearest tonne.

(2) For the purpose of this Regulation, any amount of nitrogen oxides or sulphur dioxide used in a calculation under this Regulation that is not a whole number when expressed in tonnes shall be rounded up to the nearest tonne.

Forms

3. An application or report to the Director under this Regulation must be in a form provided by or approved by the Director.

Deemed production

4. (1) Except as provided in this section, a facility's deemed production shall be the lesser of the amounts determined by the Director under subsections (2) and (3).

(2) For the purpose of determining a facility's deemed production, the Director shall determine the results of the following formula:

$$(A + B) \div 2$$

where,

A = the largest amount of the regulated product that was produced by the facility or the facility that was located at the replacement facility's site, as the case may be, in any one year of the three years immediately preceding the year in which the application is made,

B = the second largest amount of the regulated product that was produced by the facility or the facility that was located at the replacement facility's site, as the case may be, in any one year of the three years immediately preceding the year in which the application is made.

(3) For the purpose of determining a facility's deemed production, the Director shall determine the results of the following formula:

$$C \times 1.2$$

where,

C = the historical facility production of the facility.

(4) Despite subsection (1) and subject to subsection (5), the deemed production of a facility in the petroleum sector that produces ethylene, in the base metal smelting sector or in the carbon black sector is the amount determined by the Director in accordance with subsection (2).

(5) Despite subsection (1) and subject to subsection 14 (5) and 28 (5), a facility's deemed production shall be the amount of regulated product that the owner of the facility estimates will be produced by the facility during the following year,

- (a) if the determination of the facility's deemed production is being made in respect of the first, second, third or fourth application made in respect of the facility for emission allowances and the facility,
 - (i) is not a replacement facility, and

(ii) is not listed in a table to this Regulation;

- (b) if an increase in production or a modification of a process or equipment has or will occur and the determination of the facility's deemed production is being made in respect of the first, second, third or fourth application made in which emission allowances are sought in respect of the increased production or modification of the facility; or
- (c) if the facility is a replacement facility and the determination of the facility's deemed production is being made in respect of the first, second, third or fourth application made in which emission allowances are sought in respect of the increased amount of regulated product produced by the replacement facility.

(6) Subsections (7), (8) and (9) apply to the determination of a facility's deemed production if,

- (a) there was a previous determination of the facility's deemed production under subsection (5); and
- (b) the determination is being made in the second year after the previous determination.

(7) If subsection (6) applies, the Director shall calculate the following as part of his or her determination of the facility's deemed production under subsection (2), (3) or (5):

$$X - Y$$

where,

X = the amount of regulated product produced by the facility during the completed production year,

Y = the amount of regulated product that the owner of the facility estimated, or was deemed to have estimated, would be produced by the facility for the purpose of subsection (5) when the previous determination was made.

(8) If the amount calculated under subsection (7) is greater than zero, the facility's deemed production under subsection (2), (3) or (5) is increased by that amount.

(9) If the amount calculated under subsection (7) is zero or less than zero, the facility's deemed production under subsection (2), (3) or (5) is reduced by the following amount:

$$-1.1 \times A$$

where,

A = the amount determined under subsection (7).

(10) For the purpose of this section, if no application has been determined under section 16 or 30 in respect of a replacement facility, the historical facility production of the replacement facility is equal to the historical facility production of the facility that was located on the replacement facility's site, as determined in accordance with this section.

(11) For the purpose of this section, and subject to subsection (13), the historical facility production of a facility that is listed in a table to this Regulation is the largest amount of regulated product that was produced in 2002, 2003 or 2004 by the facility as reported by the owner of the facility under paragraph 3 of subsection 6 (4).

(12) For the purpose of this section and subject to subsection (13), the historical facility production of a facility that is not listed in a table to this Regulation is equal to the value assigned to "B" in subsection 15 (6) or 29 (6) in an application made in respect of the facility in accordance with section 15 or 29.

(13) For the purpose of this section, if an application in respect of a facility has been determined under section 16 or 30, the historical facility production of the facility is equal to the value assigned to "B" in subsection 16 (4) or 30 (4) in the most recently determined application made in respect of the facility under section 16 or 30.

(14) In this section,

"completed production year" means the year following the year in which the previous determination referred to in subsection (6) was made;

"following year" means, with respect to a determination of a facility's deemed production, the year following the year in which the determination is made.

Director may substitute own estimate

5. If the Director is of the opinion that an estimate made by the owner of a facility for the purpose of this Regulation is too high, the Director may substitute a lower estimate and that estimate shall be deemed to be the estimate made by the owner for the purpose of this Regulation.

Submission of production data

6. (1) The owner of a facility that is filing an application under section 12, 14, 26 or 28 shall provide to the Director the data on the total amount of regulated product that was produced by the facility or by the facility that was located at the replacement facility's site, in each of the three years preceding the year in which the application is made.

(2) The owner of a facility that is filing an application under section 15, 16, 17, 29, 30 or 31 shall provide to the Director the data on the average annual production that the owner estimates will be produced by the new, expanded or replacement facility, as the case may be.

(3) If required by the Director, an owner of a facility that has filed an application under this Regulation shall provide to the Director the method used to monitor or calculate the amount of nitrogen oxides and sulphur dioxide emitted from the facility in one or more years specified by the Director and the information used in the application of those methods to determine the amount of nitrogen oxides and sulphur dioxide emitted from the facility in those years, as reported to the Director in accordance with Ontario Regulation 127/01 (Airborne Contaminant Discharge Monitoring and Reporting) made under the Act.

(4) The owner of a facility listed in a table to this Regulation shall file the following data with the first application made under this Regulation in respect of the facility:

1. The amount of any nitrogen oxides emitted from all electricity generation units located at the facility in each of the years 2002, 2003 and 2004, if the facility's electricity generation name plate capacity was greater than 25 megawatts.
2. The amount of any sulphur dioxide emitted from all electricity generation units located at the facility in each of the years 2002, 2003 and 2004, if the facility's electricity generation name plate capacity was greater than 25 megawatts.
3. The amount of regulated product produced by the facility in each of the years 2002, 2003 and 2004.
4. The method used to monitor or calculate the amount of nitrogen oxides and sulphur dioxide emitted from the facility in 2001 and the information used in the application of those methods to determine the amount of nitrogen oxides and sulphur dioxide emitted from the facility in 2001, as reported to the Director in accordance with Ontario Regulation 127/01 (Airborne Contaminant Discharge Monitoring and Reporting) made under the Act.

(5) For the purpose of subsection (4) if an electricity generation unit produces a useful product other than electricity, the amounts reported under paragraphs 1 and 2 of subsection (4) shall include the amount determined in accordance with the following formula:

$$A \div (B \times C)$$

where,

A = the amount of energy used by the generation unit to produce electricity during the period of time,

B = the total amount of energy used by the generation unit to produce electricity and other useful products during the period of time,

C = the total amount of nitrogen oxides or sulphur dioxide, as the case may be, emitted from the generation unit during the period of time.

(6) The owner of a facility that is providing data under this section shall provide the data in the following manner:

1. With respect to carbon black, tonnes of carbon black produced at the facility during a calendar year.
2. With respect to clinker, tonnes of clinker produced at the facility during a calendar year.
3. With respect to copper products, tonnes of copper products produced at the facility during a calendar year.
4. With respect to ethylene, tonnes of ethylene produced at the facility during a calendar year.
5. With respect to flat glass, tonnes of flat glass produced at the facility during a calendar year.
6. With respect to copper and nickel contained in matte, the tonnes of copper and nickel contained in the matte produced at the facility during a calendar year;
7. With respect to nickel products, tonnes of nickel products produced at the facility during a calendar year.
8. With respect to oil, barrels of crude oil refined at the facility during a calendar year.
9. With respect to petroleum feedstock, barrels of feedstock processed in catalytic crackers and hydrotreater units to produce lubricating oils and greases at the facility during a calendar year.
10. With respect to pulp, air dried tonnes of pulp produced at the facility during a calendar year.
11. With respect to shipped steel, tonnes of steel produced at the facility or a related facility that were shipped from the facility during a calendar year.

(7) Despite paragraph 6 of subsection (6), the facility listed as Falconbridge Sudbury in the tables to this Regulation shall provide data under this section concerning matte solely in respect of tonnes of nickel contained in the matte produced at that facility in the calendar year.

EMISSION ALLOWANCES

Contents of the Registry

7. (1) The Registry shall contain the following information for all emission allowances recorded in the Registry under this Regulation:

1. The name of the person who acquired the allowances.
2. The date the allowances were acquired.
3. The name of the person who currently holds the allowances and the amount of the allowances held by that person.

(2) Despite section 17 of Ontario Regulation 397/01 (Emissions Trading) made under the Act, the operator of the Registry shall ensure that the acquisition of emission allowances by a person under this Regulation is recorded in the Registry as soon as possible after the acquisition.

Trading of allowances and credits

8. (1) Emission allowances acquired under this Regulation may be transferred from one person to another in accordance with the Ontario Emissions Trading Code.

(2) A person who has applied to the Director for approval to retire emission allowances or emission reduction credits for the purpose of subsection 35 (3) or 36 (3) may not transfer those allowances or credits to another person unless the Director refuses to approve their retirement.

Voluntary retirement of allowances

9. The holder of emission allowances may retire the allowances by giving written notice to the operator of the Registry and, on receipt of the notice, the operator shall amend the Registry to indicate that the retired allowances no longer exist.

NITROGEN OXIDES EMISSION ALLOWANCES

Sector budgets, cement, flat glass, iron and steel and pulp and paper sectors

10. (1) For each regulated sector listed in Table 1, the operator of the Registry shall record in the Registry in accordance with this section the amount of the sector's nitrogen oxides budget for each year.

(2) Subject to subsection (3), the nitrogen oxides budget for a regulated sector for a year is the amount set out for that sector for that year in Table 1.

(3) On January 1 of each year after 2005, the nitrogen oxides budget for a regulated sector for every subsequent year shall be increased by the total amount of nitrogen oxides emission allowances for which the Director gives notice to the operator of the Registry in respect of the facilities in that sector under subsection 20 (1) or (2) on or before October 1 of the preceding year.

Annual amount of new source set asides, nitrogen oxides

11. (1) The operator of the Registry shall record in the Registry in accordance with this section the amount of the nitrogen oxides new source set aside for each year.

(2) Subject to subsections (3) and (4), the nitrogen oxides new source set aside for a year is 3,100 tonnes.

(3) On January 1 of each year after 2005, the nitrogen oxides new source set aside for every subsequent year shall be reduced by the total amount of nitrogen oxides emission allowances for which the Director gives notice to the operator of the Registry under subsection 20 (1) or (2) on or before October 1 of the preceding year.

(4) On January 1 of each year after 2005, the nitrogen oxides new source set aside for every subsequent year shall be increased by the total amount of nitrogen oxides emission allowances determined by the Director under section 13 to be moved to the nitrogen oxides new source set aside as of that day.

Application for nitrogen oxides emission allowances, listed facilities

12. (1) The owner of a facility listed in Table 2 may apply to the Director for nitrogen oxides emission allowances in respect of the facility for any year after 2005.

(2) The owner of a replacement facility located on a site where a facility listed in Table 2 was located may apply to the Director for nitrogen oxides emission allowances in respect of the facility for any year after 2006.

(3) The owner of a facility in the petroleum sector that is not listed in Table 2 may apply to the Director for nitrogen oxides emission allowances in respect of the facility for any year after 2006, if nitrogen oxides emission allowances have previously been acquired as a result of an application made under section 15 or 19 in respect of the facility or the facility that was located at the replacement facility's site.

(4) An application under this section must be made not later than June 1 in the year preceding the year for which the allowances are applied for.

(5) For each facility for which an application for nitrogen oxides emission allowances for 2006 is made in accordance with this section, the Director shall determine the following amount:

$$A - C$$

where,

A = the amount of nitrogen oxides emission allowances set out in respect of the facility for 2006 in Table 2,

C = one-third of the total of the amount of any nitrogen oxides reported under paragraph 1 of subsection 6 (4) in respect of the facility.

(6) For each facility for which an application for nitrogen oxides emission allowances for 2007 or 2008 is made in accordance with this section, the Director shall determine the following amount:

$$A + B - C$$

where,

A = the amount of nitrogen oxides emission allowances set out in Table 2 in respect of the facility or the facility that was located at the replacement facility's site, as the case may be, for the year for which the emission allowances are applied for,

B = the total amount of any nitrogen oxides emission allowances that the owner of the facility or the facility that was located at the replacement facility's site acquired in respect of the facility or the facility that was located at the replacement facility's site under section 20 in any previous year,

C = one-third of the total sum of the amounts of any nitrogen oxides reported under paragraph 1 of subsection 6 (4) in respect of the facility or the facility that was located at the replacement facility's site, as the case may be.

(7) For each facility for which an application for nitrogen oxides emission allowances for any year after 2008 is made in accordance with this section, the Director shall determine the following amount:

$$A + B - C - D$$

where,

A = the amount of nitrogen oxides emission allowances set out in Table 2 in respect of the facility or the facility that was located at the replacement facility's site, as the case may be, for the year for which the emission allowances are applied for,

B = the total amount of any nitrogen oxides emission allowances that the owner of the facility or the facility that was located at the replacement facility's site acquired in respect of the facility or the facility that was located at the replacement facility's site under section 20 in any previous year,

C = one-third of the total sum of the amounts of any nitrogen oxides reported under paragraph 1 of subsection 6 (4) in respect of the facility or the facility that was located at the replacement facility's site, as the case may be,

D = the amount determined under section 13 with respect to reduction in production,

(8) If the amount of nitrogen oxides emission allowances determined under subsection (6) or (7), as the case may be, is less than zero, the amount shall be adjusted to zero.

(9) The Director shall send written notice of the amount determined, subject to subsection (8), in respect of each facility under subsection (5), (6) or (7), as the case may be, to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for.

(10) On January 1 of the year for which emission allowances are applied for, the owner of the facility shall be deemed to have acquired nitrogen oxides emission allowances in respect of the facility in the amount determined, subject to subsection (8), in respect of the facility under subsection (5), (6) or (7), as the case may be.

Phased out facilities — nitrogen oxides

13. (1) For the purpose of determining the value of “D” under subsection 12 (7), the Director shall make a determination using the following rules:

1. If the deemed production of the facility determined in accordance with section 4 is greater than 50 per cent of the facility's historical facility production, in at least one of the two years preceding the year in which the application is made, the value of “D” is zero.
2. If the deemed production of the facility determined in accordance with section 4 is less than or equal to 50 per cent of the facility's historical facility production in each of the two years preceding the year in which the application is made, but is greater than zero in at least one of those years, the value of “D” is,

$$(A + B) \times .5$$

where,

A = the amount of nitrogen oxides emission allowances set out in Table 2 in respect of the facility or the facility that was located at the replacement facility's site, as the case may be, for the year for which the emission allowances are applied for,

B = the total amount of any nitrogen oxides emission allowances that the owner of the facility or the facility that was located at the replacement facility's site acquired in respect of the facility or the facility that was located at the replacement facility's site under section 20 in any previous year.

3. If the deemed production of the facility determined in accordance with section 4 is zero in each of the two years preceding the year in which the application is made, the value of "D" is,

$$A + B$$

where,

A = the amount of nitrogen oxides emission allowances set out in Table 2 in respect of the facility or the facility that was located at the replacement facility's site, as the case may be, for the year for which the emissions allowances are applied for,

B = the amount of any nitrogen oxides emission allowances that the owner of the facility or the facility that was located at the replacement facility's site acquired in respect of the facility or the facility that was located at the replacement facility's site under section 20 in any previous year.

(2) If the facility does not produce any regulated product in any period of five consecutive years,

- (a) the facility shall be deemed not to be listed for the purposes of any subsequent application made under this Regulation, including an application made under section 15 or 16;
- (b) no further applications shall be made under subsection 12 (1) with respect to the facility;
- (c) the owner of the facility may in subsequent years make an application under section 15 in respect of the facility, if the facility meets the criteria set out in that section;
- (d) the owner of the facility may in subsequent years make an application under subsection 12 (3) or section 16 in respect of the facility, if nitrogen oxides emission

allowances have been acquired by the owner of the facility as the result of an application under section 15; and

- (e) the amount of the nitrogen oxides emission allowances set out in respect of the facility or the facility that was located at the replacement facility's site in Table 2 for the fifth year of the five-year period, if any, and the amount of nitrogen oxide emission allowances that the owner of the facility or the facility that was located at the replacement facility's site acquired in respect of the facility or the facility that was located at the replacement facility's site under section 20 in any previous year shall be added to the nitrogen oxides new source set aside in accordance with subsection 11 (4).

(3) If clause (2) (a) applies with respect to a facility, the Director shall send written notice,

- (a) to the owner of the facility advising that the facility is deemed not to be listed; and
- (b) to the operator of the Registry advising that the facility is deemed not to be listed and setting out the amount of nitrogen oxides emission allowances to be added to the nitrogen oxides new source set aside as of January 1 of the year following the year in which notice is given.

(4) For the purposes of subsections (1) and (2) if no application is made under section 12 in respect of a facility listed in Table 2 or a facility described in subsection 12 (2) or (3) in a year, the deemed production of the facility shall be zero.

(5) For the purpose of this section, if no application has been determined under section 16 in respect of a replacement facility, the historical facility production of the replacement facility is equal to the historical facility production of the facility that was located on the replacement facility's site, as determined in accordance with this section.

(6) For the purpose of this section and subject to subsection (8), the historical facility production of a facility that is listed in Table 2 is the largest amount of regulated product that was produced in 2002, 2003 or 2004 by the facility as reported by the owner of the facility under paragraph 3 of subsection 6 (4).

(7) For the purpose of this section and subject to subsection (8), the historical facility production of a facility that is not listed in Table 2 is equal to the value assigned to "B" in subsection 15 (6) in the application made respect of the facility in accordance with section 15.

(8) If a previous application made in respect of a facility under section 16 has been determined, for the purpose of this section the historical facility production of the facility is equal to the value assigned to "B" in subsection 16 (4) in the most recently determined application made under section 16 in respect of the facility.

Applications for nitrogen oxides emission allowances

14. (1) The owner of a facility listed in Table 3 may apply to the Director for nitrogen oxides emission allowances in respect of the facility for any year after 2005.

(2) If the owner of the facility has previously acquired nitrogen oxides emission allowances as the result of an application under section 15 in respect of the facility, the owner may apply to the Director for nitrogen oxides emission allowances in respect of the facility in the cement sector, the flat glass sector, the iron and steel sector or the pulp and paper sector that is not listed in Table 3 for any year after 2006.

(3) The owner of a replacement facility may apply to the Director for nitrogen oxides emission allowances in respect of the facility for any year after 2006 if,

- (a) the facility that was located at the replacement facility's site was a facility in the cement sector, the flat glass sector or the pulp and paper sector; and
- (b) an owner of the facility that was located at the site had acquired nitrogen oxides emission allowances in respect of that facility under this section.

(4) An application made under subsection (1), (2) or (3) shall not include an application for nitrogen oxides emission allowances in respect of a modification or increased production of a facility, if the owner of the facility has also made an application under section 16 to the Director for nitrogen oxides emission allowances for the same year with respect to the modification or increased production.

(5) If subsection (4) applies, the deemed production of the facility for the purposes of subsection (7) shall be the lesser of the amounts determined by the Director under subsections 4 (2) and (3).

(6) An application under this section must be made not later than June 1 in the year preceding the year for which emission allowances are applied for.

(7) For each facility for which an application for nitrogen oxides emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times B - C$$

where,

A = the intensity rate for the facility determined in accordance with subsection (8),

B = the deemed production of the facility determined in accordance with section 4,

C = one-third of the total of the amounts of any nitrogen oxides reported under paragraph 1 of subsection 6 (4) in respect of the facility or the facility that was located at the replacement facility's site, as the case may be.

(8) For the purpose of subsection (7), the intensity rate for the facility shall be determined in accordance with the following rules:

1. If the facility is listed in Table 3 and the Director has not determined an intensity rate for the facility pursuant to section 17 or the intensity rate has not been applied, the intensity rate is the intensity rate for the facility for the year for which emission allowances are applied for, as determined in accordance with Table 3.
2. Subject to paragraph 5, if the Director has determined an intensity rate for the facility pursuant to section 17, the intensity rate is the most recently determined intensity rate for the facility determined under section 17 that has been applied in a previous application for nitrogen oxides emission allowances made in respect of the facility.
3. If the facility is a replacement facility and paragraph 2 does not apply and the Director has not determined an intensity rate for the facility that was previously located at the replacement facility's site pursuant to section 17 or the intensity rate has not been applied, the intensity rate is the intensity rate for the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, as determined in accordance with Table 3.
4. Subject to paragraph 5, if the facility is a replacement facility and paragraph 2 does not apply and the Director has determined an intensity rate for the facility that was located at the replacement facility's site pursuant to section 17, the intensity rate is the most recently determined intensity rate for the facility that was located at the replacement facility's site determined under section 17 that has been applied in a previous application for nitrogen oxides emission allowances made in respect of the facility.
5. If the most recently determined intensity rate for the facility or the facility that was located at the replacement facility's site is greater than the intensity rate set out in Table 3 for the facility or the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, the intensity rate is the intensity rate for the facility or the facility that was located at the replacement facility's site, as determined in accordance with Table 3.

(9) If the total of all the amounts determined under subsection (7) in respect of applications for nitrogen oxides emission allowances for a year in respect of facilities in a regulated sector is less than or equal to the amount of the sector's nitrogen oxides budget for that year,

- (a) the Director shall send written notice of the amount determined in respect of each facility in the regulated sector under subsection (7) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for; and
- (b) on January 1 of the year for which emission allowances are applied for, the owner of a facility in the regulated sector shall be deemed to have acquired nitrogen oxides emission allowances in respect of the facility in the amount determined in respect of the facility under subsection (7).

(10) If the total of all the amounts determined under subsection (7) in respect of applications for nitrogen oxides emission allowances for a year in respect of facilities in a regulated sector is more than the amount of the sector's nitrogen oxides budget for that year,

- (a) the Director shall determine adjusted amounts under subsection (11) in respect of each facility in the regulated sector in respect of which an amount was determined under subsection (7);
- (b) the Director shall send written notice of the adjusted amount determined in respect of a facility under subsection (11) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which the emission allowances are applied for; and
- (c) on January 1 of the year for which emission allowances are applied for, the owner of a facility shall be deemed to have acquired nitrogen oxides emission allowances in respect of the facility in the adjusted amount determined for the facility under subsection (11).

(11) For the purpose of subsection (10), the adjusted amount in respect of a facility in a regulated sector in respect of applications for nitrogen oxides emission allowances for a year shall be determined in accordance with the following formula:

$$A \times B \div C$$

where,

- A = the amount determined in respect of the facility under subsection (7),
- B = the nitrogen oxides budget, calculated in accordance with section 10, for the regulated sector for the year for which emission allowances are applied for,

C = the total of all the amounts determined under subsection (7) in respect of all the facilities in the regulated sector.

New facilities, initial applications — nitrogen oxides

15. (1) The owner of a facility that is described in subsection (2) and that is not listed in Table 2 or Table 3 or is deemed not to be listed in Table 2 may apply to the Director for nitrogen oxides emission allowances in respect of the facility for any year after 2005 if,

- (a) the owner of a facility has applied under section 17 for a determination of the intensity rate that is to be applied to the facility;
- (b) the application under section 17 was made not more than three years before the application made under this section; and
- (c) nitrogen oxides emission allowances have not previously been acquired as a result of an application made under this section in respect of the facility.

(2) This section applies in the following regulated sectors to facilities that first produced regulated product after January 1, 2005 and that meet the criteria described for each sector:

1. In the cement sector, a facility that has the capacity to produce more than 100,000 tonnes of clinker per year and that will emit more than 100 tonnes of nitrogen oxides in the year for which emission allowances are applied for.
2. In the flat glass sector, a facility that has the capacity to produce more than 50,000 tonnes of flat glass per year and that will emit more than 100 tonnes of nitrogen oxides in the year for which emission allowances are applied for.
3. In the iron and steel sector, a facility that has the capacity to ship more than 100,000 tonnes of steel per year and that will emit more than 100 tonnes of nitrogen oxides in the year for which emission allowances are applied for.
4. In the petroleum sector, a facility that has the capacity to refine more than 50,000 barrels of crude oil per day, produce more than 400,000 tonnes of ethylene per year or process more than 20,000 barrels per day of petroleum feedstock to produce lubricating oils and greases and that will emit more than 100 tonnes of nitrogen oxides in the year for which emission allowances are applied for.
5. In the pulp and paper sector, a facility that has the capacity to produce more than 100,000 air dried tonnes of pulp per year and that will emit more than 100 tonnes of nitrogen oxides in the year for which emission allowances are applied for.

(3) This section does not apply to a replacement facility.

(4) An application under this section must be made not later than June 1 in the year preceding the year for which emission allowances are applied for.

(5) An application may be made under this section by the owner of a facility that has not yet begun to produce a regulated product.

(6) For each facility for which an application for nitrogen oxides emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times B$$

where,

A = the intensity rate determined by the Director in accordance with section 17 for the facility,

B = the annual average production that the owner of the facility estimates, or is deemed to estimate, in accordance with subsection 6 (2) will be produced by the facility.

(7) For each facility in the cement sector, the flat glass sector, the iron and steel sector or the pulp and paper sector for which an application for nitrogen oxides emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times C$$

where,

A = the intensity rate determined by the Director in accordance with section 17 for the facility,

C = the deemed production determined under section 4 with respect to the facility

(8) A facility to which clause 13 (2) (a) applies shall be deemed not to have produced regulated product on or before January 1, 2005.

Applications for facilities that expand or increase production — nitrogen oxides

16. (1) The owner of a facility that is listed in Table 2 or Table 3, that is a replacement facility or that is a facility in respect of which nitrogen oxides emission allowances have been acquired under section 15 may apply to the Director for nitrogen oxides emission allowances in respect of the facility for any year after 2005 if,

(a) the owner of the facility estimates,

- (i) that the deemed production of the facility in the year for which the allowances are applied for will be at least 20 per cent greater than the historical facility production of the facility or the facility that was located at the replacement facility's site, or
 - (ii) that the average annual production of the facility will be at least 20 per cent greater than the historical production of the facility as a result of a modification to a process or equipment at the facility;
- (b) the owner of the facility has applied under section 17 for a determination of the intensity rate that is to be applied to the facility;
 - (c) the application under section 17 was made not more than three years before the date of the application under this section; and
 - (d) nitrogen oxides emission allowances have not previously been acquired as a result of an application made under this section in respect of the modification or increased production of the facility.

(2) An application under this section must be made not later than June 1 in the year preceding the year for which emission allowances are applied for.

(3) An application may be made under this section by the owner of a facility that has not begun to produce a regulated product with the expanded portion of the facility.

(4) For each facility for which an application for nitrogen oxides emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times (B - C)$$

where,

A = the lesser of the intensity rate determined by the Director in accordance with section 17 for the facility and the intensity rate, if any, for the facility or the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, as determined in accordance with Table 3,

B = the average annual production that the owner of the facility estimates, or is deemed to estimate, in accordance with subsection 6 (2) will be produced by the facility,

C = the facility's historical facility production.

(5) For each facility in the cement sector, the flat glass sector, the iron and steel sector or the pulp and paper sector for which an application for nitrogen oxides emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times (D - E)$$

where,

- A = the intensity rate determined by the Director in accordance with section 17 for the facility,
- D = the deemed production determined in respect of the facility under subsection 4 (5),
- E = the lesser of the amounts of deemed production determined in respect of the facility under subsections 4 (2) and (3).

(6) If there has been no previous application determined under this section in respect of a replacement facility, for the purpose of this section the historical facility production of the replacement facility is equal to the historical facility production of the facility that was located on the replacement facility's site, as determined in accordance with this section.

(7) For the purpose of this section and subject to subsection (9), the historical facility production of a facility that is listed in Table 2 or Table 3 is the largest amount of regulated product that was produced in 2002, 2003 or 2004 by the facility as reported by the owner under paragraph 3 of subsection 6 (4).

(8) For the purpose of this section and subject to subsection (9), the historical facility production of a facility that is not listed in Table 2 or Table 3 is equal to the value assigned to "B" in subsection 15 (6) in the application previously made under section 15 in respect of the facility.

(9) For the purpose of this section, if an application in respect of a facility has been previously determined under this section, the historical facility production of the facility is equal to the value assigned to "B" in subsection (4) in the most recently determined application made under this section in respect of the facility.

Determination of intensity rate — new, replacement or expanded facilities

17. (1) The owner of a facility to which section 15 or 16 applies shall apply to the Director for an approval of a proposed intensity rate that is to be applied to the expanded, new or replacement facility, as the case may be.

(2) The intensity rate proposed by the owner of the facility shall be based upon the following formula:

$$A \div B$$

where,

A = the amount of emissions reported in accordance with paragraph 7 of subsection (5) and subsection (7),

B = the average annual production that the owner of the facility estimates, is deemed to have estimated, in accordance with subsection 6 (2).

(3) An application under this section must be made not later than January 1 in the year preceding the year for which nitrogen oxides emission allowances are applied for in respect of the facility.

(4) The application shall include an evaluation of each new or modified process in the facility that includes any new or modified piece of equipment that has a heat input of 1,000,000 BTUs per hour or greater,

- (a) that has or will result in an increase in the average annual production of the facility;
- (b) that has been made since the later of the day this Regulation comes into force and the day of the last application made under this section in respect of the facility; and
- (c) that produces nitrogen oxides emissions.

(5) The evaluation shall include the following steps for each new or modified process and piece of equipment:

1. Identification of nitrogen oxides control technologies available when the modification was made.
2. Elimination of technologies not used at comparable facilities.
3. Elimination of technically infeasible control technologies.
4. Ranking of technically feasible control technologies by nitrogen oxides emission reduction effectiveness.
5. Evaluating control costs.
6. Selection of best available control technology economically achievable.
7. Estimate the amount of nitrogen oxides emissions that will be emitted annually from the equipment and process if the selected control technology is installed.

(6) For the purpose of paragraph 6 of subsection (5), a control technology may be selected as a best available control technology economically achievable if the percentage reduction of nitrogen oxides emissions achieved by the control technology is within 15 per cent of the reduction of nitrogen oxides emissions achieved by the control technology with the greatest percentage of nitrogen oxides emission reduction identified in the evaluation as required by paragraph 4 of subsection (5).

(7) The owner of the facility shall identify in the application any source of nitrogen oxides emissions at the facility, not included in the evaluation prepared under subsection (5), and shall estimate the amount of emissions that will be emitted from the source in a calendar year.

(8) The application shall be certified as being complete, accurate and completed in accordance with this Regulation by a person who holds a licence or temporary licence issued under the *Professional Engineers Act* to engage in the practice of professional engineering, other than a limited licence issued under that Act.

(9) The Director shall, not later than April 15 in the year the application under this section is made and subject to subsection (11), notify the owner of the facility in writing that he or she accepts the proposed intensity rate for the facility or does not accept the proposed intensity rate for the facility.

(10) If the Director does not accept the proposed intensity rate for the facility, the written notice of his or her determination shall specify the reasons the proposed intensity rate was not accepted and shall set out the intensity rate for the facility as determined by the Director.

(11) If an intensity rate for the facility or the facility that was located at the replacement facility's site is set out in Table 3 or the facility is in the cement sector, the flat glass sector, the iron and steel sector or the pulp and paper sector and an intensity rate has previously been determined for the facility or the facility that was located at the replacement facility's site under this section, the Director shall determine the intensity rate for the facility in accordance with the following:

$$A \times (B \div C) + D \times ((C - B) \div C)$$

where,

A = is the intensity rate for the facility determined in accordance with subsection (12),

B = the facility's historical facility production,

- C = the average annual production that the owner of the replacement facility estimates, or is deemed to estimate, in accordance with subsection 6 (2) will be produced by the facility,
- D = the intensity rate determined for the facility in the current application under subsection (9).

(12) For the purpose of subsection (11), the intensity rate for the facility shall be determined in accordance with the following rules:

1. If the facility is listed in Table 3 and the Director has not determined an intensity rate for the facility pursuant this section or the intensity rate has not been applied, the intensity rate is the intensity rate for the facility for the year for which emission allowances are applied for, as determined in accordance with Table 3.
2. Subject to paragraph 5, if the Director has determined an intensity rate for the facility pursuant to this section, the intensity rate is the most recently determined intensity rate for the facility determined under this section that has been applied in a previous application for nitrogen oxides emission allowances made in respect of the facility.
3. If the facility is a replacement facility and paragraph 2 does not apply and the Director has not determined an intensity rate for the facility that was previously located at the replacement facility's site pursuant to this section or the intensity rate has not been applied, the intensity rate is the intensity rate for the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, as determined in accordance with Table 3.
4. Subject to paragraph 5, if the facility is a replacement facility and paragraph 2 does not apply and the Director has determined an intensity rate for the facility that was located at the replacement facility's site pursuant to this section, the intensity rate is the most recently determined intensity rate for the facility that was located at the replacement facility's site determined under this section that has been applied in a previous application for nitrogen oxides emission allowances made in respect of the facility.
5. If the most recently determined intensity rate for the facility or the facility that was located at the replacement facility's site is greater than the intensity rate set out in Table 3 for the facility or the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, the intensity rate is the intensity rate for the facility or the facility that was located at the replacement facility's site, as determined in accordance with Table 3.

(13) For the purpose of subsection (11), if there has been no previous application determined under this section in respect of the replacement facility, the historical facility production of a replacement facility is equal to the historical facility production of the facility that was located on the replacement facility's site, as determined in accordance with this section.

(14) For the purpose of subsection (11), if the facility or the facility that was located at the replacement facility's site is listed in Table 3 and no previous application has been determined under this section in respect of that facility, the facility's historical facility production is the largest amount of regulated product that was produced in 2002, 2003 or 2004 by the facility or the facility that was located at the replacement facility's site, as the case may be, as reported by the owner under paragraph 3 of subsection 6 (4).

(15) For the purpose of subsection (11), if a previous application has been determined under this section in respect of the facility that was located at the replacement facility's site, the historical facility production of the facility that was located at the replacement facility's site is equal to the value assigned to "C" in subsection (11) in the most recently determined application made under this section in respect of the facility that was located at the replacement facility's site.

(16) For the purpose of subsection (11), if a previous application has been determined under this section in respect of the facility, the facility's historical facility production is equal to the value assigned to "C" in subsection (11) in the most recently determined application made under this section in respect of the facility.

(17) For the purpose of subsection (4), each process and piece of equipment in a replacement facility to which subclause 16 (1) (a) (i) applies shall be deemed to be new.

(18) For the purpose of paragraph 2 of subsection (5), a facility is comparable to another facility if the facilities produce the same type of regulated product and sell in the same market, despite differences in the sizes of the facilities or in their ages.

Reconsideration of determination of intensity rate

18. (1) The owner of a facility may, within 15 days after he or she receives notice of the Director's determination under subsection 17 (9), apply to the Director for reconsideration of the determination.

(2) If an application is made for reconsideration of a determination, the Director shall,

(a) make a decision on the application within 15 days after he or she receives the application; and

- (b) send written notice of his or her determination to the owner of the facility and to the operator of the Registry not later than May 15 in the year preceding the year for which the emission allowance are applied for.

Application for an adjustment — nitrogen oxides

19. (1) The owner of a facility may apply under this section for nitrogen oxides emission allowances in respect of the facility for any year after 2007 if,

- (a) the owner of the facility previously applied for nitrogen oxides emission allowances in respect of the facility under section 15 or 16; and
- (b) the amount of nitrogen oxides emission allowances added to the budget of the facility's sector or acquired by the facility if the facility is in the petroleum sector as a result of the previous application under section 15 or 16 was less than the amount calculated with respect to the facility under subsection 15 (6) or 16 (4), as the case may be, because of an adjustment determined by the Director under subsection 20 (2).

(2) An application under this section must be made not later than June 1 in the year preceding the year for which the nitrogen oxides emission allowances are applied for.

(3) For each facility for which an application is made under this section, the Director shall determine the following amount:

$$A - (B + C)$$

where,

A = the amount determined under subsection 15 (6) or 16 (4), as the case may be, in respect of the facility,

B = the adjusted amount determined on the previous application under section 15 or 16 in accordance with subsection 20 (2) in respect of the budget of the facility or the budget of the facility's sector, as the case may be,

C = the total of all amounts previously acquired in respect of the facility as the result of an application made under this section.

First application for new or expanded facilities — nitrogen oxides

20. (1) If the total of all the amounts determined under subsections 15 (6), 16 (4) and 19 (3) in respect of applications for nitrogen oxides emission allowances for a year is less than or equal to the amount of the nitrogen oxides new source set aside for that year, the Director shall send written notice of the amount determined for each facility under subsection 15 (6), 16 (4) or 19

(3) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which the emission allowances are applied for.

(2) If the total of all the amounts determined under subsections 15 (6), 16 (4) and 19 (3) in respect of applications for nitrogen oxides emission allowances for a year is more than the amount of the nitrogen oxides new source set aside for that year,

- (a) the Director shall determine adjusted amounts under subsections (3) and (4) in respect of each facility for which an amount was determined under subsection 15 (6), 16 (4) or 19 (3); and
- (b) the Director shall send written notice of the adjusted amount determined in respect of a facility under clause (a) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for.

(3) For the purpose of subsection (2), the adjusted amount in respect of a facility in respect of applications made under section 19 for nitrogen oxides emission allowances for a year shall be the lesser of the amount determined under subsection 19 (3) in respect of the facility and the amount determined in accordance with the following formula:

$$A \times B \div C$$

where,

A = the amount determined in respect of the facility under subsection 19 (3),

B = the nitrogen oxides new source set aside for the year for which nitrogen oxides emission allowances are applied for,

C = the total of all the amounts determined under subsection 19 (3) in respect of all facilities.

(4) For the purpose of subsection (2), the adjusted amount for a facility in respect of applications made in accordance with section 15 or 16 for nitrogen oxides emission allowances for a year shall be determined in accordance with the following formula:

$$A \times ((B - C) \div D)$$

where,

A = the amount determined for the facility under subsection 15 (6) or 16 (4), as the case may be,

- B = the nitrogen oxides new source set aside for the year for which nitrogen oxides emission allowances are applied for,
- C = the total adjusted amounts determined under subsection (3),
- D = the total of all the amounts determined under subsections 15 (6) and 16 (4) for all facilities.

(5) If the total of the amounts determined in respect of facilities in the petroleum sector under subsections 15 (6) and 16 (4) and the amounts determined under subsections 15 (7), 16 (5) and 19 (3) with respect to applications for nitrogen oxides emission allowances for a year is less than or equal to the amount of the nitrogen oxides new source set aside for that year,

- (a) the Director shall send written notice of the amount determined for each facility under subsections 15 (6) and 16 (4), in respect of facilities in the petroleum sector, and subsections 15 (7), 16 (5) and 19 (3) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which the nitrogen oxides emission allowances are applied for; and
- (b) on January 1 of the year for which the nitrogen oxides emission allowances are applied for, the owner of a facility shall be deemed to have acquired nitrogen oxides emission allowances in respect of the facility in the amount determined for the facility under subsection 15 (6) or 16 (4), in respect of facilities in the petroleum sector, or subsection 15 (7), 16 (5) or 19 (3), as the case may be.

(6) If the total of the amounts determined under subsections 15 (6) and 16 (4), in respect of facilities in the petroleum sector and subsections 15 (7), 16 (5) and 19 (3) with respect to applications for nitrogen oxides emission allowances for a year is more than the amount of the nitrogen oxides new source set aside for that year,

- (a) the Director shall determine adjusted amounts under subsections (7) and (8) in respect of each facility for which an amount was determined under subsection 15 (6) or 16 (4), in respect of facilities in the petroleum sector, or under subsection 15 (7), 16 (5) or 19 (3);
- (b) the Director shall send written notice of the adjusted amount determined in respect of a facility under clause (a) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for; and
- (c) on January 1 of the year for which the emission allowances are applied for, the owner of a facility shall be deemed to have acquired nitrogen oxides emission allowances in

respect of the facility in the adjusted amount determined for the facility under clause (a) in respect of the facility.

(7) For the purpose of subsection (6), the adjusted amount in respect of a facility in respect of applications made under section 19 for nitrogen oxides emission allowances for a year shall be the lesser of the amount determined under subsection 19 (3) in respect of the facility and the amount determined in accordance with the following formula:

$$A \times B \div C$$

where,

- A = the amount determined in respect of the facility under subsection 19 (3),
- B = the nitrogen oxides new source set aside for the year for which nitrogen oxides emission allowances are applied for,
- C = the total of all the amounts determined under subsection 19 (3) in respect of all facilities.

(8) For the purpose of subsection (6), the adjusted amount for a facility in respect of applications made in accordance with section 15 or 16 for nitrogen oxides allowances for a year shall be determined in accordance with the following formula:

$$A \times ((B - C) \div D)$$

where,

- A = the amount determined for the facility under subsection 15 (6) or 16 (4), in respect of facilities in the petroleum sector, or subsection 15 (7) or 16 (5), as the case may be,
- B = the nitrogen oxides new source set aside for the year for which nitrogen oxides emission allowances are applied for,
- C = the total adjusted amounts determined under subsection (7),
- D = the total of all the amounts for all facilities as determined under subsections 15 (6) and 16 (4), in respect of facilities in the petroleum sector, and subsections 15 (7) and 16 (5).

SULPHUR DIOXIDE EMISSION ALLOWANCES

Facility budgets — base metal smelting and carbon black sectors

21. (1) For each facility listed in Table 4, the operator of the Registry shall record in the Registry in accordance with this section the amount of the facility's sulphur dioxide budget for each year.

(2) Subject to subsection (3), the sulphur dioxide budget for a facility listed in Table 4 for a year is the amount set out in respect of that facility for that year in Table 4.

(3) On January 1 in each year after 2005, the sulphur dioxide budget for a facility listed in Table 4 for every subsequent year shall be increased by the total amount of sulphur dioxide emission allowances for which the Director gives notice to the operator of the Registry in respect of the facility under subsection 34 (1) or (2) on or before October 1 of the preceding year.

Sector budgets — cement and pulp and paper sectors

22. (1) For each regulated sector listed in Table 5, the operator of the Registry shall record in the Registry in accordance with this section the amount of the sector's sulphur dioxide budget for each year.

(2) Subject to subsection (3), the sulphur dioxide budget for a regulated sector for a year is the amount set out for that sector for that year in Table 5.

(3) On January 1 in each year after 2005, the sulphur dioxide budget for a regulated sector for every subsequent year shall be increased by the total amount of sulphur dioxide emission allowances for which the Director gives notice to the Operator of the Registry in respect of the facilities in that sector under subsection 34 (1) or (2) on or before October 1 of the preceding year.

Facility budgets — base metal smelting and carbon black sector

23. (1) For each facility in the petroleum sector that produces ethylene, the base metal smelting sector and the carbon black sector that is not listed in Table 4 and in respect of which the Director gives notice to the operator of the Registry under subsection 34 (1) or (2), the operator of the Registry shall record in the Registry, in accordance with this section, the amount of the facility's sulphur dioxide budget for the year.

(2) Subject to subsection (3), the sulphur dioxide budget for a facility referred to in subsection (1) for a year is the amount set out in the Director's first notice given to the operator of the Registry in respect of the facility under subsection 34 (1) or (2).

(3) On January 1 of each year after the year in which operator of the Registry first records the sulphur dioxide budget of a facility referred to in subsection (1), the sulphur dioxide budget

of the facility for every subsequent year shall be increased by the total amount sulphur dioxide emission allowances for which the Director gives notice to the operator of the Registry in respect of the facility under subsection 34 (1) or (2) on or before October 1 of the preceding year.

(4) This section does not apply to the sulphur dioxide budget of a replacement facility to which section 24 applies.

Facility budgets, replacement facility

24. (1) This section applies to a replacement facility in the base metal smelting sector, the carbon black sector or the petroleum sector, if the operator of the Registry previously recorded in the Registry the amount of a sulphur dioxide budget in respect of the facility that was located at a replacement facility's site in accordance with section 21 or 23.

(2) The operator of the Registry shall record in the Registry, in accordance with this section, in respect of a replacement facility to which this section applies, the amount of the replacement facility's sulphur dioxide budget for each year.

(3) Subject to subsection (4), the sulphur dioxide budget for a replacement facility is,

- (a) the total amount of sulphur dioxide emission allowances for which the Director gave notice to the operator of the Registry in respect of the facility that was previously located at the site under subsection 34 (1) or (2) on or before October 1 of the year preceding the year in which that facility ceased production; or
- (b) the sulphur dioxide budget of the facility that was located at the replacement facility's site as of October 1 of the year preceding the year in which that facility ceased production, if the facility that was located at the replacement facility's site is listed in Table 4.

(4) On January 1 of each year after the year in which operator of the Registry first records the sulphur dioxide budget of a replacement facility, the sulphur dioxide budget of the replacement facility for every subsequent year shall be increased by the total amount of sulphur dioxide emission allowances for which the Director gives notice to the operator of the Registry in respect of the replacement facility under subsection 34 (1) or (2) on or before October 1 of the preceding year.

Annual amount of new source set asides, sulphur dioxide

25. (1) The operator of the Registry shall record in the Registry in accordance with this section the amount of the sulphur dioxide new source set aside for each year.

(2) Subject to subsections (3) and (4), the sulphur dioxide new source set aside for a year is 10,100 tonnes.

(3) On January 1 of each year after 2005, the sulphur dioxide new source set aside for every subsequent year shall be reduced by total the amount of sulphur dioxide emission allowances for which the Director gives notice to the operator of the Registry under subsection 34 (1) or (2) on or before October 1 of the preceding year.

(4) On January 1 of each year after 2005, the sulphur dioxide new source set aside for every subsequent year shall be increased by the total amount of sulphur dioxide emission allowances determined by the Director under section 27 to be moved to the sulphur dioxide new source set aside as of that day.

Application for sulphur dioxide emission allowances, petroleum sector

26. (1) The owner of a facility listed in Table 6 may apply to the Director for sulphur dioxide emission allowances in respect of the facility for any year after 2005.

(2) The owner of a replacement facility located on a site where a facility listed in Table 6 was located may apply to the Director for sulphur dioxide emission allowances in respect of the facility for any year after 2006.

(3) Subject to subsection (4), the owner of facility that is in the petroleum sector that is not listed in Table 6 may apply to the Director for sulphur dioxide emission allowances in respect of the facility for any year after 2006, if sulphur dioxide emission allowances have previously been acquired as a result of an application made under section 29 in respect of the facility or the facility that was located at the replacement facility's site.

(4) Subsection (3) does not apply to a facility in the petroleum sector that produces ethylene.

(5) An application under this section must be made not later than June 1 in the year preceding the year for which the allowances is applied for.

(6) For each facility for which an application for sulphur dioxide emission allowances for 2006 is made in accordance with this section, the Director shall determine the following amount:

$$A - C$$

where,

A = the amount of the sulphur dioxide emission allowances set out in respect of the facility for 2006 in Table 6,

C = one-third of the total of the amounts of any sulphur dioxide reported under paragraph 2 of subsection 6 (4) in respect of the facility.

(7) For each facility for which an application for sulphur dioxide emission allowances for 2007 or 2008 is made in accordance with this section, the Director shall determine the following amount:

$$A + B - C$$

where,

- A = the amount of the sulphur dioxide emission allowances set out in Table 6 in respect of the facility or the facility that was located at the replacement facility's site, as the case may be, for the year for which the emission allowances are applied for,
- B = the total amount of any sulphur dioxide emission allowances that the owner of the facility or the facility that was located at the replacement facility's site acquired in respect of the facility or the facility that was located at the replacement facility's site under section 34 in any previous year,
- C = one-third of the total sum of the amounts of any sulphur dioxide reported under paragraph 2 of subsection 6 (4) in respect of the facility or the facility that was located at the replacement facility's site, as the case may be.

(8) For each facility for which an application for sulphur dioxide emission allowances for any year after 2008 is made in accordance with this section, the Director shall determine the following amount:

$$A + B - C - D$$

where,

- A = the amount of the sulphur dioxide emission allowances set out in Table 6 in respect of the facility or the facility that was located at the replacement facility's site, as the case may be, for the year for which the emission allowances are applied for,
- B = the total amount of any sulphur dioxide emission allowances that the owner of the facility or the facility that was located at the replacement facility's site acquired in respect of the facility or the facility that was located at the replacement facility's site under section 34 in any previous year,
- C = one-third of the total sum of the amounts of any sulphur dioxide reported under paragraph 2 of subsection 6 (4) in respect of the facility or the facility that was located at the replacement facility's site, as the case may be,
- D = the amount determined under section 27 with respect to reduction in production.

(9) If the amount of sulphur dioxide emission allowances determined under subsection (7) or (8), as the case may be, is less than zero, the amount shall be adjusted to zero.

(10) The Director shall send written notice of the amount determined, subject to subsection (9), in respect of each facility under subsection (6), (7) or (8), as the case may be, to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which the emission allowances is applied for.

(11) On January 1 of the year for which the emission allowances is applied for, the owner of the facility shall be deemed to have acquired the sulphur dioxide emission allowances in respect of the facility in the amount determined, subject to subsection (9), for the facility under subsection (6), (7) or (8), as the case may be.

Phased out facilities — sulphur dioxide

27. (1) For the purpose of determining the value of “D” under subsection 26 (8), the Director shall make a determination using the following rules:

1. If the deemed production of the facility determined in accordance with section 4 is greater than 50 per cent of the facility’s historical facility production, in at least one of the two years preceding the year in which the application is made, the value of “D” is zero.
2. If the deemed production of the facility determined in accordance with section 4 is less than or equal to 50 per cent of the facility’s historical facility production in each of the two years preceding the year in which the application is made, but is greater than zero in at least one in one of those years, the value of “D” is,

$$(A + B) \times .5$$

where,

A = the amount of sulphur dioxide emission allowances set out in Table 6 in respect of the facility or the facility that was located at the replacement facility’s site, as the case may be, for the year for which emission allowances are applied for,

B = the total amount of any sulphur dioxide emission allowances that the owner of the facility or the facility that was located at the replacement facility’s site acquired in respect of the facility or the facility that was located at the replacement facility’s site under section 34.

3. If the deemed production of the facility determined in accordance with section 4 is zero in each of the two years preceding the year in which the application is made, the value of “D” is,

$$A + B$$

where,

A = the amount of sulphur dioxide emission allowances set out in Table 6 in respect of the facility or the facility that was located at the replacement facility’s site, as the case may be, for the year for which the emission allowances are applied for,

B = the total amount of any sulphur dioxide emission allowances that the owner of the facility or the facility that was located at the replacement facility’s site acquired in respect of the facility or the facility that was located at the replacement facility’s site under section 34.

- (2) If the facility does not produce any regulated product in any period of five consecutive years,
- (a) the facility, shall be deemed not to be listed for the purposes of any subsequent application made under this Regulation, including an application made under section 29 or 30;
 - (b) no further applications shall be made under subsection 26 (1) in respect of the facility;
 - (c) the owner of the facility may in subsequent years make an application under section 29 in respect of the facility, if the facility meets the criteria set out in section 29;
 - (d) the owner of the facility may in subsequent years make an application under subsection 26 (3) or section 30 in respect of the facility, if sulphur dioxide emission allowances have been acquired by the owner of the facility as the result of an application under section 29; and
 - (e) the amount of the sulphur dioxide emission allowances set out in respect of the facility or the facility that was located at the replacement facility’s site in Table 6 for the fifth year of the five-year period, if any, and the amount of sulphur dioxide emission allowances that the owner of the facility or the facility that was located at the replacement facility’s site acquired in respect of the facility or the facility that was located at the replacement facility’s site under section 34 in any previous year shall be added to the nitrogen oxides new source set aside in accordance with subsection 25 (4).

- (3) If clause (2) (a) applies with respect to a facility, the Director shall send written notice,
- (a) to the owner of the facility advising that the facility is deemed not to be listed; and
 - (b) to the operator of the Registry advising that the facility is deemed not to be listed and setting out the amount of sulphur dioxide allowances to be added to the sulphur dioxide allowances new source set aside as of January 1 of the year following the year in which notice is given.

(4) For the purposes of subsections (1) and (2) if no application is made under section 26 in respect of a facility listed in Table 6 or a facility described in subsection 26 (2) or (3) in a year, the deemed production of the facility shall be zero.

(5) For the purpose of this section, if no application has been determined under section 30 in respect of a replacement facility, the historical facility production of the replacement facility is equal to the historical facility production of the facility that was located on the replacement facility's site, as determined in accordance with this section.

(6) For the purpose of this section and subject to subsection (8), the historical facility production of a facility that is listed in Table 6 is the largest amount of regulated product that was produced in 2002, 2003 or 2004 by the facility as reported by the owner of the facility under paragraph 3 of subsection 6 (4).

(7) For the purpose of this section and subject to subsection (8), the historical facility production of a facility that is not listed in Table 6 is equal to the value assigned to "B" in subsection 29 (6) in the application made respect of the facility in accordance with section 29.

(8) If a previous application made in respect of the facility under section 30 has been determined, for the purpose of this section the historical facility production of the facility is the value assigned to "B" in subsection 30 (4) in the most recently determined application made under section 30 in respect of the facility.

Applications for sulphur dioxide emission allowances

28. (1) The owner of a facility listed in Table 7 may apply to the Director for sulphur dioxide emission allowances in respect of the facility for any year after 2005.

(2) If the owner of a facility has previously acquired sulphur dioxide emission allowances under section 29 in respect of the facility in the petroleum sector that produces ethylene, the base metal smelting sector, the cement sector, the carbon black sector or the pulp and paper sector, the owner may apply to the Director for sulphur dioxide emission allowances in respect of the facility in any year after 2006.

(3) The owner of a replacement facility may apply to the Director for sulphur dioxide emission allowances in respect of the facility for any year after 2006 if,

- (a) the facility that was located at the replacement facility's site was in the petroleum sector and produced ethylene or the base metal smelting sector, the cement sector, the carbon black sector or the pulp and paper sector; and
- (b) an owner of the facility that was located at the replacement facility's site had acquired sulphur dioxide emission allowances in respect of that facility under this section.

(4) An application made under subsection (1), (2) or (3) shall not include an application for sulphur dioxide emission allowances in respect of a modification or increased production of a facility, if the owner of the facility has also made an application under section 30 with respect to the modification or increased production of the facility for sulphur dioxide emission allowances for the same year.

(5) If subsection (4) applies, the deemed production of the facility for the purposes of subsection (7) shall be the lesser of the amounts determined by the Director under subsections 4 (2) and (3).

(6) An application under this section must be made not later than June 1 in the year preceding the year for which the emission allowances is applied for.

(7) For each facility for which an application for a sulphur dioxide emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times B - C$$

where,

A = the intensity rate for the facility determined in accordance with subsection (8),

B = the deemed production of the facility determined in accordance with section 4,

C = one-third of the total of the amounts of any sulphur dioxide reported under paragraph 2 of subsection 6 (4) in respect of the facility or the facility that was located at the replacement site, as the case may be.

(8) For the purpose of subsection (7), the intensity rate for the facility shall be determined in accordance with the following rules:

1. If the facility is listed in Table 7 and the Director has not determined an intensity rate for the facility pursuant to section 31 or the intensity rate has not been applied, the

intensity rate is the intensity rate for the facility for the year for which the emission allowances is applied for, as determined in accordance with Table 7.

2. Subject to paragraph 5, if the Director has determined an intensity rate for the facility pursuant to section 31, the intensity rate is the most recently determined intensity rate for the facility determined under section 31 that has been applied in a previous application for sulphur dioxide emission allowances made in respect of the facility.
3. If the facility is a replacement facility and paragraph 2 does not apply and the Director has not determined an intensity rate for the facility that was previously located at the replacement facility's site pursuant to section 31 or the intensity rate has not been applied, the intensity rate is the intensity rate for the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, as determined in accordance with Table 7.
4. Subject to paragraph 5, if the facility is a replacement facility and paragraph 2 does not apply and the Director has determined an intensity rate for the facility that was located at the replacement facility's site pursuant to section 31, the intensity rate is the most recently determined intensity rate for the facility that was located at the replacement facility's site determined under section 31 that has been applied in a previous application for sulphur dioxide emission allowances made in respect of the facility.
5. If the most recently determined intensity rate for the facility or the facility that was located at the replacement facility's site is greater than the intensity rate set out in Table 7 for the facility or the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, the intensity rate is the intensity rate for the facility or the facility that was located at the replacement facility's site as determined in accordance with Table 7.

(9) If the total of all the amounts determined under subsection (7) in respect of applications for sulphur dioxide emission allowances for a year for facilities in a regulated sector is less than or equal to the sulphur dioxide budget for that sector for that year,

- (a) the Director shall send written notice of the amount determined in respect of each facility in the regulated sector under subsection (7) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for; and
- (b) on January 1 of the year for which the emission allowances are applied for, the owner of a facility in the regulated sector shall be deemed to have acquired a sulphur dioxide emission allowances in respect of the facility in the amount determined for the facility under subsection (7).

(10) If the total of all the amounts determined under subsection (7) in respect of applications for sulphur dioxide emission allowances for a year in respect of facilities in a regulated sector is more than the sulphur dioxide budget for that sector for that year,

- (a) the Director shall determine adjusted amounts under subsection (11) in respect of each facility in the regulated sector for which an amount was determined under subsection (7);
- (b) the Director shall send written notice of the adjusted amount determined in respect of a facility under subsection (11) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for; and
- (c) on January 1 of the year for which emission allowances are applied for, the owner of a facility shall be deemed to have acquired sulphur dioxide emission allowances in respect of the facility in the adjusted amount determined for the facility under subsection (11).

(11) For the purpose of subsection (10), the adjusted amount in respect of a facility in a regulated sector in respect of an application for sulphur dioxide emission allowances for a year shall be determined in accordance with the following formula:

$$A \times B \div C$$

where,

- A = the amount determined in respect of the facility under subsection (7),
- B = the sulphur dioxide budget, calculated in accordance with section 22, for the regulated sector for the year for which emission allowances are applied for,
- C = the total of all the amounts determined under subsection (7) in respect of all the facilities in the regulated sector.

(12) If the amount determined under subsection (7) in respect of an application for sulphur dioxide emission allowances for a year in respect of a facility in the petroleum sector that produces ethylene, the base metal smelting sector or the carbon black sector is less than or equal to the amount of the facility's sulphur dioxide budget for that year,

- (a) the Director shall send written notice of the amount determined in respect of the facility under subsection (7) to the owner of the facility and to the operator of the

Registry not later than October 1 in the year preceding the year for which emission allowances are applied for; and

- (b) on January 1 of the year for which emission allowances are applied for, the owner of the facility shall be deemed to have acquired sulphur dioxide emission allowances in respect of the facility in the amount determined in respect of the facility under subsection (7).

(13) If the amount determined under subsection (7) in respect of an application for sulphur dioxide emission allowances for a year in respect of a facility in the petroleum sector that produces ethylene, the base metal smelting sector or the carbon black sector is more than the amount of the facility's sulphur dioxide budget for that year,

- (a) the amount determined under subsection (7) in respect of the facility shall be reduced to an amount equal to the facility's sulphur dioxide budget calculated in accordance with section 21, 23 or 24, as the case may be, for that year;
- (b) the Director shall send written notice of the adjusted amount determined in respect of the facility under clause (a) to the owner of the facility and the operator of the Registry not later than October 1 in the year preceding the year for which the emission allowances are applied for; and
- (c) on January 1 of the year for which emission allowances are applied for, the owner of a facility shall be deemed to have acquired sulphur dioxide emission allowances in respect of the facility in the adjusted amount determined for the facility under clause (a).

New facilities, initial applications — sulphur dioxide

29. (1) The owner of a facility that is described in subsection (2) and that is not listed in Table 6 or Table 7 or is deemed not be listed in Table 6 may apply to the Director for sulphur dioxide emission allowances in respect of the facility for any year after 2005 if,

- (a) the owner of the facility has applied under section 31 for a determination of the intensity rate that is to be applied to the facility;
- (b) the application under section 31 was made not more than three years before the date of the application made under this section; and
- (c) sulphur dioxide emission allowances have not previously been acquired under this section in respect of the facility.

(2) This section applies in the following regulated sectors to facilities that first produced a regulated product after January 1, 2005 and that meet the criteria described for each sector:

1. In the cement sector, a facility that has the capacity to produce more than 100,000 tonnes of clinker per year and that will emit more than 100 tonnes of sulphur dioxide in the year for which emission allowances are applied for.
2. In the iron and steel sector, a facility that has the capacity to ship more than 100,000 tonnes of steel per year and that will emit more than 100 tonnes of sulphur dioxide in the year for which emission allowances are applied for.
3. In the petroleum sector, a facility that has the capacity to refine more than 50,000 barrels of oil per day, produce more than 400,000 tonnes of ethylene per year or process more than 20,000 barrels of petroleum feedstock to produce lubricating oils and greases and that will emit more than 100 tonnes of sulphur dioxide in the year for which emission allowances are applied for.
4. In the pulp and paper sector, a facility that has the capacity to produce more than 100,000 air dried tonnes of pulp per year and that will emit more than 100 tonnes of sulphur dioxide in the year for which emission allowances are applied for.
5. In the base metal smelting sector, a facility that has the capacity to produce more than 1,000 tonnes of copper and nickel contained in matte per year and that will emit more than 5,000 tonnes of sulphur dioxide in the year for which emission allowances are applied for.
6. In the carbon black sector, a facility that has the capacity to produce more than 25,000 tonnes of carbon black per year and will emit more than 100 tonnes of sulphur dioxide in the year for which emission allowances are applied for.

(3) This section does not apply to a replacement facility.

(4) An application under this section must be made not later than June 1 in the year preceding the year for which emission allowances are applied for.

(5) An application may be made under this section by the owner of a facility that has not yet begun to produce a regulated product.

(6) For each facility for which an application for sulphur dioxide emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times B$$

where,

A = the intensity rate determined by the Director in accordance with section 31 for the facility,

B = the average annual production that the owner of the facility estimates, or is deemed to estimate, in accordance with subsection 6 (2) will be produced by the facility.

(7) For each facility in the petroleum sector that produces ethylene, the base metal smelting sector, the carbon black sector, the iron and steel sector or the pulp and paper sector for which an application for sulphur dioxide emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times C$$

where,

A = the intensity rate determined by the Director in accordance with section 31 for the facility,

C = the deemed production determined under section 4 with respect to the facility

(8) A facility to which clause 27 (2) (a) applies shall be deemed not to have produced regulated product on or before January 1, 2005.

Applications for facilities that expand or increase production — sulphur dioxide

30. (1) The owner of a facility that is listed in Table 6 or Table 7, that is a replacement facility or that is a facility in respect of which allowances have been acquired under section 29 may apply to the Director for sulphur dioxide emission allowances in respect of the facility for any year after 2005 if,

- (a) the owner of the facility estimates,
 - (i) that the deemed production of the facility in the year for which the allowances are applied for will be at least 20 per cent greater than the historical facility production of the facility or the facility that was located at the replacement facility's site, or
 - (ii) that the average annual production of the facility will be at least 20 per cent greater than the historical production of the facility as a result of a modification to a process or equipment at the facility;
- (b) the owner of the facility has applied under section 31 for a determination of the intensity rate that is to be applied to the facility;

- (c) the application under section 31 was made not more than three years before the date of the application made under this section; and
- (d) sulphur dioxide emission allowances have not previously been acquired under this section for the facility in respect of the modification or increased production of the facility.

(2) An application under this section must be made not later than June 1 in the year preceding the year for which emission allowances are applied for.

(3) An application may be made under this section by the owner of a facility that has not begun to produce a regulated product with the expanded portion of the facility.

(4) For each facility for which an application for sulphur dioxide emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times (B - C)$$

A = the lesser of the intensity rate determined by the Director in accordance with section 31 for the facility and the intensity rate, if any, for the facility or the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, as determined in accordance with Table 7,

B = the average annual production that the owner of the facility estimates, or is deemed to estimate, in accordance with subsection 6 (2) will be produced by the facility,

C = the facility's historical facility production.

(5) For each facility in the petroleum sector that produces ethylene, the base metal smelting sector, the cement sector, the carbon black sector, the iron and steel sector or the pulp and paper sector for which an application for sulphur dioxide emission allowances is made in accordance with this section, the Director shall determine the following amount:

$$A \times (D - E)$$

where,

A = the intensity rate determined by the Director in accordance with section 31 for the facility,

D = the deemed production determined in respect of the facility under subsection 4 (5),

E = the lesser of the amounts of deemed production determined in respect of the facility under subsections 4 (2) and (3).

(6) If there has been no previous application determined under this section in respect of a replacement facility, for the purpose of this section the historical facility production of the replacement facility is equal to the historical facility production of the facility that was located on the replacement facility's site, as determined in accordance with this section.

(7) For the purpose of this section and subject to subsection (9), the historical facility production of a facility that is listed in Table 6 or Table 7 is the largest amount of regulated product that was produced in 2002, 2003 or 2004 by the facility as reported by the owner under paragraph 3 of subsection 6 (4).

(8) For the purpose of this section and subject to subsection (9), the historical facility production of a facility that is not listed in Table 6 or Table 7 is equal to the value assigned to "B" in subsection 29 (6) in the application previously made under section 29 in respect of the facility.

(9) For the purpose of this section, if an application with respect to a facility has been previously determined under this section, the historical facility production of the facility is equal to the value assigned to "B" in subsection (4) in the most recently determined application made under this section in respect of the facility.

Determination of intensity rate: new and expanded facilities

31. (1) The owner of a facility to which section 29 or 30 applies shall apply to the Director for an approval of a proposed intensity rate that is to be applied to the expanded, new or replacement facility, as the case may be.

(2) The intensity rate proposed by the owner of the facility shall be based upon the following formula:

$$A \div B$$

where,

A = amount of emissions reported in accordance with paragraph 7 of subsection (5) and subsection (7),

B = the average annual production that the owner of the facility estimates, or is deemed to have estimated, in accordance with subsection 6 (2).

(3) An application under this section must be made not later than January 1 in the year preceding the year for which sulphur dioxide emission allowances are applied for in respect of the facility.

(4) The application shall include an evaluation of each new or modified process in the facility that includes any new or modified piece of equipment that has a heat input of 1,000,000 BTUs per hour or greater,

- (a) that has or will result in an increase in the average annual production of the facility;
- (b) that has been made since the later of the day this Regulation comes into force and the day of the last application made under this section in respect of the facility; and
- (c) that produces sulphur dioxide emissions.

(5) The evaluation shall include the following steps for each new or modified process and piece of equipment:

1. Identification of sulphur dioxide control technologies available when the modification was made.
2. Elimination of technologies not used at comparable facilities.
3. Elimination of technically infeasible control technologies.
4. Ranking of technically feasible control technologies by sulphur dioxide emission reduction effectiveness.
5. Evaluating control costs.
6. Selection of best available control technology economically achievable.
7. Estimate the amount of sulphur dioxide emissions that will be emitted annually from the equipment and process if the selected control technology is installed.

(6) For the purpose of paragraph 6 of subsection (5), a control technology may be selected as a best available control technology economically achievable if the percentage reduction of sulphur dioxide emissions achieved by the control technology is within 15 per cent of the reduction of sulphur dioxide emissions achieved by the control technology with the greatest percent sulphur dioxide emission reduction identified in the evaluation.

(7) The owner of the facility shall identify in the application any source of sulphur dioxide emissions at the facility not included in the evaluation prepared under subsection (5) and shall estimate the amount of emissions that will be emitted from the source in a calendar year.

(8) The application shall be certified as being complete, accurate and completed in accordance with this Regulation by a person who holds a licence or temporary licence issued under the *Professional Engineers Act* to engage in the practice of professional engineering, other than a limited licence issued under that Act.

(9) The Director shall, not later than April 15 in the year the application under this section is made and subject to subsection (11), notify the owner of the facility in writing that he or she accepts the proposed intensity rate for the facility or does not accept the proposed intensity rate for the facility.

(10) If the Director does not accept the proposed intensity rate for the facility, the written notice of his or her determination shall specify the reasons the proposed intensity rate was not accepted and shall set out the intensity rate for the facility as determined by the Director.

(11) If an intensity rate for the facility or the facility that was located at the replacement facility's site is set out in Table 7 or the facility is in the petroleum sector and produces ethylene, the base metal smelting sector, the cement sector, the carbon black sector, the iron and steel sector or the pulp and paper sector and an intensity rate has previously been determined for the facility or the facility that was located at the replacement facility's site under this section, subject to subsection (12), the Director shall determine the intensity rate for the facility in accordance with the following formula in an application to which section 29 or subsection 30 (1) applies:

$$A \times (B \div C) + D \times ((C - B) \div C)$$

where,

A = the intensity rate for the facility determined in accordance with subsection (12),

B = the facility's historical facility production,

C = the average annual production that the owner of the facility estimates, or is deemed to estimate, in accordance with subsection 6 (2) will be produced by the facility,

D = the intensity rate determined for the facility in the current application under subsection (9).

(12) For the purpose of subsection (11), the intensity rate for the facility shall be determined in accordance with the following rules:

1. If the facility is listed in Table 7 and the Director has not determined an intensity rate for the facility pursuant to this section or the intensity rate has not been applied, the intensity rate is the intensity rate for the facility for the year for which the emission allowances is applied for, as determined in accordance with Table 7.
2. Subject to paragraph 5, if the Director has determined an intensity rate for the facility pursuant to section 31, the intensity rate is the most recently determined intensity rate for the facility determined under this section that has been applied in a previous application for sulphur dioxide emission allowances made in respect of the facility.
3. If the facility is a replacement facility and paragraph 2 does not apply and the Director has not determined an intensity rate for the facility that was previously located at the replacement facility's site pursuant to this section or the intensity rate has not been applied, the intensity rate is the intensity rate for the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, as determined in accordance with Table 7.
4. Subject to paragraph 5, if the facility is a replacement facility and paragraph 2 does not apply and the Director has determined an intensity rate for the facility that was located at the replacement facility's site pursuant to this section, the intensity rate is the most recently determined intensity rate for the facility that was located at the replacement facility's site determined under this section that has been applied in a previous application for sulphur dioxide emission allowances made in respect of the facility.
5. If the most recently determined intensity rate for the facility or the facility that was located at the replacement facility's site is greater than the intensity rate set out in Table 7 for the facility or the facility that was located at the replacement facility's site for the year for which emission allowances are applied for, the intensity rate is the intensity rate for the facility or the facility that was located at the replacement facility's site as determined in accordance with Table 7.

(13) For the purpose of subsection (11), if there has been no previous application determined under this section in respect of the replacement facility, the historical facility production of a replacement facility is equal to the historical facility production of the facility that was located on the replacement facility's site, as determined in accordance with this section.

(14) For the purpose of subsection (11), if the facility or the facility that was located on the replacement facility's site is listed in Table 7 and no previous application has been determined under this section in respect of that facility, the facility's historical facility production is the largest amount of regulated product that was produced in 2002, 2003 or 2004 by the facility or

the facility that was located at the replacement facility's site, as the case may be, as reported by the owner under paragraph 3 of subsection 6 (4).

(15) For the purpose of subsection (11), if a previous application has been determined under this section in respect of the facility that was located at the replacement facility's site, the historical facility production of the facility that was located at the replacement facility's site is the average annual production that the owner of the facility that was located at the replacement facility's site is equal to the value assigned to "C" in subsection (11) in the most recently determined application made under this section in respect of the facility.

(16) For the purpose of subsection (11), if a previous application has been determined under this section in respect of the facility, the facility's historical facility production is equal to the value assigned to "C" in subsection (11) in the most recently determined application made under this section in respect of the facility.

(17) For the purpose of subsection (4), each process and piece of equipment in a replacement facility to which subclause 30 (1) (a) (i) applies shall be deemed to be new.

(18) For the purpose of paragraph 2 of subsection (5), a facility is comparable to another facility if the facilities produce the same type of regulated product and sell in the same market, despite differences in the sizes of the facilities or in their ages.

Reconsideration of determination of intensity rate

32. (1) The owner of a facility may, within 15 days after he or she receives notice of the Director's determination under subsection 31 (9), apply to the Director for reconsideration of the determination.

- (2) If an application is made for reconsideration of a determination, the Director shall,
- (a) make a decision on the application within 15 days after he or she receives the application; and
 - (b) send written notice of his or her determination to the owner of the facility and to the operator of the Registry not later than May 15 in the year preceding the year for which the emission allowance is applied for.

Application for an adjustment — sulphur dioxide

33. (1) The owner of a facility may apply under this section for sulphur dioxide emission allowances in respect of the facility for any year after 2007 if,

- (a) the owner of the facility previously applied for sulphur dioxide emission allowances in respect of the facility under section 29 or 30; and

- (b) the amount of sulphur dioxide emission allowances added to the budget of the facility or the budget of the facility's sector or acquired by the owner of the facility if the facility is in the petroleum sector but does not produce ethylene as a result of the previous application under section 29 or 31 was less than the amount calculated with respect to the facility under subsection 29 (6) or 30 (4), as the case may be, because of an adjustment determined by the Director under subsection 34 (2).

(2) An application under this section must be made not later than June 1 in the year preceding the year for which the sulphur dioxide emission allowances are applied for.

(3) For each facility for which an application is made under this section, the Director shall determine the following amount:

$$A - B + C$$

where,

A = the amount determined under subsection 29 (6) or 30 (4), as the case may be, in respect of the facility,

B = the adjusted amount determined on the previous application under subsection 29 or 30 in accordance with subsection 34 (2) in respect of the budget of the facility or the budget of the facility's sector, as the case may be,

C = the total of all amounts of sulphur dioxide emission allowances previously acquired in respect of the facility as the result of an application made under this section.

First application for new or expanded facilities — sulphur dioxide

34. (1) If the total of all the amounts determined under subsections 29 (6), 30 (4) and 33 (3) in respect of applications for sulphur dioxide emission allowances for a year is less than or equal to the amount of the sulphur dioxide new source set aside for that year, the Director shall send written notice of the amount determined in respect of each facility under subsections 29 (6), 30 (4) and 33 (3) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for.

(2) If the total of all the amounts determined under subsections 29 (6), 30 (4) and 33 (3) in respect of applications for sulphur dioxide emission allowances for a year is more than the amount of the sulphur dioxide new source set aside for that year,

- (a) the Director shall determine adjusted amounts under subsections (3) and (4) in respect of each facility in respect of which an amount was determined under subsection 29 (6), 30 (4) or 33 (3); and

- (b) the Director shall send written notice of the adjusted amount determined in respect of a facility under clause (a) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for.

(3) For the purpose of subsection (2), the adjusted amount in respect of a facility in respect of applications made under section 33 for sulphur dioxide emission allowances for a year shall be the lesser of the amount determined under subsection 33 (3) in respect of the facility and the amount determined in accordance with the following formula:

$$A \times B \div C$$

where,

- A = the amount determined in respect of the facility under subsection 33 (3),
- B = the sulphur dioxide new source set aside for the year for which sulphur dioxide emission allowances are applied for,
- C = the total of all the amounts determined under subsection 33 (3) in respect of all facilities.

(4) For the purpose of subsection (2), the adjusted amount for a facility in respect of applications made in accordance with section 29 or 30 for sulphur dioxide emission allowances for a year shall be determined in accordance with the following formula:

$$A \times ((B - C) \div D)$$

where,

- A = the amount determined for the facility under subsection 29 (6) or 30 (4), as the case may be,
- B = the sulphur dioxide new source set aside for the year for which sulphur dioxide emission allowances are applied for,
- C = the total adjusted amounts determined under subsection (3),
- D = the total of all the amounts determined under subsections 29 (6) and 30 (4) for all facilities.

(5) If the total of all the amounts determined under subsections 29 (6) and 30 (4), in respect of facilities in the petroleum sector that do not produce ethylene, and subsections 29 (7), 30 (5)

and 33 (3) in respect of applications for sulphur dioxide emission allowances for a year is less than or equal to the amount of the sulphur dioxide new source set aside for that year,

- (a) the Director shall send written notice of the amount determined for each facility under subsections 29 (6) and 30 (4), in respect of a facility in the petroleum sector that does not produce ethylene, and subsections 29 (7), 30 (5) and 33 (3) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which the sulphur dioxide emission allowances are applied for; and
- (b) on January 1 of the year for which the sulphur dioxide emission allowances are applied for, the owner of a facility shall be deemed to have acquired sulphur dioxide emission allowances in respect of the facility in the amount determined for the facility under subsection 29 (6) or 30 (4), in respect of a facility in the petroleum sector that does not produce ethylene, or subsection 29 (7), 30 (5) or 33 (3), as the case may be.

(6) If the total of all the amounts determined under subsections 29 (6) and 30 (4), in respect of facilities in the petroleum sector that do not produce ethylene, and subsections 29 (7), 30 (5) and 33 (3) with respect to applications for sulphur dioxide emission allowances for a year is more than the amount of the sulphur dioxide new source set aside for that year,

- (a) the Director shall determine adjusted amounts under subsections (7) and (8) in respect of each facility for which an amount was determined under subsection 29 (6) or 30 (4), in respect of a facility in the petroleum sector that does not produce ethylene, or subsection 29 (7), 30 (5) or 33 (3);
- (b) the Director shall send written notice of the adjusted amount determined in respect of a facility under clause (a) to the owner of the facility and to the operator of the Registry not later than October 1 in the year preceding the year for which emission allowances are applied for; and
- (c) on January 1 of the year for which the emission allowances are applied for, the owner of a facility shall be deemed to have acquired sulphur dioxide emission allowances in respect of the facility in the adjusted amount determined for the facility under clause (a) in respect of the facility.

(7) For the purpose of subsection (6), the adjusted amount in respect of a facility in respect of applications made under section 33 for sulphur dioxide emission allowances for a year shall be the lesser of the amount determined under subsection 33 (3) in respect of the facility and the amount determined in accordance with the following formula:

$$A \times B \div C$$

where,

- A = the amount determined in respect of the facility under subsection 33 (3),
- B = the sulphur dioxide new source set aside for the year for which sulphur dioxide emission allowances are applied for,
- C = the total of all the amounts determined under subsection 33 (3) in respect of all facilities.

(8) For the purpose of subsection (6), the adjusted amount for a facility in respect of applications made in accordance with section 29 or 30 for sulphur dioxide emission allowances for a year shall be determined in accordance with the following formula:

$$A \times ((B - C) \div D)$$

where,

- A = the amount determined for the facility under subsection 29 (6) or 30 (4), in respect of a facility in the petroleum sector that does not produce ethylene, or subsection 29 (7) or 30 (5), as the case may be,
- B = the sulphur dioxide new source set aside for the year for which sulphur dioxide emission allowances are applied for,
- C = the total adjusted amounts determined under subsection (7),
- D = the total of all the amounts determined under subsections 29 (6) and 30 (4), in respect of a facility in the petroleum sector that does not produce ethylene, and subsections 29 (7) and 30 (4) for all facilities.

OBLIGATION TO BALANCE EMISSIONS WITH ALLOWANCES AND CREDITS

Application to retire nitrogen oxides emission allowances and credits

35. (1) This section applies to a facility for a year if the facility is listed in a table to this Regulation or the facility did not produce a regulated product before January 1, 2005 and the facility is,

- (a) in the cement sector and has the capacity to produce more than 100,000 tonnes of clinker per year and emitted more than 100 tonnes of nitrogen oxides in the previous year;

- (b) in the flat glass sector and has the capacity to produce more than 50,000 tonnes of flat glass per year and emitted more than 100 tonnes of nitrogen oxides in the previous year;
- (c) in the iron and steel sector and has the capacity to ship more than 100,000 tonnes of steel per year and emitted more than 100 tonnes of nitrogen oxides in the previous year;
- (d) in the petroleum sector and has the capacity to refine more than 50,000 barrels of crude oil per day, produce more than 400,000 tonnes of ethylene per year or process more than 20,000 barrels of petroleum feedstock to produce lubricating oils and greases and emitted more than 100 tonnes of nitrogen oxides in the previous year; or
- (e) in the pulp and paper sector and has the capacity to produce more than 100,000 air dried tonnes of pulp per year and emitted more than 100 tonnes of nitrogen oxides in the previous year.

(2) A facility to which clause 13 (2) (a) applies shall be deemed not to have produced regulated product on or before January 1, 2005.

(3) Not later than March 31 in each year after 2006, the owner of a facility to which this section applies for the year shall apply to the Director for approval to retire nitrogen oxides emission allowances for the purpose of subsection (5).

(4) An application under subsection (3) may also include an application for approval to retire nitric oxide emission allowances, nitric oxide emission reduction credits and nitrogen oxides emission reduction credits for the purpose of subsection (5).

(5) For each year after 2006, the owner of a facility to which this section applies shall, not later than June 1 of the year, ensure that the following statement is true:

$$A + (B \times 0.9) \geq C$$

where,

A = the total amount of nitrogen oxides emission allowances and nitric oxide emission allowances that are retired for the purpose of this subsection with the approval of the Director,

B = the total amount of nitrogen oxides emission reduction credits and nitric oxide emission reduction credits that are retired for the purpose of this subsection with the approval of the Director,

C = the amount of nitrogen oxides that the owner of the facility reported in accordance with subsection 43 (5) were emitted from the facility in the previous year.

(6) For the purpose of subsection (5),

- (a) a nitric oxide emission allowance acquired under Ontario Regulation 397/01 (Emissions Trading) made under the Act is equivalent to 1.53 of a nitrogen oxides emission allowance; and
- (b) a nitric oxide emission reduction credit created in accordance with the Ontario Emissions Trading Code is equivalent to 1.53 of a nitrogen oxides emission reduction credit.

Application to retire sulphur dioxide emission allowances and credits

36. (1) This section applies to a facility for a year if the facility is listed in a table to this Regulation or the facility did not produce a regulated product before January 1, 2005 and the facility is,

- (a) in the cement sector and has the capacity to produce more than 100,000 tonnes of clinker per year and emitted more than 100 tonnes of sulphur dioxide in the previous year;
- (b) in the base metal smelting sector and has the capacity to produce more than 1,000 tonnes of nickel and copper contained in matte per year and emitted more than 5,000 tonnes of sulphur dioxide in the previous year;
- (c) in the iron and steel sector and has the capacity to ship more than 100,000 tonnes of steel per year and emitted more than 100 tonnes of sulphur dioxide in the previous year;
- (d) in the petroleum sector and has the capacity to refine more than 50,000 barrels of oil per day, produce more than 400,000 tonnes of ethylene per year or process more than 20,000 barrels of petroleum feedstock to produce lubricating oils and greases and emitted more than 100 tonnes of sulphur dioxide in the previous year;
- (e) in the pulp and paper sector and has the capacity to produce more than 100,000 air dried tonnes of pulp per year and that emitted more than 100 tonnes of sulphur dioxide in the previous year; or
- (f) in the carbon black sector and has the capacity to produce more than 25,000 tonnes of carbon black per year and emitted more than 100 tonnes of sulphur dioxide in the previous year.

(2) A facility to which clause 27 (2) (a) applies shall be deemed not to have produced regulated product on or before January 1, 2005.

(3) Not later than March 31 in each year after 2006, the owner of a facility to which this section applies for the year shall apply to the Director for approval to retire sulphur dioxide emission allowances for the purpose of subsection (5).

(4) An application under subsection (3) may also include an application for approval to retire sulphur dioxide emission reduction credits for the purpose of subsection (5).

(5) For each year after 2006, the owner of a facility to which this section applies shall, not later than June 1 of the year, ensure that the following statement is true:

$$A + (B \times 0.9) \geq C$$

where,

A = the total amount of sulphur dioxide emission allowances that are retired for the purpose of this subsection with the approval of the Director,

B = the total amount of sulphur dioxide emission reduction credits that are retired for the purpose of this subsection with the approval of the Director,

C = the amount of sulphur dioxide that the owner of the facility reported under subsection 44 (5) were emitted from the facility in the previous year.

Approval of application to retire emission allowances or reduction credits

37. (1) If an application for approval to retire emission allowances or emission reduction credits is made to the Director under section 35 or 36, the Director shall approve or refuse to approve within 30 days after he or she receives the application.

(2) If the Director refuses to approve the application, the applicant may, within 15 days after he or she receives notice of the Director's decision, apply to the Director,

(a) for reconsideration of the Director's decision; or

(b) for approval to retire other emission allowances or emission reduction credits.

(3) If an application is made under subsection (2), the Director shall make a decision on the application within 15 days after he or she receives the application.

Grounds for refusing approval

38. (1) The Director may refuse to approve an application to retire emission allowances if,

- (a) the applicant is not shown as the holder of the allowances on the Registry;
 - (b) the Director is not satisfied that the allowances are held by the applicant; or
 - (c) retirement of the allowances is not permitted by this Regulation.
- (2) The Director may refuse to approve an application to retire emission reduction credits if,
- (a) the applicant is not shown as the holder of the credits on the Registry;
 - (b) the Director is not satisfied that the credits are held by the applicant; or
 - (c) retirement of the credits is not permitted by this Regulation.

Information for Registry

39. (1) A person who makes an application to the Director under section 35, 36 or 37 shall give written notice of the application to the operator of the Registry.

(2) The Director shall give written notice of a decision on an application under section 35, 36 or 37 to the applicant and to the operator of the Registry and, if the Director has approved the retirement of emission allowances or emission reduction credits, the operator shall amend the Registry to indicate that the retired allowances or credits no longer exist.

LIMITS ON RETIREMENT OF EMISSION ALLOWANCES

Limits on retirement of emission allowances

40. The owner of a facility may not retire emission allowances in a year for the purpose of subsection 35 (5) or 36 (5), if the allowances were acquired by a person under section 12, 14, 20, 26, 28 or 34 on January 1 of that year.

LIMITS ON RETIREMENT OF EMISSION REDUCTION CREDITS

Ratio of credits to allowances limits

41. (1) The owner of a facility may not retire an amount of nitrogen oxides emission reduction credits or nitric oxide emission reduction credits in a year for the purpose of subsection 35 (5) unless the following statement is true:

$$A \times 0.9 \leq B \times 0.33$$

where,

A = the total amount of nitrogen oxides emission reduction credits and nitric oxide emission reduction credits that are retired in the year for the purpose of subsection 35 (5),

B = the total amount of nitrogen oxides emission allowances and nitric oxide emission allowances that are retired in the year for the purpose of subsection 35 (5).

(2) The owner of a facility may not retire an amount of sulphur dioxide emission reduction credits in a year for the purpose of subsection 36 (5) unless the following statement is true:

$$A \times 0.9 \leq B \times 0.10$$

where,

A = the total amount of sulphur dioxide emission reduction credits that are retired in the year for the purpose of subsection 36 (5),

B = the total amount of sulphur dioxide emission allowances that are retired in the year for the purpose of subsection 36 (5).

Limit on nitrogen oxides non-smog season credits

42. The owner of a facility may retire nitrogen oxides non-smog season emission reduction credits and nitric oxide non-smog season emission reduction credits for a year for the purpose of subsection 35 (5) only if the following statement is true:

$$(A \div B) \leq (C \div D)$$

where,

A = the amount of nitrogen oxides emitted from the facility in the smog season in the year,

B = the amount of nitrogen oxides emitted from the facility in the non-smog season in the year,

C = the total amount of nitrogen oxides smog season emission reduction credits and nitric oxide smog season emission reduction credits retired by the owner for the year for the purpose of subsection 35 (5),

D = the total amount of nitrogen oxides non-smog season emission reduction credits and nitric oxide non-smog season emission reduction credits retired by the owner for the year for the purpose of subsection 35 (5).

MONITORING AND REPORTING

Nitrogen oxides monitoring and reporting

43. (1) This section applies to a facility in a year if,

- (a) the facility is listed in a table to this Regulation; or
- (b) section 35 can reasonably be expected to apply to the facility for the next year.

(2) For the purpose of this section, the owner of a facility to which this section applies shall ensure that emissions of nitrogen oxides emitted from the facility during the year are monitored, calculated and reported in accordance with this section.

(3) Despite subsection (2), nitrogen oxides emissions from a generation unit do not have to be monitored, calculated or reported under this section, if the facility where the generation unit is located has an electricity generation name plate capacity that is greater than 25 megawatts.

(4) The owner of a facility to which this section applies shall ensure that emissions of nitrogen oxides from any stationary source of emissions emitted from the facility in a year are monitored or calculated using the method reported in accordance with paragraph 4 of subsection 6 (4) or such other method as the Director may, by written notice, require be used.

(5) The owner of a facility to which this section applies shall, not later than March 31 in a year following the year in which it applies, submit a report, based on a method used in accordance with subsection (4), to the Director stating,

- (a) the amount of nitrogen oxides emitted from the facility in the smog season in the year;
- (b) the amount of nitrogen oxides emitted from the facility in the non-smog season in the year.

Sulphur dioxide monitoring and reporting

44. (1) This section applies to a facility in a year if,

- (a) that facility is listed in a table to this Regulation; or
- (b) section 36 can reasonably be expected to apply to the facility for the next year.

(2) For the purpose of this section, the owner of a facility to which this section applies shall ensure that emissions of sulphur dioxide emitted during the year from the facility are monitored, calculated and reported in accordance with this section.

(3) Despite subsection (2), sulphur dioxide emissions from a generation unit do not have to be monitored, calculated or reported under this section, if the facility where the generation unit is located has an electricity generation name plate capacity that is greater than 25 megawatts.

(4) The owner of a facility to which this section applies shall ensure that emissions from any stationary source of emissions emitted from a facility in a year are monitored or calculated using the method reported in accordance with paragraph 4 of subsection 6 (4) or such other method as the Director may, by written notice, require be used. -

(5) The owner of a facility to which this section applies shall, not later than March 31 in a year following the year in which it applies, submit a report, based on a method used in accordance with subsection (4), to the Director stating,

- (a) the amount of sulphur dioxide emitted from the facility in the smog season in the year;
- (b) the amount of sulphur dioxide emitted from the facility in the non-smog season in the year.

Calculation of emissions

45. If a generation unit produces a useful product other than electricity, the amounts reported under subsections 43 (5) and 44 (5) shall include the amount determined in accordance with the following formula:

$$A \div B \times C$$

where,

- A = the amount of energy used by the generation unit to produce a useful product other than electricity during the smog season or non-smog season, as the case may be,
- B = the total amount of energy used by the generation unit to produce electricity and other useful products during the smog season or non-smog season, as the case may be,
- C = the total amount of nitrogen oxides or sulphur dioxide, as the case may be, emitted from the generation unit during the smog season or non-smog season, as the case may be.

Monitoring in the cement and base metal smelting sectors

46. (1) In addition to any other monitoring requirements in this Regulation, the owner of a facility in the cement sector to which section 43 applies shall ensure that emissions of nitrogen oxides from any kiln located at the facility are monitored during the year with,

- (a) a continuous emissions monitoring system installed and operated in accordance with Report EPS 1/PG/7; or
- (b) a method that, in the opinion of the Director, will provide estimates of nitrogen oxides emissions that are at least as accurate as the estimates that would be provided by a continuous emission monitoring system referred to in clause (a).

(2) In addition to any other monitoring requirements in this Regulation, the owner of a facility to which section 44 applies and which is listed in Table 8 shall ensure that emissions of sulphur dioxide from any source set out in Table 8 and located at the facility are monitored during the year with,

- (a) a continuous emissions monitoring system installed and operated in accordance with Report EPS 1/PG/7; or
- (b) a method that, in the opinion of the Director, will provide estimates of sulphur dioxide emissions at least as accurate as the estimates that would be provided by a continuous emission monitoring system referred to in clause (a).

(3) The owner of a facility to which this section applies shall ensure that the continuous emission monitoring system that is selected meets the design specifications set out in Table 1 of Report EPS 1/PG/7 and the performance standards set out in Table 3 of Report EPS 1/PG/7.

(4) For the purpose of this section and despite subsection 3.4.1 of Report EPS 1/PG/7, emission data that are missing because of a malfunction of the continuous emission monitoring system may be substituted using data derived from operating parameter correlations for a period of up to 168 hours for any single episode of malfunctioning.

(5) The owner of a facility to which this section applies shall, not later than September 1, 2005, notify the Director of,

- (a) whether the emissions of nitrogen oxides from kilns located at the facility will be monitored in accordance with clause (1) (a) or (b);
- (b) whether the emissions of sulphur dioxide from kilns located at the facility will be monitored in accordance with clause (2) (a) or (b);
- (c) the continuous emission monitoring system selected to monitor emissions of nitrogen oxides, if nitrogen oxides emissions are to be monitored in accordance with clause (1) (a); and

- (d) the continuous emission monitoring system selected to monitor emissions of sulphur dioxide if sulphur dioxide emissions are to be monitored in accordance with clause (2) (a).

(6) If the emissions of nitrogen oxides or sulphur dioxide from a facility to which this section applies are monitored with a continuous emission monitoring system, the owner of the facility shall, not later than January 1, 2006, submit to the Director a report from an independent third party in which the third party certifies that,

- (a) the continuous emission monitoring system meets the performance specifications listed in Table 3 of Report EPS 1/PG/7; and
- (b) a quality assurance and quality control manual in respect of the continuous emission monitoring system that meets the requirements of section 6.1 of Report EPS 1/PG/7 has been developed.

(7) The owner of a facility to which this section applies shall, not later than March 1, 2007 and March 1 of each subsequent year submit a report to the Director from an independent third party that sets out the results of the evaluation conducted in accordance with section 6.4 of Report EPS 1/PG/7.

(8) The owner of a facility to which this section applies shall give the Director written notice of any malfunction of the continuous emission monitoring system that lasts longer than seven consecutive days not later than the eighth day following the start of the system malfunction.

(9) The owner of a facility to which subsection (3) applies shall give the Director written notice setting out changes made to the any part of the continuous emission monitoring system, including to the quality assurance and quality control manual as soon as possible after the changes are made.

(10) Subsection (2) does not apply to the facility listed as “Inco, Sudbury” in Table 8, if the emissions of sulphur dioxide from the 381 metre stack and the 193 metre stack located at the facility and referred to in an Order issued to Inco Limited by the Director under sections 7, 17, 18 and 124 of the Act on February 12, 2002 are monitored or calculated for the year in accordance with a method set out in the Order.

(11) Subsection (2) does not apply to the facility listed as “Falconbridge, Sudbury” in Table 8, if the emissions of sulphur dioxide from the 93 metre stack located at the facility and referred to in an Order issued to Falconbridge Limited by the Director under sections 7, 17, 18 and 124 of the Act on February 12, 2002 are monitored or calculated for the year in accordance with a method set in the Order.

Emissions monitoring report

47. (1) In addition to any other reporting requirements in this Regulation, the owner of a facility who is required under section 46 to ensure that emissions of nitrogen oxides or sulphur dioxide are monitored during the year shall not later than March 1 in each year submit a report to the Director summarizing the data obtained from the monitoring in the previous year.

(2) The report to the Director shall include the following:

1. The name and address of the owner of the facility.
2. The name, address and geographical location of the facility.
3. The name of, or identifier for, each source set out in Table 8 from which nitrogen oxides or sulphur dioxide are emitted.
4. Any change in information provided under paragraph 3 that has occurred since the last report.
5. The amount of nitrogen oxides or sulphur dioxide emitted each month from each source set out in Table 8.
6. The total amount of nitrogen oxides or sulphur dioxide emitted during the smog season from each source set out in Table 8.
7. The total amount of nitrogen oxides or sulphur dioxide emitted during the non-smog season from each source set out in Table 8.
8. The total amount of nitrogen oxides or sulphur dioxide emitted during the year from each source set out in Table 8.

Records

48. A person who is required to submit a report to the Director under section 43 or 44 shall ensure that the information and supporting documentation on which the report is based are kept for five years after the report is submitted.

TABLE 1
(NITROGEN OXIDES EMISSIONS ALLOWANCES, SECTOR BUDGETS, SECTION 10)

| Item | Regulated Sector | Amount (tonnes) | | | |
|------|------------------|-----------------|-----------|-----------|----------------|
| | | 2006 | 2007-2009 | 2010-2014 | 2015 and after |
| 1. | Cement | 19,872 | 19,136 | 17,835 | 14,875 |
| 2. | Flat Glass | 2,100 | 1,953 | 1,805 | 1,805 |
| 3. | Pulp and Paper | 7,170 | 6,836 | 6,558 | 6,558 |
| 4. | Iron and Steel | 10,823 | 10,352 | 9,855 | 9,855 |

TABLE 2
(NITROGEN OXIDES EMISSIONS ALLOWANCES, PETROLEUM SECTOR, SECTION 12)

| Item | Facility | Amount of Nitrogen Oxides Emission Allowances (tonnes) | | |
|-------------------------|---------------------------|--|-----------|----------------|
| Petroleum Sector | | | | |
| | | 2006 | 2007-2009 | 2010 and after |
| 1. | Imperial Oil, Sarnia | 3,164 | 2,912 | 2,660 |
| 2. | Imperial Oil, Nanticoke | 2,363 | 2,132 | 1,900 |
| 3. | Petro-Canada, Mississauga | 780 | 722 | 665 |
| 4. | Shell Canada, Sarnia | 2,174 | 1,942 | 1,710 |
| 5. | Suncor Inc., Sarnia | 1,132 | 1,041 | 950 |
| 6. | Nova Chemicals, Sarnia | 2,384 | 2,442 | 2,500 |

TABLE 3
(NITROGEN OXIDES EMISSION INTENSITY RATES, SECTION 14)

| Item | Facility | Intensity Rate (tonnes per unit of regulated product) | | | |
|------------------------------|-------------------------------|---|-----------|----------------|----------------|
| Cement Sector | | | | | |
| | | 2006 | 2007-2009 | 2010-2014 | 2015 and after |
| 1. | St. Marys, Bowmanville | 0.0028 | 0.0024 | 0.0020 | 0.0020 |
| 2. | St. Lawrence, Mississauga | 0.0020 | 0.0020 | 0.0020 | 0.0020 |
| 3. | Lafarge, Bath | 0.0054 | 0.0042 | 0.0030 | 0.0020 |
| 4. | Essroc, Picton | 0.0026 | 0.0024 | 0.0022 | 0.0020 |
| 5. | St. Marys, St. Marys | 0.0024 | 0.0022 | 0.0020 | 0.0020 |
| 6. | Lafarge, Woodstock | 0.0081 | 0.0067 | 0.0054 | 0.0020 |
| Flat Glass Sector | | | | | |
| | | 2006 | 2007-2009 | 2010 and after | |
| 7. | PPG, Owen Sound | 0.012 | 0.012 | 0.0108 | |
| Iron and Steel Sector | | | | | |
| 8. | Algoma, Sault Ste. Marie | 0.0015 | 0.00131 | 0.00113 | |
| 9. | Dofasco, Hamilton | 0.00072 | 0.00067 | 0.00063 | |
| 10. | Stelco Hilton Works, Hamilton | 0.00102 | 0.00094 | 0.00085 | |
| 11. | Stelco Lake Erie, Nanticoke | 0.00102 | 0.00094 | 0.00085 | |
| Pulp and Paper Sector | | | | | |
| | | 2006 | 2007-2009 | 2010 and after | |
| 12. | Bowater, Thunder Bay | 0.0023 | 0.0022 | 0.0022 | |
| 13. | Kimberly Clark, Terrace Bay | 0.0017 | 0.0017 | 0.0017 | |
| 14. | Domtar, Espanola | 0.0024 | 0.0023 | 0.0023 | |
| 15. | Weyerhaeuser, Dryden | 0.0031 | 0.0030 | 0.0029 | |
| 16. | Norampac, Red Rock | 0.0014 | 0.0013 | 0.0013 | |
| 17. | Abitibi, Fort Frances | 0.0042 | 0.0041 | 0.0040 | |
| 18. | Marathon Pulp, Marathon | 0.0048 | 0.0044 | 0.0043 | |
| 19. | Tembec, Smooth Rock | 0.0028 | 0.0027 | 0.0026 | |
| 20. | Domtar, Cornwall | 0.0049 | 0.0042 | 0.0034 | |

TABLE 4
(SULPHUR DIOXIDE EMISSION ALLOWANCES, FACILITY BUDGETS, SECTION 21)

| Item | Facility | Amount (tonnes) | | | |
|------|-------------------------------|-----------------|-----------|-----------|----------------|
| | | 2006 | 2007-2009 | 2010-2014 | 2015 and after |
| 1. | Inco, Sudbury | 265,000 | 175,000 | 175,000 | 66,000 |
| 2. | Falconbridge, Sudbury | 66,000 | 66,000 | 66,000 | 25,000 |
| 3. | Nova Chemicals, Sarnia | 7,000 | 7,100 | 7,100 | 7,100 |
| 4. | Cabot Canada, Sarnia | 7,800 | 7,550 | 7,300 | 7,300 |
| 5. | Columbian Chemicals, Hamilton | 3,200 | 3,300 | 3,400 | 3,400 |

TABLE 5
(SULPHUR DIOXIDE EMISSION ALLOWANCES, SECTOR BUDGETS, SECTION 22)

| Item | Regulated Sector | Amount (tonnes) | | | |
|------|------------------|-----------------|-----------|-----------|----------------|
| | | 2006 | 2007-2009 | 2010-2014 | 2015 and after |
| 1. | Cement | 22,339 | 21,820 | 20,773 | 16,139 |
| 2. | Iron and steel | 18,409 | 18,710 | 19,384 | 19,384 |
| 3. | Pulp and Paper | 10,337 | 9,269 | 8,339 | 8,339 |

TABLE 6
(SULPHUR DIOXIDE EMISSION ALLOWANCES, PETROLEUM SECTOR, SECTION 26)

| Item | Facility | Amount of Sulphur Dioxide Emission Allowances (tonnes) | | |
|-------------------------|---------------------------|--|-----------|----------------|
| Petroleum Sector | | | | |
| | | 2006 | 2007-2009 | 2010 and after |
| 1. | Imperial Oil, Sarnia | 23,938 | 16,569 | 9,200 |
| 2. | Imperial Oil, Nanticoke | 6,951 | 6,876 | 6,800 |
| 3. | Petro-Canada, Mississauga | 1,931 | 1,720 | 1,600 |
| 4. | Shell Canada, Sarnia | 12,567 | 9,859 | 7,150 |
| 5. | Suncor Inc. Sarnia | 4,000 | 4,000 | 4,000 |

TABLE 7
(SULPHUR DIOXIDE EMISSION INTENSITY RATES, SECTION 28)

| Item | Facility | Intensity Rates (tonnes per unit of regulated product) | | | |
|-----------------------------------|-------------------------------|--|-----------|----------------|----------------|
| Cement Sector | | | | | |
| | | 2006 | 2007-2009 | 2010-2014 | 2015 and after |
| 1. | St. Marys, Bowmanville | 0.0029 | 0.0026 | 0.0022 | 0.0022 |
| 2. | St. Lawrence, Mississauga | 0.0022 | 0.0022 | 0.0022 | 0.0022 |
| 3. | Lafarge, Bath | 0.0042 | 0.0036 | 0.0030 | 0.0022 |
| 4. | Essroc, Picton | 0.0031 | 0.0027 | 0.0023 | 0.0022 |
| 5. | St. Marys, St. Marys | 0.0022 | 0.0022 | 0.0022 | 0.0022 |
| 6. | Lafarge, Woodstock | 0.0132 | 0.0112 | 0.0092 | 0.0022 |
| Base Metal Smelting Sector | | | | | |
| | | 2006 | 2007-2014 | 2015 and after | |
| 8. | Inco, Sudbury | | 1.12 | 0.810 | 0.300 |
| 9. | Falconbridge, Sudbury | | 0.730 | 0.580 | 0.450 |
| Carbon Black Sector | | | | | |
| | | 2006 | 2007-2009 | 2010 and after | |
| 10. | Cabot Canada | | 0.077 | 0.0715 | 0.066 |
| 11. | Columbian Chemicals | | 0.036 | 0.036 | 0.036 |
| Iron and Steel | | | | | |
| | | 2006 | 2007-2009 | 2010 and after | |
| 12. | Algoma, Sault Ste. Marie | | 0.00324 | 0.00323 | 0.00323 |
| 13. | Dofasco, Hamilton | | 0.00099 | 0.00093 | 0.00092 |
| 14. | Stelco Hilton Works, Hamilton | | 0.00170 | 0.00163 | 0.00160 |
| 15. | Stelco Lake Erie, Nanticoke | | 0.00170 | 0.00163 | 0.00160 |
| Pulp and Paper Sector | | | | | |
| | | 2006 | 2007-2009 | 2010 and after | |
| 16. | Bowater, Thunder Bay | | 0.0034 | 0.0034 | 0.0034 |
| 17. | Kimberly Clark, Terrace Bay | | 0.0019 | 0.0017 | 0.0015 |
| 18. | Domtar, Espanola | | 0.0015 | 0.0014 | 0.0013 |
| 19. | Weyerhaeuser, Dryden | | 0.0007 | 0.0007 | 0.0007 |
| 20. | Norampac, Red Rock | | 0.0017 | 0.0017 | 0.0017 |
| 21. | Abitibi, Fort Frances | | 0.0082 | 0.0082 | 0.0082 |
| 22. | Marathon Pulp, Marathon | | 0.0123 | 0.0085 | 0.0053 |

| | | | | |
|-------------------------|------------------------|--------|----------|----------|
| 23. | Tembec, Smooth Rock | 0.0016 | 0.0016 | 0.0016 |
| 24. | Domtar, Cornwall | 0.0164 | 0.0139 | 0.0113 |
| Petroleum Sector | | | | |
| 25. | Nova Chemicals, Sarnia | 0.010 | 0.008875 | 0.008875 |

TABLE 8
(ADDITIONAL MONITORING OF SULPHUR DIOXIDE EMISSION SOURCES, SECTION
46)

| Facility | Source |
|-----------------------------------|-----------------|
| Any facility in the cement sector | kiln |
| Inco, Sudbury | 381 metre stack |
| Inco, Sudbury | 193 metre stack |
| Falconbridge, Sudbury | 93 metre stack |