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This draft regulation is provided solely to facilitate dialogue concerning its contents. Should the decision be made to proceed with the proposal, the comments received during consultation will be considered during the final preparation of the regulation. The content, structure, form and wording of the draft regulation are subject to change as a result of the consultation process and as a result of review, editing and correction by the Office of Legislative Counsel.

CONSULTATION DRAFT**ONTARIO REGULATION**

proposed to be made under the

**PROPOSED CLIMATE CHANGE MITIGATION AND LOW-CARBON ECONOMY
ACT, 2016**

(BILL 172)

THE CAP AND TRADE PROGRAM

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GENERAL

Definitions

1. In this Regulation,

[MOECC Note: In this draft, references to “the Act” are to the proposed Act set out in the first reading version of Bill 172 (Climate Change Mitigation and Low-carbon Economy Act, 2016), introduced on February 24, 2016.]

“auction” means an auction held under section 36;

“Auction Class 1 emission allowance” means an Ontario emission allowance that is auctioned and that has been classified by the Minister as having a vintage year that is either the auction year or an earlier year;

“Auction Class 2 emission allowance” means an Ontario emission allowance that is auctioned and that has been classified by the Minister as having a vintage year that is later than the auction year;

“auction year” means, when used in reference to an auction, the calendar year in which the auction is held;

“bid price” means the price offered for an Ontario emission allowance, as indicated in a bid submitted under this Regulation;

“capped participant” means a mandatory participant or a voluntary participant;

“current vintage emission allowance” means an Ontario emission allowance that has been classified by the Minister as having a vintage year that is either the current year or an earlier year;

“designated account representative” means, when used in reference to a registered participant, an individual designated by the participant as the participant’s account representative in accordance with section 27;

“designated jurisdiction” means,

- (a) the province of Quebec, or
- (b) the state of California;

“future vintage emission allowance” means an Ontario emission allowance that has been classified by the Minister as having a vintage year that is later than the current year;

“NAICS” means the North American Industry Classification System maintained for Canada by Statistics Canada, as amended or revised from time to time;

“Reporting Regulation” means Ontario Regulation 452/09 (Greenhouse Gas Emissions Reporting) made under the *Environmental Protection Act*;

[MOECC Note: It may be appropriate in some circumstances to read references to the Reporting Regulation in this draft regulation to include the new regulation, proposed to be made under the proposed Act, which would deal with the same subject matter as the existing Reporting Regulation. These references will be clarified at a later time.]

“verifiable emissions amount” means one of the following amounts that has been set out in respect of greenhouse gas emissions in a year in a report given to the Director under the Reporting Regulation:

1. The amount calculated under paragraph 4 of subsection 7.3 (2) of the Reporting Regulation.
2. The amount calculated under subsection 7.4 (1), (2) or (3) of the Reporting Regulation.

Compliance periods

2. The compliance periods are the following:

1. January 1, 2017 to December 31, 2020.
2. January 1, 2021 to December 31, 2023 and each subsequent three-year period.

Attribution of emissions

3. (1) For the purposes of section 13 of the Act, the prescribed activity is one of the following:

1. All activities set out in Table 2 of the Reporting Regulation that are engaged in at a single facility.
2. Electricity importation.
3. Natural gas distribution.
4. Petroleum product supply.

(2) Subject to subsection (4), the amount of greenhouse gas emissions relating to an activity mentioned in subsection (1) that is attributed to a capped participant for a year is the following:

1. The participant’s verifiable emissions amount in respect of the activity, if a positive or qualified positive verification statement has been issued in respect of the report in which the verifiable emissions amount is set out.
2. The amount determined by the Director under subsection (3) in respect of the activity.

(3) For the purposes of paragraph 2 of subsection (2), the Director shall determine the amount of greenhouse gas emissions attributed to the participant for a year in respect of the activity based on the information available to the Director if,

- (a) an adverse verification statement was issued in respect of the report in which the verifiable emissions amount in respect of the activity was set out; or
- (b) a revised report setting out the verifiable emissions amount or a verification statement or a revised verification statement in respect of the report in which the verifiable emissions amount was set out was required to be given to the Director and was not given to the Director.

(4) The amount of greenhouse gas emissions attributed to a capped participant relating to a prescribed activity is zero for the following years:

- 1. In the case of a mandatory participant who was not required under the Reporting Regulation to give a report to the Director in 2016 with respect to greenhouse gas emissions in 2015 and to have the report verified, each of the subsequent first two consecutive years in which the participant was required to give a report and to have the report verified.
- 2. In the case of a voluntary participant, the first year in which the person is registered under the Act and each previous year in which the participant was not registered under the Act.
- 3. In the case of any capped participant, any year in respect of which the participant is not required, either under the Reporting Regulation or as a condition of registration, to give a report to the Director and to have the report verified.

SUBMISSION OF EMISSION ALLOWANCES AND CREDITS FOR COMPLIANCE PERIOD

Ontario emission allowance or Ontario credit, equivalence in carbon dioxide equivalent

4. An Ontario emission allowance or Ontario credit is equivalent to one tonne of carbon dioxide equivalent.

Submission of emission allowances and Ontario credits, timing

5. (1) The deadline for submitting emission allowances and credits under section 14 of the Act for a compliance period is 8 p.m. eastern standard time on November 1 following the end of the compliance period.

(2) The deadline prescribed for the purposes of subsection 14 (9) of the Act is 8 p.m. eastern standard time on the day that is 180 days following the day a revised report is given to the Director, if the report sets out an increase in the amount of greenhouse gas emissions that results in an increase in the amount attributed to a person under section 3.

(3) If the deadline under subsection (1) or (2) falls on a day that is not a business day, the deadline is 8 p.m. eastern standard time on the first business day following the deadline under subsection (1) or (2), as the case may be.

Restriction, emission allowances

6. Only the following Ontario emission allowances may be submitted for a compliance period:

1. Ontario emission allowances transferred into a compliance account as a result of a successful purchase of emission allowances offered for sale under section 37.
2. Ontario emission allowances classified by the Minister as having a vintage year that is a year in the compliance period or an earlier year.
3. Ontario emission allowances classified by the Minister as having a vintage year that is either the first or second year following the end of the compliance period, if the emission allowance has been allocated free of charge as a production adjustment.

*[MOECC Note: Allowances distributed free of charge for production adjustment
See Appendix for further information on production adjustments and the distribution of allowances free of charge.]*

Restriction, credits

7. Only the following Ontario credits may be submitted for a compliance period:

1. Ontario offset credits created by the Minister before the end of the year following the end of the compliance period.
2. Ontario early reduction credits.

[MOECC Note: See Appendix for further information on early reduction credits.]

[MOECC Note: To create a robust offset credit program in Ontario, a separate offsets regulation will be proposed later in 2016 if the climate change legislation passes. The offsets regulation will describe the requirements proponents must meet to be able to create, verify and register offset credits for use in Ontario's greenhouse gas cap and trade program, including requirements for protocols. Protocols set out the requirements to demonstrate the offset criteria such as ownership, and that proposed offsets are real, additional, verified, unique, permanent, and enforceable, to ensure that offset projects produce the emission reductions being claimed.]

Manner of submitting emission allowances and credits

8. (1) A capped participant may submit Ontario emission allowances described in paragraph 1 of section 6 by paying for the purchased emission allowances.

(2) A capped participant may submit Ontario emission allowances described in paragraphs 2 and 3 of section 6 and Ontario credits described in paragraphs 1 and 2 of section 7 by taking the following steps:

1. A designated account representative of the participant must submit a notice of the participant's intent to submit the emission allowances and credits to all other designated account representatives of the participant.
2. A second designated account representative of the participant must, no later than two days following the submission of the notice of intent under paragraph 1, confirm the participant's intent to submit the emission allowances and credits to all other designated account representatives of the participant.

(3) A capped participant may only submit Ontario emission allowances and Ontario credits under subsection (2) if the emission allowances or credits are held in the participant's holding account.

(4) The steps described in paragraphs 1 and 2 of subsection (2) may both be taken by the same individual if the participant has only one designated account representative.

(5) Upon receipt of a confirmation under paragraph 2 of subsection (2), the Minister shall transfer the Ontario emission allowances and Ontario credits to the participant's compliance account.

(6) If the Minister asks a designated account representative of a participant for information relating to the submission of emission allowances or credits under this section, the account representative shall give the information to the Minister as soon as possible.

[MOECC Note: Change in ownership - If the ownership of a facility or person engaging in an activity covered by this regulation changes, the new owner is required to submit any outstanding allowances and credits for emissions from the facility or activity in accordance with this regulation.]

Minister's removal of emission allowances and credits from compliance account

9. (1) After the applicable deadline for submitting emission allowances and credits under section 14 of the Act for a compliance period, the Minister shall take the steps set out in subsection (2) in respect of each capped participant's compliance account, in the order in which the steps are set out, until the earlier of the following:

1. The amount of Ontario emission allowances and Ontario credits removed by the Minister from the compliance account is equal to the amount of greenhouse gas emissions required to be submitted by the participant for the compliance period.
2. The Minister has taken all of the steps.

(2) The steps to be taken in respect of the compliance account are the following:

1. The Minister shall remove Ontario offset credits that may be submitted for the compliance period, beginning with the credits that were created first and continuing chronologically to the most recently created credits until the earlier of the following:
 - i. No more of those credits remain in the compliance account.
 - ii. The amount of credits removed from the compliance account represents eight per cent of the greenhouse gas emissions attributed to the participant for the compliance period.
2. The Minister shall remove any Ontario emission allowances described in paragraph 1 of section 6 until no more of those allowances remain in the compliance account.
3. The Minister shall remove any Ontario early reduction credits until no more of those credits remain in the compliance account. *[MOECC Note: See Appendix for further information on early reduction credits.]*
4. The Minister shall remove any Ontario emission allowances described in paragraph 2 of section 6, beginning with the emission allowances with the earliest vintage year and continuing chronologically to the emission allowances with the most recent vintage year, until no more of those emission allowances remain in the compliance account.
5. The Minister shall remove any Ontario emission allowances described in paragraph 3 of section 6, beginning with the emission allowances with the earlier vintage year and continuing chronologically to the emission allowances with the later vintage year, until no more of those emission allowances remain in the compliance account.

(3) The Minister shall retire all emission allowances and credits removed by the Minister under this section.

Restriction on accounts, shortfall

10. If a capped participant fails to submit all of the required emission allowances and credits on or before the applicable deadline in accordance with this Regulation, the participant's authority to deal with emission allowances and credits in the participant's cap and trade accounts is restricted under paragraph 4 of subsection 14 (7) of the Act as follows: the participant is prohibited from transferring emission allowances or credits from the participant's holding accounts into any other account other than the participant's compliance account.

Minister's removal of emission allowances and credits, shortfall

11. (1) The Minister may only remove emission allowances and credits for a compliance period under subsection 14 (7) of the Act until such time as the Director issues an order under paragraph 1 of subsection 14 (8) of the Act.

(2) The Minister's authority to remove emission allowances and credits for a compliance period under paragraphs 1 and 3 of subsection 14 (7) of the Act may only be exercised by taking the following steps in respect of the participant's cap and trade accounts in the order in which the steps are set out:

1. The Minister shall remove Ontario offset credits that may be submitted for the compliance period, beginning with the credits that were created first and continuing chronologically to the most recently created credits until the earlier of the following:
 - i. No more of those credits remain in the cap and trade accounts.
 - ii. The amount of credits removed from the cap and trade accounts, both under section 9 and this section, represents eight per cent of the greenhouse gas emissions attributed to the participant for the compliance period.
2. The Minister shall remove any Ontario early reduction credits until no more of those credits remain in the cap and trade accounts. *[MOECC Note: See Appendix for further information on early reduction credits]*
3. The Minister shall remove any Ontario emission allowances described in paragraph 2 of section 6, beginning with the emission allowances with the earliest vintage year and continuing chronologically to the emission allowances with the most recent vintage year, until no more of those emission allowances remain in the cap and trade accounts.
4. The Minister shall remove any remaining Ontario emission allowances held in the participant's compliance account, beginning with the emission allowances with the earliest vintage year and continuing chronologically to the emission allowances with later vintage years, until no more of those emission allowances remain in the compliance account.
5. The Minister shall remove any remaining Ontario emission allowances held in the participant's holding account, beginning with the emission allowances with the earliest vintage year and continuing chronologically to the emission allowances with later vintage years, until no more of those emission allowances remain in the holding account.

(3) The Minister shall retire all emission allowances and credits removed by the Minister under paragraph 1 of subsection 14 (7) of the Act.

(4) The Minister shall reserve all emission allowances removed by the Minister under paragraph 3 of subsection 14 (7) of the Act for the purposes of auctions.

Notice of continuing shortfall

12. A notice under subsection 14 (8) of the Act shall include, in addition to the amount of the outstanding obligations, the following:

1. A statement explaining that if the participant is eligible to apply for an allocation of free emission allowances, the number of emission allowances the participant would be eligible to receive in the following year may decrease by the number of outstanding emission allowances and credits.
2. The deadline for submitting sufficient emission allowances or credits to satisfy the outstanding obligations, which must be 30 days from the day that the notice is issued.
3. A statement that the Director may issue an order under subsection 14 (8) of the Act if the participant does not satisfy the outstanding obligations by the specified deadline.

Failure to remedy continuing shortfall

13. The amount required to be paid by an order under paragraph 1 of subsection 14 (8) of the Act shall be determined by applying the following formula:

$$A = B \times C$$

Where,

- A = the amount required to be paid,
- B = the lowest bid price accepted for Auction Class 1 emission allowances at the most recent auction,
- C = the amount of outstanding obligations at the time of the determination.

REGISTRATION OF PARTICIPANTS IN THE CAP AND TRADE PROGRAM

Mandatory participants

14. (1) Each of the following persons is required to register as a mandatory participant under paragraph 2 of subsection 15 (1) of the Act.

1. A person who is exempt from section 7.6 of the Reporting Regulation under section 26 of that regulation.

2. A person who was required under the Reporting Regulation to submit a report and verification statement in 2016 with respect to greenhouse gas emissions in 2015.

(2) Subject to subsection (3), a person shall register as a mandatory participant no later than September 1 in the first year in which the person is required to submit a verification statement.

(3) A person mentioned in paragraph 1 or 2 of subsection (1) shall register on or after July 1, 2016 and no later than November 30, 2016.

(4) The owner or operator of a facility that meets all of the following criteria is exempt from subsection 15 (1) of the Act in respect of the facility:

1. The primary activity engaged in at the facility is electricity generation within the meaning of the Reporting Regulation.
2. No products are produced at the facility other than electricity and any heat, steam or by-product gas.
3. The facility does not receive natural gas directly from an international or inter-provincial natural gas transmission pipeline.
4. No electricity is generated at the facility from the incineration of waste.

Voluntary participants

15. (1) For the purposes of paragraph 1 of subsection 16 (1) of the Act, a person mentioned in that paragraph may apply for registration as a voluntary participant in the cap and trade program if the person is the owner or operator of a facility at which an activity set out in Table 2 of the Reporting Regulation is engaged in and the person provides two positive verification statements in respect of the two most recent reports given to the Director by the person under that regulation.

(2) A person who meets all of the criteria set out in paragraphs 1 to 4 of subsection 14 (4) is not permitted to apply for registration as a voluntary participant.

Market participants

16. A person who is not an employee of a mandatory or voluntary participant may apply to the Director for registration as a market participant in the cap and trade program under subsection 17 (1) of the Act.

Information to be provided for registration

17. (1) A person who is registering or applying to register under the Act shall give the Director the following information:

1. The name and contact information of the person and whether the person is a corporation, partnership, sole proprietor or other type of organization.
2. In the case of a corporation,
 - i. the date and place of the incorporation,
 - ii. the business number,
 - iii. the names and contact information of the directors and officers,
 - iv. the names and contact information of persons controlling over 10 per cent of the voting rights attached to all the outstanding voting securities, and
 - v. the name of each subsidiary or parent corporation.
3. In the case of a partnership,
 - i. the business number,
 - ii. the name and contact information of each partner, or, in the case of a limited partnership, the name and contact information of each general partner, and
 - iii. the name and contact information of each special partner having provided over 10 per cent of the common stock.
4. If the person has a business relationship with any other person who is registered under the Act or who is required to be registered under the Act or who is registered or required to be registered under similar rules or regulations of a designated jurisdiction,
 - i. the name and contact information of the other person,
 - ii. whether the other person is an individual or a corporation, partnership, sole proprietor or other type of organization,
 - iii. if the other person is not an individual, the date and place of its incorporation or the date and place of its establishment by other means,
 - iv. a description of the nature of the business relationship, which must include the percentage of shares, securities or other interests of each person held by others and which may be accompanied by a diagram showing the relationship,
 - v. the holding account number of the other person, and

- vi. the name and contact information of the other person's primary account representative.
5. A designation of account agents prepared in accordance with section 27.
 6. A document signed by the chief officer of the person registering or a resolution of the board of directors of the person that sets out the following:
 - i. An undertaking that the chief officer or board of directors will comply with the Act and this Regulation.
 - ii. A statement that the information provided under this section is accurate, to the best of the chief officer's or the board of directors' knowledge.
 - iii. The chief officer's or board of directors' consent to the Ministry giving information relating to the person to authorities in designated jurisdictions when necessary for the purposes of this Regulation and the similar rules and regulations of designated jurisdictions.
 7. The percentage of the holding limit allotted to the person in accordance with subsection 21 (5) or 22 (2), if applicable.
 8. The percentage of the purchase limit allotted to the person in accordance with section 48, if applicable.

(2) In the case of a person registering or applying to register as a capped participant, the participant shall give the Director the following information in addition to the information mentioned in subsection (1):

1. Each unique identifier provided to the person by the Ministry for the purposes of the Reporting Regulation.
2. For each facility in respect of which the person prepares a report and in respect of which verification is required to be conducted under the Reporting Regulation,
 - i. the primary NAICS code and, if applicable, any secondary NAICS codes, and
 - ii. the names and contact information of any persons responsible for preparing the report.

(3) In the case of a person applying to register as a voluntary participant, the person must submit a verification statement, prepared in accordance with [**MOECC Note: the Reporting Regulation**] in respect of each of the two reports prepared in respect of greenhouse gas emissions during the two years immediately preceding the year of the application.

(4) For the purposes of paragraph 4 of subsection (1), a business relationship exists between two persons if there is a direct or indirect relationship in which,

- (a) the first person owns more than 20 per cent of the securities of the second person or holds a call, option or other right or obligation to acquire such securities;
- (b) the first person shares more than 20 per cent of its officers or directors with the second person or may appoint up to 20 per cent of the officers or directors of the second person;
- (c) the first person owns voting securities carrying more than 20 per cent of the voting rights attached to all voting securities in the second person;
- (d) if the second person is a partnership other than a limited partnership, the first person holds more than 20 per cent of the interests in the partnership;
- (e) if the second person is a limited partnership, the first person is a general partner of the partnership; or
- (f) the first person has any direct or indirect influence over voting securities of the second person, other than voting securities to secure an obligation, and, if the first person exercised that influence, the first person would be entitled to elect a majority of directors of the second person.

(5) For the purposes of paragraph 4 of subsection (1), a business relationship exists between a group of persons if two or more persons in the group are controlled by one of the persons in the group.

[MOECC Note: Registration of clearing houses - Ontario is considering facilitating the participation of clearing houses in the program to provide clearing services for transactions between registered participants:

- ***To be eligible, the clearing house would need to be recognized by a regulatory authority responsible for supervising financial markets in Canada.***
- ***Clearing houses would need to register according to rules similar to those in section 17 and submit supporting documentation confirming oversight of their activities by a regulatory authority.***
- ***Upon successful registration, an eligible clearing house would receive a clearing house account in which they would be able to temporarily hold allowances and credits to provide clearing services to other registered participants.]***

Conditions of registration

18. (1) It is a condition of registration as a capped participant or as a market participant that the participant must notify the Director of any changes to information provided to the Director under section 17 within 30 days following the change.

(2) It is a condition of registration as a voluntary participant that the participant must give reports and verification statements to the Director as if the participant were a mandatory participant.

(3) It is a condition of registration as a capped participant that the participant not transfer emission allowances or credits out of the participant's compliance account.

Cancellation of registration

19. (1) The Director may cancel the registration of a capped participant if the participant has requested the cancellation in writing and has satisfied all obligations under section 14 of the Act for the compliance period.

(2) The Director may cancel the registration of a market participant if the participant has requested the cancellation in writing and no emission allowances or credits remain in the participant's holding account.

CAP AND TRADE ACCOUNTS AND TRANSACTIONS

Cap and trade accounts of registered participants

20. (1) The Director shall establish a holding account for each registered participant, to and from which emission allowances and credits may be transferred.

(2) In addition to the holding account mentioned in subsection (1), the Director shall establish a compliance account for each capped participant, to which the Minister may transfer emission allowances and credits that the participant submits under section 14 of the Act.

Holding limits, current vintage emission allowances, etc.

21. (1) This section applies in respect of the following:

1. Current vintage emission allowances.
2. Ontario emission allowances that are classified as Category A, B or C.
3. Ontario early reduction credits. *[MOECC Note: See Appendix for further information on early reduction credits.]*

(2) Subject to subsection (3), the total number of emission allowances and credits mentioned in subsection (1) that are held in a participant's cap and trade accounts at any time in a year, or

in the cap and trade accounts of participants who are related persons at any time in a year, shall not exceed the limit determined by applying the following formula:

$$HL = 2,500,000 + 0.025 \times (C - 25,000,000)$$

Where,

HL = the limit on emission allowances and credits mentioned in paragraphs 1, 2 and 3 of subsection (1) that are held in the cap and trade accounts during a year,

C = the number of Ontario emission allowances created under section 34 for the year.

(3) When determining whether or not the limit determined under subsection (2) is exceeded, the amount set out in subsection (4) shall be deducted from the total number of emission allowances and credits held in the participant's cap and trade accounts.

(4) The amount deducted under subsection (3) is the total number of Ontario emission allowances and credits held in the participant's compliance account, up to the maximum number determined in accordance with ***[MOECC Note: an accruing estimate of the expected compliance obligation for the compliance period and the first year of the next compliance period. Each year, the emissions estimate for that year would be based on the most recent verified emissions report available or, in the absence of a verified emissions report, an amount determined by the director. The estimated compliance obligation would increase annually at the beginning of a new compliance year as new verified emissions reports are available and then reset in the second year of the next compliance period to deduct the amount of their compliance obligation for the previous compliance period.]***

[MOECC Note: Request for adjustment of exemption from the holding limit - A capped emitter that expects to have a significant increase in emissions in a compliance period of at least 250,000 tonnes per year of CO₂e may request an adjustment to the estimate by the director for that year and the next year until the verified emissions report for that year is available. Once the verified emissions report is available for the year in which emissions increased, the emissions amount of the verified report would replace the estimate assigned by the director. The capped emitter would need to provide sufficient information to demonstrate that the increase of emissions is expected to be more than 250,000 tonnes per year of CO₂e to support the determination of an estimate by the director.]

(5) Registered participants who are related persons shall allot the limits calculated under this section among themselves and each related person shall hold emission allowances or credits in an amount that is equal to or lower than their allotted portion of the limit.

(6) For the purposes of this section, two persons are related persons,

(a) if there is a direct or indirect relationship between them in which the first person,

- (i) owns more than 50 per cent of the securities of the second person or holds a call, option or other right or obligation to acquire such securities,
 - (ii) shares more than 50 per cent of its officers or directors with the second person or may appoint up to 50 per cent of the officers or directors of the second person, or
 - (iii) owns voting securities carrying more than 50 per cent of the voting rights attached to all voting securities in the second person;
- (b) if they each have the same designated account representative, and that same individual also performs other duties for one of the persons;
 - (c) if the second person is a partnership other than a limited partnership and the first person holds more than 50 per cent of the interests in the partnership; or
 - (d) if the second person is a limited partnership, the first person is the general partner of the partnership.

(7) For the purposes of this section, a group of persons are related persons if two or more persons in the group are controlled by one of the persons in the group.

Holding limit, future vintage emission allowances

22. (1) The sum of the future vintage emission allowances held in a person's cap and trade accounts at any time in a year, or in the cap and trade accounts of related persons at any time in a year, shall not exceed the limit set out by applying the following formula in respect of each future vintage year:

$$HL_j = 2,500,000 + 0.025 \times (C_j - 25,000,000)$$

Where,

HL_j = the limit on future vintage emission allowances with vintage year j that are held in the cap and trade accounts during a year,

C_j = the number of Ontario emission allowances created under section 34 for year j .

(2) Registered participants who are related persons shall allot the limits calculated under this section among themselves and each related person shall hold emission allowances or credits in an amount that is equal to or lower than their allotted portion of the limit.

(3) Subsections 21 (6) and (7) apply for the purposes of this section.

When holding limit exceeded

23. (1) The Minister may, at any time starting five days after the day a capped participant is in contravention of section 21 or 22, remove the number of emission allowances or credits that exceed the applicable limit from the participant's holding accounts.

(2) The Minister shall,

- (a) retire all credits removed under subsection (1); and
- (b) reserve all emission allowances removed under subsection (1) for the purposes of an auction.

[MOECC Note: Application of holding limits to clearing houses - Holding limits would not apply to clearing house accounts. Once the instruments are sold and transferred into the buyers account, the allowances are counted against the holding limit of the buyer.]

Account agents, recognition by Director

24. (1) An individual may apply to the Director, in the manner approved by the Director, for recognition as an account agent if the person meets the following eligibility criteria:

- 1. The individual has not been convicted of a criminal offence in the five years before the individual submitted the application to the Director, unless a pardon, including a record suspension within the meaning of the *Criminal Records Act* (Canada), has been obtained.
- 2. The individual has not been found guilty of an offence under the Act.
- 3. The individual has not been found guilty of an offence under the *Commodity Futures Act* or the *Securities Act*.
- 4. The person does not have an identification number assigned for the purposes of dealing with emission allowances and credits.

(2) The application shall include the following:

- 1. The name, address and date of birth of the applicant.
- 2. Copies of two government-issued identity documents, one of which must have a photograph, the person's name and date of birth.
- 3. An attestation by a notary or lawyer, completed no earlier than three months before the application is submitted, verifying the identity of the applicant and certifying the authenticity of the identity documents.
- 4. The name and contact information of the applicant's employer, if any.

5. Confirmation from a financial institution located in Canada that the person has an account with the institution and that the person's identity was verified at the time when the account was opened.
6. A document signed by the applicant that includes the following:
 - i. A statement that, to the best of the applicant's knowledge, the applicant meets the criteria in subsection (1) and the information provided in the application is accurate.
 - ii. A statement that the applicant consents to the Ministry giving information relating to the person to authorities in designated jurisdictions when necessary for the purposes of this Regulation and the similar rules and regulations of designated jurisdictions.

(3) If the Director recognizes the applicant as an account agent, the Director shall assign an identification number to the applicant.

(4) It is a condition of recognition as an account agent that the individual provide the Director with updated information within 30 days of any change in respect of the individual's satisfaction of the eligibility criteria under subsection (1).

(5) It is a condition of recognition as an account agent that the individual provide the Director with updated information regarding the eligibility criteria under subsection (1) if the Director so requests, within the time specified by the Director.

(6) The Director may cancel an individual's recognition as an account agent by providing the individual with written notice of the cancellation if the Director is satisfied that the individual has been convicted of a criminal offence or if the individual no longer satisfies the criteria set out in paragraphs 2 and 3 of subsection (1), or fails to provide information required under subsection (5).

Account agents, who may be designated

25. (1) A registered participant may only designate one of the following as an account agent:

1. An individual who has been recognized as an account agent under section 24.
2. A person authorized to act as an account agent by a designated jurisdiction.

(2) Only an individual who resides in Ontario may be designated as the primary account representative.

Authority of account agents

26. (1) A designated primary account representative or a designated alternate account representative of a registered participant is authorized to act on behalf of the participant to perform any actions that the participant is required or permitted to do under the Act.

(2) An individual who is designated as an account viewing agent by a registered participant is authorized to observe the participant's cap and trade accounts on behalf of the participant.

(3) If a designated primary or alternate account representative submits a notice or confirmation under this Regulation, the individual must include a statement that he or she is authorized to submit the notice or confirmation on behalf of the registered participant who made the designation and that the information set out in the notice or confirmation is true, accurate and complete to the best of his or her knowledge.

Designations, requirements and restrictions

27. (1) Each registered participant shall designate,

- (a) one individual as a primary account representative;
- (b) subject to subsection (2), at least one and no more than four individuals as alternate account representatives, none of whom may also be designated as the primary account representative.

(2) A registered participant who is an individual is not required to designate an alternate account representative.

(3) Each registered participant may designate up to five individuals as account viewing agents.

(4) The designation shall include the following information in respect of each individual being designated:

1. The individual's name and the identification number assigned by the Director.
2. A statement signed by the chief officer or chief financial officer or a resolution of the board of directors of the registered participant, attesting that the individual has been designated to act on behalf of the registered participant as either an account representative or an account viewing agent, as the case may be.
3. An attestation from a notary or lawyer stating the relationship between the individual and the registered participant.

4. A statement signed by the individual attesting that the individual has been designated to act on behalf of the registered participant for the purposes of this Regulation and that the individual undertakes to comply with this Regulation.
5. If the individual is designated by any other person as an account representative or as an account viewing agent for the purposes of this Regulation or as a person authorized to perform similar functions under the regulations of a designated jurisdiction, a statement signed by the individual, providing the name and contact information of any such person.

Termination of designation

28. The designation of an individual as an account representative for a registered participant terminates when,

- (a) the Director receives a written request from the registered participant for termination of the designation;
- (b) all of the registered participant's accounts are closed; or
- (c) the Director cancels the recognition of the individual under subsection 24 (6).

Suspension of authority re accounts

29. (1) The Director may suspend a participant's or a designated account representative's authority to deal with emission allowances and credits held in a participant's cap and trade accounts by providing the individual with written notice of the suspension if the Director has reason to believe that the participant or account representative has contravened this Regulation or section 27 or 28 of the Act.

(2) If the Director is satisfied that the participant or designated account representative, as the case may be, is no longer contravening this Regulation or section 27 or 28 of the Act, the Director shall reinstate the authority.

Minister to transfer upon receiving transfer request

30. (1) Upon receiving a request to transfer emission allowances or credits under this Regulation, the Minister shall transfer the allowances or credits that are identified in the request in accordance with the request, unless the Minister is of the view that,

- (a) the transfer would result in non-compliance with the Act or the regulations;
- (b) the Minister has reasonable grounds to believe that an offence has been committed under the Act in relation to the transfer request; or
- (c) the transfer request contains errors, omissions or is otherwise incomplete.

(2) If the Minister refuses to transfer emission allowances or credits under subsection (1), the Minister shall provide notice of the reason for the refusal to all of the designated account representatives who have taken steps under this Regulation with respect to the transfer request.

(3) If the Minister refuses to transfer emission allowances or credits under clause (1) (c), the notice shall identify the errors or omissions or shall include a description of how the transfer request is otherwise incomplete.

When Minister may transfer between registered participants

31. (1) A registered participant may submit a request to the Minister to transfer emission allowances or credits from the participant's holding account to another registered participant's holding account by taking the following steps:

1. A designated account representative of the registered participant who wishes to transfer the emission allowances or credits must submit a notice of the intent to transfer emission allowances or credits to all other designated account representatives of the participant, setting out,
 - i. the number of emission allowances and credits,
 - ii. a description of the emission allowances and credits, and
 - iii. except if the proposed transfer is between related persons, details with respect to the price to be paid for each emission allowance and credit.
 - iv. *[MOECC Note: the type of transaction agreement, the date of the agreement, the expected termination date of the agreement, the contact information of other parties involved in the transaction, and all other transactions or products covered by the agreement. The types of contacts that can be specified include one of the following:*
 - *over-the-counter agreements that involve a transfer to be completed within three days of the date of the agreement*
 - *over-the-counter agreements that involve a transfer to be completed in more than three days from the date of the agreement or involve multiple transfers or includes the sale of other products*
 - *exchange agreements]*
2. A second designated account representative of the participant must, no later than two days following the submission of the notice of intent under paragraph 1, confirm the participant's intent to transfer the emission allowances and credits mentioned in the notice to all other designated account representatives of the participant and to all designated account representatives of the registered participant to whom the emission allowances and credits would be transferred.

3. A designated account representative of the registered participant to whom the emission allowances and credits would be transferred must submit a confirmation that the participant to whom the emission allowances and credits would be transferred intends to accept the transfer.

(2) Subject to subsection 30 (1), the Minister shall ensure that upon receipt of a confirmation of acceptance of the transfer under paragraph 3 of subsection (1), the emission allowances and credits specified in the confirmation of acceptance are transferred.

(3) The steps described in paragraphs 1 and 2 of subsection (1) may both be taken by the same individual if the participant has only one designated account representative.

(4) If the Minister asks a designated account representative of a participant for information relating to the transfer of emission allowances or credits under this section, the account representative shall give the information to the Minister as soon as possible.

[MOECC Note: Transfers involving clearing houses

- *Allowances and credits may only be transferred into the clearing house account by a registered participant (i.e., potential seller) for the purpose of transferring control of them to the clearing house, and may only be transferred out of the account to the registered participant receiving the allowances (i.e., buyer) pursuant to the transaction being cleared.*
- *Clearing houses would only be able to hold allowances and credits for a maximum of five days before they must be transferred to a buyer or returned to the seller.*
- *Requests to transfer compliance instruments to or from a clearing house account would not require confirmation from an account representative of the destination holding account.]*

Voluntary removal of emission allowances or credits from holding account

32. (1) A registered participant may submit a request to the Minister for the removal of emission allowances or credits from the participant's holding account by taking the following steps:

1. A designated account representative of the participant who wishes to have the emission allowances or credits removed must submit a notice of the participant's intent to remove emission allowances and credits to all other designated account representatives of the participant, setting out the number of emission allowances and credits and a description of the emission allowances and credits that are intended to be removed.
2. A second designated account representative of the participant must, no later than two days following the submission of the notice of intent under paragraph 1, confirm the participant's intent to remove the emission allowances and credits mentioned in the notice to all other designated account representatives of the participant.

(2) Upon receiving a confirmation under paragraph 2 of subsection (1), the Minister shall remove the emission allowances or credits specified in the confirmation from the holding account and retire them.

(3) The steps described in paragraphs 1 and 2 of subsection (1) may both be taken by the same individual if the participant has only one designated account representative.

(4) If the Minister asks a designated account representative of a participant for information relating to the transfer of emission allowances or credits under this section, the account representative shall give the information to the Minister as soon as possible.

Emission allowances in closed accounts

33. If a capped participant's cap and trade accounts are closed under section 25 of the Act and any Ontario emission allowances or Ontario credits remain in the accounts, the Minister shall take the following steps:

1. The Minister shall reserve the Ontario emission allowances for auctions.
2. The Minister shall retire the Ontario early reduction credits. *[MOECC Note: See Appendix for further information on early reduction credits.]*

[MOECC Note: Pending rules on the creation of Ontario offset credits, Ontario offset credits remaining in closed account would either be retired or reserved to replace credits that were discovered to be invalid or were reversed (e.g., trees destroyed by forest fire).]

[MOECC Note: Posting of transactions - The minister, at least once per year, shall post a list of registrants and a summary of transactions.]

CREATION OF ONTARIO EMISSION ALLOWANCES

Number of Ontario emission allowances to be created

34. For each year set out in Column 1 of the following Table, the Minister shall create the number of Ontario emission allowances set out opposite the year in Column 2 of the Table:

Column 1	Column 2
Year	Number of Allowances
2017	142,332,000
2018	136,440,000
2019	130,556,000
2020	124,668,000

[MOECC Note: The Minister will establish the accounts needed to administer the program including accounts for creating allowances, distributing allowances free of charge, distributing allowances by auction, reserving allowances for direct sale, retiring allowances,

cancelling allowances, invalidating offset credits, and pending rules on the creation of offset credits, for reserving credits to replace invalid or reversed offset credits.]

Minister to reserve emission allowances for sale, etc.

35. (1) Each time the Minister creates Ontario emission allowances, the Minister shall reserve five per cent of all Ontario emission allowances created for the purposes of sales under section 37.

(2) The Minister shall classify the Ontario emission allowances reserved under subsection (1) into three categories with the labels of Category A, B and C, with each category consisting of, to the extent possible, an equal number of emission allowances.

[MOECC Note: - Emission allowances will be distributed free of charge annually for each vintage year when the vintage year equals the calendar year- See Appendix for further information on the distribution of allowances free of charge]

[MOECC Note – Emission allowances auctioned –Emission allowances remaining following determination of the total amount to be distributed for free, will be reserved for quarterly auctions for that year. Additionally, ten per cent of Ontario emission allowances created with a vintage three years later than the current auction year would also be reserved for annual quarterly auctions.]

(3) The Minister shall classify each Ontario emission allowance reserved for the purposes of distribution free of charge or for the purpose of auctions as an emission allowance with a vintage year.

(4) After an order is issued under paragraph 1 of subsection 14 (8) of the Act, the Minister shall deduct from the Ontario emission allowances reserved by the Minister for the next auction a number of Ontario emission allowances equal to 25 per cent of the amount of the outstanding obligations at the time of the determination under section 13 of this Regulation.

(5) The Minister shall retire the Ontario emission allowances deducted under subsection (4).

DISTRIBUTION OF ONTARIO EMISSION ALLOWANCES BY AUCTION AND SALE

Distribution by auction

36. (1) Each year starting in 2017, the Minister shall auction Ontario emission allowances on four separate occasions, each consisting of a single round of bidding.

(2) The Minister may only auction the following emission allowances:

1. Such Ontario emission allowances as have been reserved by the Minister for the purpose of auctions.

2. Any Ontario emission allowances that have been submitted to the Minister under paragraph 2 of subsection 14 (7) of the Act.

(3) If, at the end of an auction, any of the Ontario emission allowances that were auctioned remain unsold, the Minister shall reserve them for the purposes of a subsequent auction under subsection (1) and may auction them subsequently, subject to the following rules:

1. An unsold Auction Class 1 emission allowance may be auctioned subsequently only if, following the most recent auction in which the allowance remained unsold, the lowest bid price accepted by the Minister for Auction Class 1 emission allowances was higher than the minimum price at two or more consecutive auctions held by the Minister.
2. An unsold Auction Class 2 emission allowance may be auctioned subsequently in a year that is no earlier than the vintage year of the unsold emission allowance.
3. The maximum number of unsold emission allowances that may be auctioned on a single occasion is the number that is equal to 25 per cent of the emission allowances that are being auctioned on the occasion that,
 - i. have not previously been auctioned, and
 - ii. have been classified as having a vintage year that is the auction year.

Distribution by sale

37. (1) Each year starting in 2017, in addition to holding auctions, the Minister shall offer Ontario emission allowances for sale to capped participants on four separate occasions.

(2) The Minister shall only offer for sale such Ontario emission allowances as have been reserved for sales under this section.

(3) If any of the emission allowances that were offered for sale under subsection (1) remain unsold after the Minister has offered them for sale, the Minister shall reserve them for the purposes of a subsequent sale under this section.

Minister's notice of auction or sale

38. At least 60 days before an auction or a sale, the Minister shall provide notice of the auction or sale to the public in such manner as the Minister considers appropriate, setting out the following information:

1. The date on which and time period during which bidding in the auction or sale may take place.
2. The location or internet address at which the auction or sale will be held.

3. A summary of the requirements of this Regulation relating to the auction or sale.
4. A summary of the auction or sale process.
5. In the case of an auction,
 - i. the vintage years of the Ontario emission allowances being offered for sale at the auction and the number of emission allowances with each vintage year being offered, and
 - ii. the minimum price of the Ontario emission allowances.
6. In the case of a sale,
 - i. the categories of the Ontario emission allowances being offered for sale and the number of emission allowances of each category being offered, and
 - ii. the price of the emission allowances in each category.

Financial assurance

39. (1) Financial assurance required to be given by a registered participant under this Regulation for the purposes of bidding in an auction or a sale must meet the following criteria:

1. It must be in Canadian dollars.
 2. It must be valid for at least 26 days following the date of the auction or sale.
 3. It must be provided in the form of a transfer, irrevocable letter of credit or letter of guarantee issued by,
 - i. a bank within the meaning of the *Bank Act* (Canada), or
 - ii. a financial services cooperative that is authorized by a statute of Canada or Ontario to carry on business in Canada or Ontario.
 4. It must be deposited with and payable to the Minister.
 5. It must be for an amount that is greater than or equal to the participant's proposed maximum bid value, as determined under subsection (2) or (3).
- (2) The participant's proposed maximum bid value for an auction is determined as follows:

1. For each bid price proposed by the participant, multiply the bid price by the number of emission allowances that the participant proposes to purchase at that bid price or at a higher bid price.
 2. The highest value calculated under paragraph 1 is the proposed maximum bid value.
- (3) The participant's proposed maximum bid value for a sale is determined as follows:
1. For each bid price proposed by the participant, multiply the bid price by the number of emission allowances that the participant proposes to purchase at that bid price.
 2. Determine the sum of the results calculated under paragraph 1.

Bids

40. (1) A registered participant must include the following in a bid submitted in an auction or a sale:

1. The bid price, in dollars and whole cents.
 2. The quantity of lots that the participant wishes to purchase.
- (2) Each bid must be sealed and submitted in the form approved by the Minister.
- (3) A participant may submit more than one bid in an auction or sale.

Payment for purchases

41. (1) A registered participant who has been notified by the Minister that one or more bids by the participant have been successful in an auction or a sale shall pay to the Minister the amount of the successful bids within seven days after receiving the notice.

(2) If an amount payable under subsection (1) is not paid within the period specified in subsection (1), the Minister may use the person's financial assurance provided under section 39 to secure the payment.

(3) The Minister shall transfer the Ontario emission allowances paid for under subsection (1) or (2) to the participant's,

- (a) holding account, in the case of an auction purchase, subject to subsection (5); or
- (b) compliance account, in the case of a sale.

(4) The Minister shall return any unused portions of financial assurance provided under section 39.

(5) Despite clause (3) (a), the Minister may transfer Ontario emission allowances purchased at an auction to a participant's compliance account in [*MOECC Note: if there is room remaining in respect to the compliance exemption related to the holding limit.*].

Summary of auction, sale

42. (1) The Minister shall make available to the public, in a manner that the Minister considers appropriate, a written summary of each auction or sale, setting out the following information:

1. In the case of an auction,
 - i. the lowest bid price accepted for Auction Class 1 emission allowances, and
 - ii. the lowest bid price accepted for Auction Class 2 emission allowances.
2. The registered participants who submitted bids in the auction or sale.
3. Details regarding the number of emission allowances sold, the number of each vintage year or category of emission allowances sold, and a description of how the emission allowances were distributed among the participants who submitted bids, without identifying which participants purchased the emission allowances.

(2) The summary shall be made available within 45 days following the conclusion of the auction or sale.

BIDDING IN AUCTIONS

Permission to bid in auctions

43. (1) A registered participant may apply to the Minister for permission to bid in auctions by submitting the following information to the Minister:

1. The name, contact information and holding account number of the participant.
2. The names and identification numbers of all designated account representatives of the participant.
3. If the participant is an individual, the individual's social insurance number.
4. The form of financial assurance to be given.
5. The percentage of the holding limit allotted to the participant in accordance with section 21 or 22, if applicable.

6. The percentage of the purchase limit allotted to the participant in accordance with section 48, if applicable.

(2) Subject to subsection (3), upon receiving an application from a participant that meets the requirements set out in subsection (1), the Minister shall permit the participant to bid in auctions.

(3) The Minister shall refuse permission to bid in auctions if any of the following circumstances apply:

1. The participant has given false or misleading information in the application.
2. The participant has failed to disclose information required under subsection (1).
3. The participant's registration or cap and trade accounts are subject to conditions under this Regulation or imposed by the Director that prohibit participation in auctions or otherwise prevent emission allowances or credits from being transferred to the participant's holding account.

Expiry of permission if material change

44. If there is a material change in the information submitted to the Minister under subsection 43 (1), the permission expires and the participant must reapply under section 43 for permission to bid in auctions.

Suspension, revocation of permission

45. (1) The Minister may suspend permission to bid in auctions if the circumstances described in paragraph 3 of subsection 43 (3) apply.

(2) If permission has been suspended, the Minister may reinstate the permission once the circumstances described in paragraph 3 of subsection 43 (3) no longer apply.

(3) The Minister may revoke permission to bid in auctions if the Minister becomes aware that the participant has given false or misleading information in the application for permission, or if the participant has failed to comply with section 46 or 47 of this Regulation or section 28 of the Act or failed to disclose information required by this Regulation.

(4) If the Minister receives notice from a participant who has been permitted to bid in auctions that the participant no longer wishes to bid in auctions, the Minister shall revoke the permission.

Duty to update information

46. A participant who has permission to bid in auctions under section 43 shall, if any of the information submitted as part of the application changes, provide updated information to the Minister at least 40 days before an auction in which the participant wishes to bid.

Criteria to be met before each auction

47. (1) Subject to subsection (2), only a participant who meets the following criteria may bid in an auction held by the Minister:

1. The participant has permission under section 43 to bid in auctions held by the Minister.
2. The participant has given the Minister notice of the participant's intention to bid in the auction at least 40 days before the auction.
3. The participant has given financial assurance to the Minister at least 12 days before the auction.

(2) If any of the information submitted under paragraph 5 or 6 of subsection 43 (1) as part of the participant's most recent application for permission to bid in auctions changes during the period beginning 39 days before the auction and ending on the day of the auction, the person is not permitted to bid in the auction.

Purchase limits

48. (1) A capped participant or a group of capped participants who are related shall not purchase more than 25 per cent of the Ontario emission allowances available at an auction.

(2) Capped participants who are related shall allocate the purchase limit set out in subsection (1) among themselves.

(3) A capped participant who is a related person shall not purchase more than the share of the purchase limit allocated to the participant in accordance with subsection (2).

(4) A market participant or a group of related market participants shall not purchase more than four per cent of the Ontario emission allowances available at an auction.

(5) Market participants who are related shall allocate the purchase limit set out in subsection (4) among themselves.

(6) A market participant who is a related person shall not purchase more than the share of the purchase limit allocated to the participant in accordance with subsection (5).

(7) If a group of related persons includes at least one capped participant and one market participant, the total purchased by the group at an auction shall not exceed 25 per cent of the Ontario emission allowances available at the auction.

(8) Participants who are related persons shall allocate the purchase limit set out in subsection (7) among themselves and no more than four per cent of the Ontario emission

allowances available at the auction may be allocated to the related persons who are market participants.

(9) Subsections 21 (6) and (7) apply for the purposes of this section.

ADMINISTRATION OF AUCTION

Lots

49. The Minister shall divide Ontario emission allowances that are to be auctioned into lots in accordance with the following rules:

1. Each lot, other than the final lot, shall consist of 1,000 Ontario emission allowances.
2. The final lot may consist of fewer than 1,000 Ontario emission allowances if fewer than 1,000 Ontario emission allowances remain once all other emission allowances have been divided into lots of 1,000.
3. Each lot may consist of only one of the following combinations of Ontario emission allowances:
 - i. Auction Class 1 emission allowances.
 - ii. Auction Class 2 emission allowances, all of which must have been classified as having the same vintage year.

Minimum price

50. (1) The minimum price of an emission allowance in auction year 2017 is determined by applying the following formula:

$$MP_{2017} = 12.82 \times (1 + 0.05 + Ir)$$

Where,

MP_{2017} = the minimum price for an emission allowance in auction year 2017,

Ir = the average Consumer Price Index for Ontario for the 12-month period ending on September 30, 2016, as published by Statistics Canada under the *Statistics Act* (Canada).

(2) The minimum price of an emission allowance in an auction year after 2017 is determined by applying the following formula:

$$MP_y = MP_{(y-1)} \times (1 + 0.05 + Ir)$$

Where,

MP_y = the minimum price for an emission allowance in auction year y ,

$MP_{(y-1)}$ = the minimum price for an emission allowance in the auction year immediately preceding year y ;

I_r = the average Consumer Price Index for Ontario for the 12-month period ending on September 30th of the year immediately preceding year y , as published by Statistics Canada under the *Statistics Act* (Canada).

Bids in excess of holding limit, purchase limit

51. (1) After the period of time for bidding has concluded, the Minister shall, in the circumstances described in subsection (2), reject bids or portions of bids of a participant starting with the participant's lowest bid price and continuing in increasing order by bid price.

(2) The Minister shall reject bids or portions of bids under subsection (1) if acceptance of all of the participant's bids would result in contravention of a limit under section 21, 22 or 48.

(3) The Minister shall reject bids or portions of bids under subsection (1) until the total of the participant's bids remaining would, if accepted, not result in contravention of a limit under section 21, 22 or 48.

Determination of actual maximum bid value

52. (1) Before accepting any bids, the Minister shall determine whether each participant's actual maximum bid value, as determined under subsection (2), is greater than or equal to the participant's financial assurance.

(2) The participant's actual maximum bid value is determined as follows:

1. For each bid price included in the participant's bids, multiply the bid price by the number of emission allowances that the participant proposed to purchase at that bid price or at a higher bid price.
2. The highest value calculated under paragraph 1 is the actual maximum bid value.

Maximum bid value in excess of financial assurance

53. (1) If the actual maximum bid value of a participant's bids exceeds the value of the participant's financial assurance, the Minister shall remove from the participant's bids enough lots such that the remaining bids would not result in the actual maximum bid value exceeding the value of the financial assurance.

(2) The Minister shall remove lots under subsection (1) starting with the lowest bid price and continuing in increasing order by bid price.

(3) If the Minister has removed lots under subsection (1), the Minister shall determine at which bid price mentioned in subsection (4), if any, the removed lots could be bid upon without causing the actual maximum bid value to exceed the value of the participant's financial assurance.

(4) For the purposes of subsection (3), the bid price must be a bid price that has been included in another participant's bid in the auction and, if there is more than one bid price available to the Minister, the Minister shall use the highest bid price for the purposes of subsection (3).

(5) The Minister shall consider bids at bid prices determined by the Minister under subsection (3) for lots that have been removed under subsection (1) as if they were new bids submitted at the bid price determined under subsection (3).

(6) If the Minister is unable to determine a new bid price for removed lots under subsection (3), the Minister shall reject the removed lots.

Acceptance of bids

54. (1) In this section,

“lowest bid price (Auction Class 1)” means the lowest bid price accepted by the Minister for Auction Class 1 emission allowances;

“lowest bid price (Auction Class 2)” means the lowest bid price accepted by the Minister for Auction Class 2 emission allowances.

(2) The Minister shall accept bids that have not been rejected under section 51 or 53, starting with the highest bid price and continuing in decreasing order by bid price until no more bids remain or no more emission allowances are available.

(3) No bid price that is below the minimum price shall be accepted.

(4) Subsection (5) applies if more than one bid has been submitted,

(a) at the lowest bid price (Auction Class 1) for Auction Class 1 emission allowances; or

(b) at the lowest bid price (Auction Class 2) for Auction Class 2 emission allowances.

(5) If the total quantity of emission allowances bid upon at a bid price mentioned in clause (4) (a) or (b) is greater than the quantity of emission allowances available at that bid price, the Minister shall divide the remaining emission allowances available at that bid price between the participants who submitted the bids at that bid price, in accordance with the following steps:

1. Divide the quantity of emission allowances bid upon by each participant at that bid price by the total quantity of emission allowances that were bid upon at that bid price. This is the participant's share of the emission allowances.
2. Multiply each participant's share determined under paragraph 1 by the quantity of emission allowances remaining, rounding down to the nearest whole number. This is the number of emission allowances to be distributed to the participant.
3. If any emission allowances remain after carrying out the steps under paragraphs 1 and 2, distribute the remaining emission allowances as follows:
 - i. Assign a random number to each participant who submitted a bid at the applicable lowest bid price.
 - ii. Distribute one emission allowance at a time to the participants in ascending order by the random number assigned, until no more of the emission allowances available at that bid price remain.

(6) The Minister shall sell each emission allowance in respect of which a bid has been accepted at the lowest bid price (Auction Class 1) or at the lowest bid price (Auction Class 2), as the case may be.

BIDDING IN SALES

Permission to bid in sales

55. (1) A capped participant may apply to the Minister for permission to bid on emission allowances offered for sale under section 37 by submitting the following information to the Minister:

1. The information set out in paragraphs 1 to 4 of subsection 43 (1).
2. The participant's compliance account number.
3. The percentage of the holding limit allotted to the participant in accordance with section 21, if applicable.

(2) Subject to subsection (3), upon receiving an application from a capped participant that meets the requirements set out in subsection (1), the Minister shall permit the capped participant to bid in sales.

(3) The Minister shall refuse to give permission to bid in sales if any of the following circumstances apply:

1. The person has given false or misleading information in the application.

2. The participant has failed to disclose information required under subsection (1).
3. The person's registration or account is subject to conditions imposed by the Director that prohibit the person's participation in sales or otherwise prevent emission allowances or credits from being transferred to the person's compliance account.

Suspension, revocation of permission

56. (1) The Minister may suspend permission to bid in sales if the circumstances described in paragraph 3 of subsection 55 (3) apply.

(2) If a permission has been suspended, the Minister may reinstate the permission once the circumstances described in paragraph 3 of subsection 55 (3) no longer apply.

(3) The Minister may revoke permission to bid in sales if the Minister becomes aware that the participant has given false or misleading information in the application for permission or if the participant has failed to comply with section 46 or 57 of this Regulation or section 28 of the Act or failed to disclose information required by this Regulation.

(4) If the Minister receives notice from a participant who has been authorized to bid in sales that the participant no longer wishes to bid in sales, the Minister shall revoke the permission.

Criteria to be met before each sale

57. (1) Subject to subsection (3), only a capped participant who meets the following criteria may bid in a sale held by the Minister:

1. The person has been a capped participant for at least 40 days before the sale.
2. The person has permission under section 55 to bid in sales held by the Minister.
3. The person has given the Minister notice of the person's intention to bid in the sale at least 40 days before the sale.
4. The participant has given financial assurance to the Minister at least 12 days before the sale.
5. On the day of the sale, the participant does not hold any emission allowances in the participant's holding account that can be submitted for the current compliance period.

(2) For the purposes of paragraph 3 of subsection (1), the notice shall be in the form approved by the Minister and shall include any updates to the information given as part of the application under section 55.

(3) If the information submitted under paragraph 3 of subsection 55 (1) as part of a participant's application for permission to bid in sales changes during the period beginning 39 days before the sale and ending on the day of the sale, the person is not permitted to bid in the sale.

ADMINISTRATION OF SALE

Lots

58. The Minister shall divide Ontario emission allowances that are to be offered for sale under section 37 into lots in accordance with the following rules:

1. Each lot, other than the final lot, shall consist of 1,000 Ontario emission allowances of the same category.
2. The final lot may consist of fewer than 1,000 Ontario emission allowances if fewer than 1,000 Ontario emission allowances remain once all other allowances have been divided into lots of 1,000.

Price

59. (1) The price of an Ontario emission allowance classified as Category A in 2017 is determined by applying the following formula:

$$P_{2017} = A \times (1 + 0.05 + Ir)$$

Where,

P_{2017} = the price for a Category A allowance in 2017,

A = *[MOECC Note: Sale price posted by Quebec for a reserve emission unit in Category A in 2016; this will be a dollar value],*

Ir = the average Consumer Price Index for Ontario for the 12-month period ending on September 30, 2016, as published by Statistics Canada under the *Statistics Act* (Canada).

(2) The price of an Ontario emission allowance classified as Category B in 2017 is determined by applying the following formula:

$$P_{2017} = B \times (1 + 0.05 + Ir)$$

Where,

P_{2017} = the price for a Category B allowance in 2017,

B = [MOECC Note: Sale price posted by Quebec for a reserve emission unit in Category B in 2016; this will be a dollar value],

I_r = the average Consumer Price Index for Ontario for the 12-month period ending on September 30, 2016, as published by Statistics Canada under the *Statistics Act* (Canada).

(3) The price of an Ontario emission allowance classified as Category C in 2017 is determined by applying the following formula:

$$P_{2017} = C \times (1 + 0.05 + I_r)$$

Where,

P_{2017} = the price for a Category C allowance in 2017,

C = [MOECC Note: Sale price posted by Quebec for a reserve emission unit in Category C in 2016; this will be a dollar value],

I_r = the average Consumer Price Index for Ontario for the 12-month period ending on September 30, 2016, as published by Statistics Canada under the *Statistics Act* (Canada).

(4) The price of an Ontario emission allowance classified as Category A, B or C in each year after 2017 is determined by applying the following formula:

$$P_y = P_{(y-1)} \times (1 + 0.05 + I_r)$$

Where,

P_y = the price for an emission allowance of the relevant category in year y ,

$P_{(y-1)}$ = the price for an emission allowance of the relevant category in the year immediately preceding year y ,

I_r = the average Consumer Price Index for Ontario for the 12-month period ending on September 30th of the year immediately preceding year y , as published by Statistics Canada under the *Statistics Act* (Canada).

Bids in excess of holding limit

60. (1) After the period of time for bidding has concluded, the Minister shall, in the circumstances described in subsection (2), reject bids or portions of bids of a participant, starting with the participant's lowest bid price and continuing in increasing order by bid price.

(2) The Minister shall reject bids or portions of bids under subsection (1) if acceptance of all of the participant's bids would result in contravention of a limit under section 21.

(3) The Minister shall reject bids or portions of bids under subsection (1) until the total of the participant's bids remaining would, if accepted, not result in contravention of the limit under section 21.

Determination of actual maximum bid value

61. (1) Before accepting any bids, the Minister shall determine whether each participant's actual maximum bid value, as determined under subsection (2), is greater than or equal to the participant's financial assurance.

(2) The participant's actual maximum bid value is determined as follows:

1. For each bid price included in the participant's bids, multiply the bid price by the number of emission allowances that the participant proposes to purchase at that bid price or at a higher bid price.
2. The highest value calculated under paragraph 1 is the actual maximum bid value.

Maximum bid value in excess of financial assurance

62. If the actual maximum bid value of a participant's bids exceeds the value of the participant's financial assurance, the Minister shall remove from the participant's bids enough lots such that the remaining bids would not result in the actual maximum bid value exceeding the value of the financial assurance.

Acceptance of bids

63. (1) The Minister shall accept bids that have not been rejected under section 60 for each category in accordance with this section, dealing with each category of emission allowances in the following order: Category A, Category B, Category C.

(2) If the total quantity of emission allowances bid upon in a category is equal to or less than the quantity of emission allowances of that category available, then the Minister shall distribute the emission allowances of that category in accordance with the bids.

(3) If the total quantity of emission allowances bid upon in a category is in excess of the quantity of emission allowances of that category available, then the Minister shall distribute the emission allowances of that category in accordance with the following steps:

1. Divide the quantity of emission allowances of the category bid upon by each participant by the total quantity of emission allowances of that category available. This is the participant's share of the emission allowances of that category.

2. Multiply each participant's share determined under paragraph 1 by the quantity of emission allowances of the category available, rounding down to the nearest whole number. This is the number of emission allowances to be distributed to the participant.
3. If any emission allowances remain after carrying out the steps under paragraph 1 and 2, distribute the remaining emission allowances as follows:
 - i. Assign a random number to each participant who submitted a bid for emission allowances of the category.
 - ii. Distribute one emission allowance at a time to the participants in ascending order by the random number assigned, until no more emission allowances of the category remain.

MISCELLANEOUS

Retention of records

64. A registered participant shall keep all records created by the participant relating to the following matters in a paper or electronic format for a period of at least seven years after the records were created.

1. Transactions in the cap and trade program.
2. Ontario early reduction credits. *[MOECC Note: See Appendix for further information on early reduction credits]*
3. Offset initiatives and offset credits.
4. Designation of account agents.

Forms

65. (1) In this Regulation, if a record is required to be given or submitted, other than a record required to be given or submitted by the Director, the record shall be submitted in a form provided by or approved by the Director and in a manner approved by the Director.

(2) The Director may require that a record that is given to the Director under this Regulation be given in an electronic format specified by the Director.

Appendix to the Draft Cap and Trade Regulation

Notes: Certain capped participants will be eligible to apply for emission allowances that may be used to meet their compliance obligations.

It is proposed that the number of allowances that an eligible capped participant receives free of charge in the first compliance period (i.e., 2017-2020) will be based on the approach in this document. In the first compliance period, many of the allowances required by large emitters in Ontario will be distributed free of charge. This is a temporary measure, meant to reflect both the need for Ontario facilities to transition to an environment where emitting GHGs carries a cost they must bear, and also to protect against carbon leakage (i.e., the movement of production to jurisdictions that have not implemented carbon policies). In future compliance periods, it is envisioned that fewer allowances would be distributed free of charge as Ontario facilities make the adjustment to carbon pricing.

This Appendix contains policy proposals on two key elements of Ontario's proposed cap and trade program: allocations and early reduction credits. Complementary changes that are being proposed to the reporting regulation and incorporated guideline to support the proposed implementation of the cap and trade program are also included. The information in this Appendix should be read in conjunction with the draft cap and trade regulation which has been posted to the Environment Registry. Following the 45-day consultation period, comments received will be considered and the content of this document, including the grey shaded boxes in the draft regulation, is proposed to be revised accordingly and integrated into a final cap and trade regulation.

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A.1 Eligibility for Free Allocation

Certain capped participants that have to report and verify their emissions under O. Reg. 452/09 Greenhouse Gas Emissions Reporting may apply to receive allowances free of charge for emissions due to activities listed in Table 2 of the Reporting Regulation. Please refer to the draft cap and trade regulation for more details about which facilities are expected to be mandatory participants under the cap and trade program.

Emissions from certain types of operations and activities will not be eligible to receive allowances free of charge including:

- A facility that meets the following criteria:
 - a) Electricity generation within the meaning of the Reporting Regulation is the primary activity engaged in at the facility;
 - b) No products are produced at the facility other than electricity, useful thermal energy or by-product gas; and
 - c) No electricity is generated at the facility from the incineration of waste.
- Energy use reported under general stationary combustion for the operation of equipment related to natural gas as described in Table 2 of O. Reg. 452/09.
- Petroleum product suppliers, natural gas distributors and electricity importers reporting under the other activities categories of O. Reg. 452/09.
- Activities associated with reporting only emissions listed in Section 7.3(2) para 1 of O. Reg. 452/09. (e.g., coal storage).
- Activities associated with the operation of equipment for a transmission system or a distribution system (electricity) as described in Table 2 of O. Reg. 452/09.

New facilities (see Section A.2.8 for definition) do not have a compliance obligation in the first two years of operation and will not be eligible to apply for allowances for those two years.

A.2 How to Apply for Allowances

An eligible capped participant may submit an application to the Director for free emission allowances for a budget year. Budget year means the calendar year for which the Minister will create Ontario emission allowances under Section 34 of the draft cap and trade regulation.

Applicants will be required to indicate their facility information (e.g., GHG ID, company name, sector classification, location) and detailed production, process and emissions data needed to apply the calculations described in Section A.2.1 of this document.

The director may reject an application where the information provided is incomplete or false.

Applications would be due on or before September 1 of the year before the budget year (e.g. facilities submit application on September 1, 2016 for budget year 2017 allowances).

The Director will deposit allowances into the holding accounts of the successful applicants by January 15 of the budget year for the first compliance period (e.g., allowances for budget year 2017 will be deposited into facilities' holding accounts by January 15, 2017).

In 2021 only (i.e., the compliance year for the first compliance period), allowances for the 2022 budget year will be deposited by October 24 of 2021 into the holding account of the applicant. For the years after 2021, allowances will be deposited by January 15 of the budget year. (e.g., allowances for budget year 2023 will be deposited into facilities' holding accounts by January 15, 2023).

Director may consider four types of allocation methods for facilities eligible for free emission allowance allocation. The eligible capped emitter must provide all the information needed to the Director to allow for the evaluation and determination of which type of allocation method or methods will be applicable for each facility.

(A) Product output benchmark allocation

Emission allowances will be allocated on the basis of this method to a capped participant that owns or operates a facility which produces a product that has a product output benchmark listed in Table 1.

(B) Energy use-based allocation

Emission allowances will be allocated on the basis of energy used at the facility. Facilities that use energy in certain processes, operations or activities are not eligible to apply for this type of allocation. The complete list and details of exclusions are provided in the section on energy use based allocation (Section A.2.4.2).

(C) History-based allocation

Under this approach, allowance allocations will be based on historical emissions or historical emissions intensity of the facility. Owners or operators of the facilities receiving free allowances under this approach will not be able to apply for an allocation

for free emission allowances for those facilities under either the product output benchmark, the direct allocation or the energy use-based method for sources that have already been allocated allowances under the history based allocation.

(D) Direct allocation method

Sources in respect of which free emission allowances will be allocated under this approach are identified in Table 4. Allocations to these facilities will be based on emissions reported for the source under O. Reg. 452/09.

A.2.1 How will free allowances be allocated?

Allocations of emission allowances are based on the following general equations.

Capped participants applying for free emission allowances shall submit an application, in a form approved by the Director, which includes the information required to complete the following general equation.

$$A_t = B_t + B_{adj_t}$$

Where:

A_t = total number of allowances that a facility will receive for the budget year “t”

B_t = total number of allowances for a facility for budget year “t” without production adjustments

B_{adj_t} = total production adjustment allowances for a facility for the budget year “t”

Where:

$$B_t = AF_t \times [(B_{bpt} + B_{hpt} + B_{dpt}) \times C_{pt} + (B_{bct} + B_{hct} + B_{et}) \times C_{ct} + (B_{dct} \times C_{cdt}) + B_{biot}]$$

t = the budget year for the allowances, (e.g., allowances for the 2017 year)

AF_t = assistance factor for budget year “t”

AF_t is equal to 1 in the first compliance period (2017-2020).

Following are definitions of the terms included in the four allocation methods:

B_{bpt} = product output benchmark fixed process allocation value for budget year “t”

B_{bpt} is the base number of free emission allowances that may be allocated in respect of a facility's fixed process emissions for the budget year "t". This number will be determined based on a formula set out in Section A.2.2 of this document.

B_{hpt} = historical base fixed process allocation value for the budget year "t"

B_{hpt} is the base number of free emission allowances that may be allocated in respect of a facility's history based fixed process emissions for budget year "t". Allowances will be provided based on either historical fixed process emissions or historical fixed process emissions intensity of the facility. The list of facilities that may be eligible for allocations based on historical fixed process emissions and historical emissions intensity are listed in Table 3 and Table 2 respectively of this document.

B_{dpt} = Direct Allocation for fixed process emissions for the budget year "t"

B_{dpt} is the base number of free emission allowances that may be allocated in respect of a facility's fixed process emissions for the source for the budget year "t". Allocation will be based on the facility fixed process emissions for the budget year "t-2" reported for the source under O. Reg. 452/09. (See Table 4 for a list of sources and facilities that may be allocated free emission allowances under the approach).

C_{pt} = Cap Adjustment Factor for fixed process emissions for year t (see Table 5)

The cap adjustment factor will reduce the number of allowances available for free allocation each year. For fixed process emissions, the cap adjustment factor will be 1 in each year from 2017 to 2020 inclusive. The cap adjustment factor is set at 1 to recognize the limited options available to reduce fixed emissions in the short-term.

B_{bct} = product-output benchmark combustion allocation value for budget year "t"

B_{bct} is the base number of free emission allowances that may be allocated in respect of a facility's combustion emissions for the budget year "t". The base number of free emission allowances will be determined based on the calculations set out in Section A.2.3.

B_{hct} = historical base combustion allocation value for budget year “t”

B_{hct} is the base number of free emission allowances that may be allocated in respect of a facility’s historical combustion emissions or historical combustion emissions intensity. The list of facilities that may be eligible for allocations based on historical combustion emissions and historical combustion emissions intensity are listed in Table 3 and Table 2 respectively of this document.

C_{ct} = Cap Adjustment Factor for combustion emissions for budget year “t”

The Cap Adjustment Factor for combustion emissions will decline every year between 2017 and 2020 inclusive as listed in Table 5.

B_{dct} = Direct Allocation for combustion emissions

B_{dct} is the base number of free emission allowances for the budget year “t” that may be allocated in respect of a facility’s combustion emissions. Facilities will be allocated allowances based on their combustion emissions for the year “t-2” for the source reported under O. Reg. 452/09 (see Table 4 for a list of sources and facilities that may be allocated free emission allowances under the approach).

C_{cdt} = Cap Adjustment Factor for direct allocation for combustion emissions

The C_{cdt} values are listed in Table 4.

B_{et} = energy use allocation value for budget year “t”

B_{et} is the base number of free emission allowances for budget year “t” that may be allocated in respect of a facility’s energy use determined based on the calculations set out in Section A.2.4.

B_{biot} = biomass allocation for non-CO₂ emissions for budget year “t”

B_{biot} is the base number of free emission allowances for budget year “t” for non-CO₂ emissions from biomass use. Allocation will be based on facility’s methane and nitrous oxide emissions associated with the use of biomass during the budget year “t-2”. The base number of free emission allowances will be determined based the calculations set out in Section A.2.4.

$B_{adj,t}$ is the number of free emission allowances allocated to account for changes (e.g., in production for products listed in Table 1) not properly accounted for in prior allocations (see Section A.2.6 below). $B_{adj,t}$ could be a positive or a negative number.

A.2.2 How to determine product output benchmark fixed process allocation (B_{bpt})

B_{bpt} will be determined based on the following equation:

$$B_{bpt} = \sum_i^n [Product_{i,t-2} \times BM_{p,i}]$$

Where:

$Product_{i,t-2}$ is the amount of product i listed in Table 1 that is produced at a facility in the budget year “t-2”. Within some manufacturing categories there may be more than one type of product produced. For example, within the iron and steel manufacturing category there might be two different products from process A (e.g., iron) and process B (e.g., steel). Thus, the “product” in this equation could be tonnes of iron or tonnes of steel.

$BM_{p,i}$ is the fixed process benchmark for a product as listed in Table 1. Every “product” will have its own benchmark and is generally based on an average of fixed process emissions per tonne of product within that sector.

A.2.3 How to determine product-output benchmark combustion allocation (B_{bct})

B_{bct} will be determined based on the following equation:

$$B_{bct} = \sum_i^n [Product_{i,t-2} \times BM_{c,i}]$$

Where:

$Product_{i,t-2}$ is the amount of Product (i) listed in Table 1 that is produced in the year “t-2”.

$BM_{c,i}$ is the combustion benchmark in year “t” for that product as listed in Table 1. Every “product” will have its own benchmark and is generally based on an average of combustion emissions per tonne of product within the sector.

A.2.4 How to determine energy use allocation (B_{et}) and biomass allocation for non-CO₂ emissions (B_{biot})

B_{et} and B_{biot} are determined using the following equations:

$$B_{et} = [(EI_{non-cogen} + EI_{cogen_heat}) \times 0.049317 + (EI_{no_gas} \times EF_{fuel}) + (Heat_{imported} \times NBF \times 0.061646)]$$

$$B_{biot} = \sum_{i=1}^n (EI_{biomass_i} \times EF_{biomass_CH4_i} \times 21) + (EI_{biomass_i} \times EF_{biomass_N2O_i} \times 310)$$

Where:

B_{et} = base energy use allocation value in budget year “t”

EI_{non_cogen} = eligible non-biomass energy input in budget year “t-2” not related to operation of cogeneration system, expressed in GJ. (See Section A.2.4.2 for energy use applications which would not be eligible to receive energy use allocation.)

EI_{cogen_heat} = Energy input in budget year “t-2” used for generating useful thermal energy (e.g., steam) not used for producing electricity in the year (expressed in GJ) calculated pursuant to the equation in Section A.2.4.1.

0.049317 = Emission factor for natural gas (tonnes CO₂e/GJ) based on Ontario emission factor

EI_{no_gas} = Energy input in budget year “t-2” for facilities that do not receive natural gas through a pipeline (expressed in GJ)

EF_{fuel} = Fuel specific emission factors in budget year “t-2” for fuels used at facilities that do not receive natural gas through a pipeline (expressed as tonnes CO₂e per GJ) as set out in Tables 20-1a, 20-2, 20-3, 20-4, 20-5 and 20-6 in the O. Reg. 452/09 reporting Guideline

$Heat_{imported}$ = Thermal steam energy imported by the facility from a 3rd party in the year “t-2” (expressed in GJ)

NBF = Fraction of energy input from non-biomass fuel used in the cogeneration unit in the year t-2 unit (expressed in GJ/GJ)

0.061646 = Natural gas emission factor based on a boiler operating at 80% efficiency (0.049317/0.8) (allowances/GJ of useful thermal energy) where 0.049317 is the emissions factor for natural gas based on Ontario emissions factor

B_{biot} = biomass allocation for non CO₂ emissions for budget year “t”

EI_{biomass_i} = Total energy input from biomass used anywhere at the facility in year “t-2” (expressed in GJ)

$EF_{\text{biomass_CH}_4_i}$ = Fuel-specific emission factor for CH₄ for year “t-2”(tonnes per GJ) (set out in ON.20 in O. Reg. 452/09 Guideline)

$EF_{\text{biomass_N}_2\text{O}_i}$ = Fuel-specific emission factor for N₂O for year “t-2”(tonnes per GJ) (set out in ON.20 in O. Reg. 452/09 Guideline)

A.2.4.1 Energy Input Used to Determine Useful Thermal Energy ($EI_{\text{cogen_heat}}$)

A.2.4.1.1 Subject to A.2.4.1.2 and A.2.4.1.3, $InterimEI_{\text{cogen_heat}}$ is determined using the following calculations:

$$InterimEI_{\text{cogen_heat}} = [EI_{\text{total_cogen}} \times \left(\frac{Heat_{\text{cogen}}}{(Heat_{\text{cogen}} + Energy_{\text{electricity}})} \right)]$$

Where:

$InterimEI_{\text{cogen_heat}}$ = Energy input used for generating useful thermal output (e.g., steam) in the year “t-2” (expressed in GJ)

$EI_{\text{total_cogen}}$ = Total energy input (including biomass) to the cogeneration system in the year “t-2” (expressed in GJ)

$Heat_{\text{cogen}}$ = Total useful thermal output from the cogeneration system in the year “t-2” (e.g., steam excluding electricity) (expressed in GJ). Useful thermal output is as defined in the Guideline incorporated under O.Reg. 452/09

$Energy_{\text{electricity}}$ = Total electricity output from the cogeneration system in year “t-2” (expressed in GJ)

A.2.4.1.2 If $InterimEI_{\text{cogen_heat}}$ is less than the total fossil fuel input into the cogeneration system in year t-2, then $EI_{\text{cogen_heat}}$ is equal to the $InterimEI_{\text{cogen_heat}}$ that is calculated using the formula above.

A2.4.1.3 If $InterimEI_{cogen_heat}$ is greater than total fossil fuel input into the cogeneration system in year t-2, then EI_{cogen_heat} is equal to total fossil fuel input into the cogeneration system.

A.2.4.2 Eligible Energy Input

Facilities can apply for energy use allocation based on energy used at the site, except for the energy used in the following types of processes, operations or sources.

- Energy used for the production of products that have product based benchmarks (set out in Table 1);
- Energy used in facilities listed in Table 4 (with the exception noted below);
- Energy used at sources in facilities with historical facility intensity (set out in Table 2); or
- Energy used at facilities listed in Table 3.

The detailed list of energy uses, the emissions from which are not eligible to receive energy use allocation are as follows:

- Coal used in a coke oven to produce coke;
- Coal, coke and other carbon material injected directly into the blast furnace as a reductant (excluding any fuels that are used in the hot blast stoves);
- Coke oven gas and blast furnace gas used in any process, including electricity generation;
- Carbon removed from the iron in a basic oxygen furnace;
- Electrodes consumed, coal or coke or other carbon material injected directly into the electric arc furnace, natural gas used for shell cooling (excluding fuel used for oxyfuel firing);
- Fuel used to produce clinker from a cement kiln;
- Fuel used to produce lime products from a lime kiln (that is not located at a facility that produces both pulp and paper);
- Feedstock and fuels used at a facility to produce carbon black;
- Fuel used at a facility that produces beer;
- Feedstock and fuels used in the processes to produce ammonia, or nitric acid;
- Feedstock and fuels used in the processes to produce hydrogen from steam methane reforming;
- Any crude oil, feedstock, coke, refinery fuel gas, vent gas, flare gas, and any fuels used in a petroleum refinery process that is receiving allowances using a refinery complexity weight barrel benchmark;

- Any feedstock and fuels used at a facility that produces ethylene at an ethylene cracker, and other chemicals other than ethylene;
- Feedstock and fuels used at a facility to produce styrene;
- Fuel used at institutions, energy from waste facilities listed in Table 4;
- Fuel used at any facility listed in Tables 2, 3 and 4 except for fuel that is not feedstock or fuel which is directly associated with the operation of either the ammonia facility (both for fixed process and combustion), or the nitric acid facility at CF industries, Courtright Nitrogen complex.

Any capped participant is eligible to apply for allowances for steam imports. This includes any facility that is receiving free allowances from any other type of allocation method (e.g., product output benchmark, history-based allocation, direct allocation).

A.2.5 Determining History Based Allocations (B_{hpt} , B_{hct})

This approach provides an allocation free of charge based on either the historical average emissions for a facility or a facility specific emissions intensity that is based on historical emissions per tonne of product.

A.2.5.1 Historical Emissions-Based Fixed Allocation

The list of facilities eligible to apply for allowances based on the historical emissions-based fixed allocation along with the basis for how the allocation was determined is set out in Table 3.

A.2.5.2 Historical Intensity-Based Allocation

Facilities eligible for free emission allowances based on historical intensity allocation are listed in Table 2. Allocation (B_{hpt}) will be determined as the product of the facility's historical intensity (i.e. historical emissions per production of a tonne of product) and the product produced based on the equation below. A facility may produce one or more products.

The historical intensity fixed process allocation is calculated as follows:

$$B_{hpt} = \sum_{i=1}^n [Product_{i,t-2} \times EI_{p,i}]$$

Where:

B_{hpt} is the facility base allocation for fixed process emissions.

$Product_{i,t-2}$ is the amount of a given product i produced in the year "t-2".

EI_{p_i} is the historical fixed process emissions intensity for product i produced by the facility listed in Table 3.

The historical intensity combustion allocation is calculated as follows:

$$B_{hct} = \sum_i^n [Product_{i,t-2} \times EI_{c_i}]$$

Where:

B_{hct} is the facility base allocation for combustion emissions.

$Product_{i,t-2}$ is the amount of product i produced in the year “t-2”.

EI_{c_i} is the historical combustion emissions intensity for product i produced by the facility listed in Table 3.

A.2.6 Production Adjustment Factor (B_{adj_t})

The production adjustment factor is the number of allowances allocated to facilities to account for changes (e.g., in production for products listed in Table 1) not properly accounted for in prior allocations. This value shall be calculated where the entity was covered under the Cap-and-Trade Program in year “t-2” (i.e., starting in 2018 for allocations for budget year 2019).

For example, a facility eligible for free allowances would submit an application for 2019 emission allowances on or before September 1, 2018 that includes their production and energy use data for 2017 because their 2018 data has not been reported yet. The 2017 data is used to calculate allowance allocation. The assistance factor and the cap adjustment factor for the year 2019 will be used to determine the allocations for 2019. When the 2019 data becomes available in 2020, the allocation for 2019 that was previously made based on 2017 data (depending on the allocation method used for the facility) will be adjusted. The number of allowances that were received for budget year 2019 (based on 2017 production and energy use data) are then subtracted from the allocation based on the actual 2019 data to give B_{adj_t} . The resulting B_{adj_t} could be positive or negative.

The B_{adj_t} is calculated as follows.

$$B_{adj_t} = AF_{t-2} \times [(B_{bpt} + B_{hpt} + B_{dpt}) \times C_{p,t-2} + (B_{bct} \times B_{hct} + B_e) \times C_{c,t-2} + (B_{dct} \times C_{cd,t-2}) + B_{bio}] - B_{t-2}$$

Where:

B_{adj_t} = production adjustment allowances for the budget year “t” (allowances)

AF_{t-2} = Assistance factor for the budget year “t-2”

$C_{p,t-2}$ = Cap Adjustment Factor for fixed process emissions for budget year “t-2” (see Table 5)

$C_{c,t-2}$ = Cap Adjustment Factor for combustion emissions for budget year “t-2” (see Table 5)

$C_{cd,t-2}$ = Cap Adjustment Factor for combustion emissions for facilities with direct allocations for the budget year “t-2” as listed in Table 4

B_{t-2} = the number of allowances that were provided to the facility for the budget year “t-2” not including the production adjustment allowances for that budget year

All other parameters are as described in Sections A.2.1 to 2.5 of this policy proposal.

$B_{adj,t}$ term does not apply to facilities listed in Table 3 of this policy proposal and hence no such calculation will be made for those facilities.

Facility with production adjustment allowances from budget year “t” shall be allowed to be use up to that amount for compliance for budget year “t-2” (e.g., production adjustments allowances for the budget year 2022 can be used in the compliance year 2021).

A.2.6.1 Shutdown

In the calendar year following a permanent shut down of the facility (i.e., person ceases to engage in the activity as per O. Reg. 452/09), the capped participant would not be eligible to apply for allowances under “ B_t ” of Section A.2.1 in the document, that is the allowances for a facility for budget year “t” that does not include production adjustments.

A facility must apply for a production adjustment in the year after the shutdown. If the production adjustment value is positive, the calculated production adjustment amount will be allocated to the facility. If the production adjustment value is negative, the facility shall return to the Minister the number of allowances equal to the negative amount. The Minister will auction the returned allowances. The allowances required to be returned must be of a vintage eligible for use in the compliance period. If a facility does not return the allowances by the deadline specified by Minister, the allowances will be deducted from the facility’s holding account. In a situation where there are insufficient allowances in the holding account, the 3:1 requirement (facility required to retire three additional allowances for everyone it was short) will apply to the shortfall.

A.2.7 Allocation for Voluntary Participant

A voluntary participant (i.e., facility that decides to opt-in) that is eligible to receive free allowances (see Section A.1) will be allocated allowances based on the following hierarchy of allocation methods:

- a) Product output benchmark: If the facility produces a product for which a benchmark is included in Table 1, the facility will be allocated allowances based on that benchmark.
- b) Energy-use based allocation: If the facility produces a product for which no benchmark is included in Table 1, the facility will be allocated allowances based on the energy use allocation method.

Applications for allowances for voluntary participants will have to be submitted by September 1 of the year before each budget year for which the voluntary participant is seeking an allocation.

Facilities will be required to have an authorized person sign off on the application for allowances for the first two years. For the budget year 2019 the application will have to be based on verified data submitted through O. Reg. 452/09.

A.2.8 Allocation for New Facilities

New facilities will have a compliance obligation starting in their third year of operation. New facility is defined as:

- a) any existing facility with emissions that has to be verified and is 25,000 tonnes of CO₂e or more for the first time in or after 2017;
- b) any facility that begins operations on January 1, 2016 or later and that has annual emissions that have to be verified and is 25,000 of CO₂e tonnes or more per year.

The new facilities will not be eligible for free allocation for the first two years of their operation.

For the third year in operation, new facilities with annual emissions equal to or greater than 25,000 of CO₂e tonnes per year would be allocated allowances based on the following hierarchy of methods:

- a) Product output benchmark: If the facility produces a product for which a benchmark is included in Table 1, the facility will be allocated allowances based on that benchmark.
- b) Energy-use based allocation: If the facility produces a product for which no benchmark is included in Table 1, the facility will be allocated allowances based on the energy use allocation method.

The Ministry is considering implementing an approach to develop facility specific intensity allocation in the future for new facilities, where there are no applicable product-output benchmarks and there are significant fixed process emissions.

A.3 Director's Authority to Adjust Allocations

If a facility receives an adverse verification statement or does not submit an emissions report, the Director can assign a value for the purpose of allocation calculations and submission of allowances in respect of emissions or other parameters.

Where a capped participant who is eligible for free allocations fails to submit all of the required emission allowances and credits on or before the prescribed deadline the Director may also reduce the free allocations available to the capped participant by the amount of the shortfall.

A.4 Early Reduction Credits

A.4.1 Background

Certain capped participants will be eligible to apply for early reduction credits that may be used the same way that Ontario allowances can be used pursuant to the regulation. Early reduction credits (ERCs) are in addition to the emissions allowances created by the Minister under Section 34 of the draft cap and trade regulation.

The number of allowances that an eligible capped participant receives will be based on the proposed approach in this Appendix.

There will be a maximum of two million ERCs available for distribution. If applications for ERCs exceed the amount available they will be distributed on a pro rata basis. If the applications for ERCs total less than two million, only the amount requested will be created and distributed, subject to meeting the criteria below.

A.4.2 Eligible Emissions for Early Reduction Credits

Early reduction credits are expected to be available for demonstrated reductions in eligible GHG emissions. GHG emissions are “eligible emissions” for the purposes of an application for Ontario early reduction credits if the emissions are:

- a) reported and verified under O. Reg. 452/09;
- b) the type of emissions that would be eligible for free allocation; and
- c) not emitted from a facility that is eligible for free allocation under the product-output benchmarking approach.

A.4.3 Application for Early Reduction Credits

Capped participants that have “eligible emissions” as defined under Section A.4.2 must submit an application to the Director by June 1, 2017.

An application for early reduction credits shall include the following information:

- a) The name, contact information and holding account number of the applicant.
- b) A description of the “eligible emissions” at the facility during the reduction period.
- c) A description of the actions taken to achieve the reduction of eligible emissions that is being claimed for the purposes of applying for early reduction credits and the dates that the reduction occurred.
- d) Documentation demonstrating that the reduction of eligible emissions meets the criteria set out in Sections A.4.2, A.4.4 and A.4.5 of this document. Documentation must be adequate for a review by an accredited verification body (see subsection (f)).
- e) The amount of the reduction of eligible emissions that occurred, expressed in tonnes of carbon dioxide equivalent calculated using one of the following methods as they apply to the eligible emissions:
 1. The relevant standard quantification method under O. Reg.452/09;
 2. a mass balance calculation method; or
 3. a method recognized by the industry and meeting the requirements of the ISO 14064-2 standard.
- f) A verification report prepared by an accredited verification body (as defined in the GHG Reporting Regulation) in accordance with ISO 14064-3.
- g) Information needed to calculate the maximum quantity of early reduction credits.
- h) A statement signed and dated by an individual who is authorized by the person mentioned in Section 7(1) of O. Reg. 452/09 to sign on behalf of the person, certifying that:
 1. The individual has examined the application to ensure that it is complete and accurate, and

2. The application has been prepared in accordance with the Cap and Trade Regulation and the statements and information contained in the application are true and fair to the best of the individual's knowledge.

The Director may reject an application where the information provided is incomplete or false. If successful on the application, the emission allowances will be deposited into the holding account of the applicant by June 1, 2018.

A.4.4 Reduction Period and Reference Period for Creation of Early Reduction Credits

ERCs will only be awarded for reductions of eligible emissions during the reduction period. The reduction period is between January 1, 2012 and December 31, 2015.

Reductions will be calculated based on the "reference period" which is the average annual emissions at the participant's facility from January 1, 2009 to December 31, 2011 inclusive.

A.4.5 Eligibility Conditions for Creating Early Reduction Credits

To be eligible for Early Reduction Credits the following criteria must be met:

- The reduction was achieved during the reduction period.
- The annual average of eligible emissions at the facility during the reduction period is lower than the annual average of eligible emissions at the facility during the reference period.
- The average intensity of eligible emissions at the facility during the reduction period, is lower than the average intensity of eligible emissions at the facility during the reference period as calculated using the equations below.
- An attestation that the applicant has legal ownership of the emission reductions being claimed from the project.
- Reductions are calculated using the same calculation method and the same factors for all years 2009 to 2015 in which the reductions are being claimed.
- The reduction must not have been achieved as a result any of the following:
 - a) Actions that were required to be taken as a result of legislative or regulatory provision;
 - b) The closure of a facility or a part of a facility;
 - c) A decrease in production at a facility;

- d) Moving operations from one facility to another facility; or
 - e) Actions that were taken as part of a project that was credited or financed in whole or in part by another cap and trade or GHG reduction program or project.
- Reductions are permanent and irreversible; projects which sequester carbon that could be later released to the atmosphere will not be considered for early reduction credits.
 - If the emissions reduction is achieved as a result of the substitution of a fuel with a replacement fuel at the facility:
 - a) The average price paid for the replacement fuel during the reduction period must have been higher than the average cost of the fuel that was substituted during the same period; and
 - b) The person must have paid for the modification or replacement of equipment at the facility in order to use the replacement fuel during the reduction period.

A.4.6 Calculating Average Intensity of Eligible Emissions

A.4.6.1 Calculation of Average Intensity of Eligible Emissions During Reduction Period

The average intensity of eligible emissions during the reduction period shall be calculated by applying the following formula.

$$I_{\text{Reduction } j} = \frac{\sum_{i=n}^{2015} \text{GHG}_{ij}}{\sum_{i=n}^{2015} P_{ij}}$$

Where:

$I_{\text{Reduction } j}$ = the average intensity of eligible emissions for production unit j as approved by the Director during the reduction period

j = production unit as approved by the Director

i = year

n = the first year of the reduction period

GHG_{ij} = eligible GHG emissions of the facility, relating to the production unit j for year i , in tonnes of CO₂ equivalent

P_{ij} = the annual quantity of production unit j as approved by the Director and produced by the facility for the year i

A.4.6.2 Calculation of Average Intensity of Eligible Emissions During Reference Period

The average intensity of eligible emissions during the reference period shall be calculated by applying the following formula:

$$I_{\text{Reference } j} = \frac{\sum_{i=2009}^{2011} \text{GHG}_{ij}}{\sum_{i=2009}^{2011} P_{ij}}$$

Where:

$I_{\text{Reference } j}$ = the average intensity of eligible emissions for production unit j as approved by the Director during the reference period

j = production unit as approved by the Director

I = year

GHG_{ij} = eligible GHG emissions of the facility, relating to the production unit j for year I , in tonnes of CO_2 equivalent

P_{ij} = the annual quantity of production unit j , as approved by the Director, produced by the facility for the year i

A.4.7 Limit for Individual Facility

A.4.7.1 Formula for Calculating Limit

The maximum number of early reduction credits that may be awarded in respect of the reduction of eligible emissions at a single facility is determined by applying the following formula:

$$\text{ERC}_{\text{max}} = N_Y \times \sum_{j=1}^k \left((E_{\text{Reference}(j)} - E_{\text{Reduction}(j)}) \times P_j \right)$$

Where:

ERC_{max} = the maximum number of Ontario early reduction credits that may be created in respect of the reduction of eligible emissions at a single facility

N_Y = the number of calendar years included in the reduction period

K = the total number of production units at the facility

J = production unit as approved by the Director

$E_{\text{Reference (j)}}$ = the average annual eligible emissions from the production of production unit j during the reference period, calculated using Equation 1 of Schedule 1, expressed in tonnes of carbon dioxide equivalent

$E_{\text{Reduction (j)}}$ = the average annual eligible emissions from the production of production unit j during the reduction period, calculated using Equation 2 of Schedule 1, expressed in tonnes of carbon dioxide equivalent

P_j = the value determined under Section A.4.7.2

A.4.7.2 Determining P_j

For the purposes of Section A.4.7.1, P_j has a value of 1 if the average annual quantity of production units j produced during the reference period, calculated using Equation 3 of Schedule 1, is less than or equal to the average annual quantity of production units j produced during the reduction period, calculated using Equation 4 of Schedule 1.

P_j shall be determined by dividing the result of Equation 4 of Schedule 1 by the result of Equation 3 of Schedule 1, if the average annual quantity of production units j produced during the reference period, calculated using Equation 3 of Schedule 1, is more than to the average annual quantity of production units j produced during the reduction period, calculated using Equation 4 of Schedule 1.

A.5 Complementary Reporting Changes

The Ministry is proposing complementary changes to the reporting regulation and incorporated guideline to support the implementation of the cap and trade programs. The proposed changes include:

- a) Collection of additional product, process and energy use information to support the calculations for free allowance allocations (e.g., refinery data);
- b) General requirement for measurement of certain parameters required to support the calculations for free allowances, with an accuracy requirement of 5%;
- c) Reporting and verification for voluntarily participants;
- d) Revisions to the regulation and calculation methods in the Guideline to estimate emissions from electricity importation; and
- e) Refinements of the Guideline to:

1. Clarify requirements for petroleum product supply and introduce the use of an attestation form;
2. Introduce default emission factors for calculating emissions from electricity importation; and
3. Refine reporting of different types of biomass used in a facility.

A.6 Definitions

“accredited verification body” means a verification body that is accredited to ISO 14065 by a member of the International Accreditation Forum;

“ammonia” means ammonia produced by the ammonia production activity as defined in O.Reg. 452/09;

“Beer” means beer produced at the facility through fermentation with yeast;

“BOF steel” means steel produced from the a basic oxygen furnace;

“CAN-CWB” means direct Canadian Complexity Weight Barrel (CAN-CWB) excluding hydrogen production and cogeneration as calculated in accordance with the Guideline under O.Reg. 452/09;

“Carbon Black” means carbon pellets, powders or other products produced by the pyrolysis of hydrocarbon feedstock;

“coke” means coke produced by a coke oven at an iron and steel facility;

“dolomite used” means dolomite added to the blast furnace;

“dolomite lime” means dolomite lime produced by a lime kiln at the facility;

“Dolopel” means lime that has been processed twice in lime kilns at the same facility;

“EAF steel” means steel produced from the electric arc furnace;

“Ethylene” means the ethylene produced from the processing of natural gas liquids or feedstock from the refining of crude oil and its derivatives;

“glass bottles and jars” means glass products produced through the glass production activity set out in Table 2 of O.Reg. 452/09;

“Grey cement” means clinker produced from a cement kiln at the facility, blended with limestone and gypsum at the facility;

“High Calcium Lime” means high calcium lime produced by a lime kiln at the facility;

“High value chemicals” means ethylene, benzene, butadiene and polypropylene;

“Hydrogen” means hydrogen produced using steam hydrocarbon reforming, partial oxidation or other transformation of the hydrocarbon; and does not include hydrogen that is in the feedstock to a steam hydrocarbon reforming, partial oxidation or other transformation processes;

“institution” means educational services and Health Care and Social Assistance as per NAICS(North American Industry Classification System) Code 61 and 62;

“Iron produced” means liquid iron produced by a blast furnace;

“ISO 14064-3” means standard ISO 14064-3, published by the International Organization for Standardization (ISO) and entitled “Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions”, as amended from time to time;

“ISO 14065” means standard ISO 14065, published by the International Organization for Standardization (ISO) and entitled “Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition”, as amended from time to time;

ISO 14064-2 means standard ISO 14064-2, published by the International Organization for Standardization (ISO) and entitled “Greenhouse gases -- Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements,” as amended from time to time;

“limestone” means limestone added to the blast furnace;

“Magnesium” means any magnesium metals, magnesium alloys or magnesium products produced at the facility where a covered gas or carrier gas is used in the production process;

“nitric acid” means nitric acid produced by the nitric acid production activity set out in Table 2 of O.Reg. 452/09;

“Pulp and paper” means the sum of pulp products and paper products produced at a facility; and

“White cement” means clinker produced from a cement kiln, blended with limestone and gypsum to produce white cement at the facility.

Schedule 1: Equations for use under Section A.4.7

$$E_{Reference(j)} = \frac{\sum_{i=2009}^{2011} E_{ij}}{3} \quad \text{Equation 1}$$

Where:

$E_{Reference(j)}$ = the average annual eligible emissions from the production of production unit j during the reference period, expressed in tonnes of carbon dioxide equivalent

E_{ij} = the eligible emissions from the production or use of production unit j during year i , expressed in tonnes of carbon dioxide equivalent

j = production unit

i = each year in the reference period.

$$E_{Reduction(j)} = \frac{\sum_{i=m}^{2015} E_{ij}}{n} \quad \text{Equation 2}$$

Where:

$E_{Reduction(j)}$ = the average annual eligible emissions from the production of production unit j during the reduction period, expressed in tonnes of carbon dioxide equivalent

E_{ij} = the eligible emissions from the production or use of production unit j for year i , expressed in tonnes of carbon dioxide equivalent

i = each year in the reduction period

j = production unit

m = the year in which the reduction period begins

n = the number of consecutive years in the reduction period

$$P_{Reference(j)} = \frac{\sum_{2009}^{2011} P_{ij}}{3} \quad \text{Equation 3}$$

Where:

$P_{Reference(j)}$ = the average annual quantity of production units produced during the reference period

P_{ij} = the quantity of production units produced during year

i = each year in the reference period

j = production unit

$$P_{Reduction(j)} = \frac{\sum_{i=m}^{2015} P_{ij}}{n}$$

Equation 4

Where:

$P_{Reduction(i)}$ = the average annual quantity of production units produced during the reduction period

P_{ij} = the quantity of production units produced during year i

i = each year in the reduction period

j = production unit

m = the year in which the reduction period begins

n = the number of consecutive years in the reduction period

Table 1: Product Output Benchmarks

Source	Product	Benchmark for Fixed Process Emissions for product ($BM_{p,i}$)	Benchmark for Combustion Emissions for product ($BM_{c,i}$)	Benchmark Units
Iron and steel making	Iron	1.034	0.396	Allowances per tonne of iron produced
Iron and steel making	BOF Steel	0.147	n.a	Allowances per tonne of BOF Steel produced
Iron and steel making	EAF Steel	0.067	n.a	Allowances per tonne of EAF Steel produced
Iron and steel making	Limestone used	0.44	n.a	Allowances per tonne of limestone used
Iron and steel making	Coke	Not applicable	0.522	Allowances per tonne of coke produced
Iron and steel making	Dolomite used	0.48	n.a	Allowances per tonne of dolomite used
Petroleum Refining	CAN-CWB	n.a	0.0047	Allowances per Complexity-weighted Barrel
Grey Cement Manufacturing	Grey Cement	0.487	0.316	Allowances per tonne of grey cement
Hydrogen Manufacturing	Hydrogen	5.5	4.15	Allowances per tonne of Hydrogen produced
Beer manufacturing	Beer	n.a	0.007	Allowances/hundred litres of beer produced

Table 2: Historical Facility Intensity (2017-2020)

Facility Owner	Facility Name	Facility City	Source	Product	Historical fixed process emissions intensity (EI_{p_i})	Historical Combustion emissions intensity (EI_{c_i})	Intensity units
Federal White Cement Ltd.	Woodstock Plant	Woodstock	White Cement Manufacturing	White Cement	Historical 2010-2012 fixed process emissions intensity as determined by the Director	Historical 2010-2012 combustion emissions intensity as determined by the Director	Allowances per tonne of white cement
O-I Canada Corp.	Plant #31 Brampton	Brampton	Glass Manufacturing	Glass Bottles and Jars	Historical 2010-2013 fixed process emissions intensity as determined by the Director	Historical 2010-2013 combustion emissions intensity as determined by the Director	Allowances per tonne of Glass Bottles and Jars produced
Terra International (Canada) Inc.	CF Industries Courtright Nitrogen Complex	Courtright	Ammonia Manufacturing	Ammonia	Historical 2010-2014 fixed process emissions intensity as determined by the Director	Historical 2010-2014 combustion emissions intensity as determined by the Director	Allowances per tonne of ammonia produced
Terra International (Canada) Inc.	CF Industries Courtright Nitrogen Complex	Courtright	Reductant use in Nitric acid Manufacturing	Nitric acid	Historical 2010-2014 fixed process emissions intensity as determined by the Director	Not applicable	Allowances per tonne of nitric acid produced
Cabot Canada Limited	Cabot Canada Limited	Sarnia	Carbon black manufacturing	Carbon black	Not Applicable	Historical 2010-2013 combustion emissions intensity as determined by the Director	Allowances per tonne of carbon black produced
Columbian Chemicals Canada Ltd.	Hamilton	Hamilton	Carbon black manufacturing	Carbon black	Not Applicable	Historical 2010-2013 combustion emissions intensity as determined by the Director	Allowances per tonne of carbon black produced

Facility Owner	Facility Name	Facility City	Source	Product	Historical fixed process emissions intensity (EI _{p-i})	Historical Combustion emissions intensity (EI _{c-i})	Intensity units
NOVA Chemicals (Canada) Ltd.	Corunna Site	Corunna	Ethylene manufacturing	Ethylene	Not Applicable	Historical combustion emissions intensity as determined by the Director	Allowances per tonne of ethylene produced
Imperial Oil	Sarnia Chemical Plant	Sarnia	All chemicals from ethylene cracking unit	All chemicals from ethylene cracking unit	Not Applicable	Historical combustion emissions intensity as determined by the Director	Allowances per tonne of all chemicals produced from the ethylene cracking unit
Imperial Oil	Sarnia Chemical Plant	Sarnia	All chemicals other than those produced from the ethylene cracking unit	Chemicals other than those produced from the ethylene cracking unit	Not Applicable	Historical combustion emissions intensity as determined by the Director	Allowances per tonne of chemicals other than those produced from the ethylene cracking unit
Petro-Canada Lubricants Inc.	Mississauga Lubricants Centre	Mississauga	Lubricant manufacturing	Refinery feed	Not Applicable	Historical combustion emissions intensity as determined by the Director	Allowances per kilolitres of refinery feed
Styrolution Canada Ltd.	Sarnia Site	Sarnia	Styrene manufacturing	Styrene	Not Applicable	Historical combustion emissions intensity as determined by the Director	Allowances per tonne of styrene produced
Magellan	Haley	Haley	Magnesium production	Magnesium	Not Applicable	Historical combustion emissions intensity as determined by the Director	Allowances per tonne of magnesium produced
Carmeuse Lime Canada	Beachville Operation	Ingersoll	High Calcium lime production	High calcium lime	Historical 2010-2012 fixed process emissions intensity as determined by the Director	Historical 2010-2012 combustion emissions intensity as determined by the Director	Allowances per tonne of high calcium produced
Carmeuse Lime Canada	Dundas Operations	Dundas	Dolomite lime production	Dolomite	Historical 2010-2012 fixed process emissions intensity as determined by the Director	Historical 2010-2012 combustion emissions intensity as determined by the Director	Allowances per tonne of dolomite produced

Facility Owner	Facility Name	Facility City	Source	Product	Historical fixed process emissions intensity (EI_{p-i})	Historical Combustion emissions intensity (EI_{c-i})	Intensity units
Carmeuse Lime Canada	Dundas Operations	Dundas	Dolopel lime production	Dolopel	Historical 2010-2012 fixed process emissions intensity as determined by the Director	Historical 2010-2012 combustion emissions intensity as determined by the Director	Allowances per tonne of dolopel produced
Carmeuse Lime Canada	Northern Lime Limited	Blind River	High calcium lime production	High calcium lime	Historical 2010-2012 fixed process emissions intensity as determined by the Director	Historical 2010-2012 combustion emissions intensity as determined by the Director	Allowances per tonne of high calcium produced
Essar Steel Algoma Inc.	Essar Steel Algoma Inc	Sault Ste. Marie	High Calcium lime production	High calcium lime	Historical 2010-2012 fixed process emissions intensity as determined by the Director	Historical 2010-2012 combustion emissions intensity as determined by the Director	Allowances per tonne of high calcium produced
Essar Steel Algoma Inc.	Essar Steel Algoma Inc	Sault Ste. Marie	Dolomite lime production	Dolomite	Historical 2010-2012 fixed process emissions intensity as determined by the Director	Historical 2010-2012 combustion emissions intensity as determined by the Director	Allowances per tonne of dolomite produced

Table 3: Historical Emissions-Based Fixed Process Allocation (B_{hp}) and Combustion Allocation (B_{hc})

Facility Owner	Facility Name	Facility City	Source	Product	Historical fixed process emissions allocations (B_{hp})	Historical combustion emissions allocations (B_{hc})
Glencore Canada Corporation	Sudbury Nickel Smelter Complex	Falconbridge	Mining, base metal smelting, refining	copper and nickel	Historical 2011-2013 fixed process emissions as determined by the Director	Historical 2011-2013 combustion emissions as determined by the Director
Vale Canada Limited	Copper Cliff Nickel Refining, smelter and mining complex	Sudbury	Mining, base metal smelting, refining	copper and nickel	Historical 2011-2013 fixed process emissions as determined by the Director	Historical 2011-2013 combustion emissions as determined by the Director
Brampton Brick Limited	Brampton Brick	Brampton	Brick making	Brick	Historical 2011-2013 fixed process emissions as determined by the Director	Historical 2011-2013 combustion emissions as determined by the Director
Hanson Brick	Hanson Brick - Burlington	Burlington	Brick making	Brick	Historical 2011-2013 fixed process emissions as determined by the Director	Historical 2011-2013 combustion emissions as determined by the Director
ROXUL Inc.	ROXUL Inc.	Milton	Mineral wool insulation manufacturing	Mineral wool insulation		Historical 2011-2013 combustion emissions as determined by the Director

Table 4: Direct Allocations

Facility Owner	Facility Name	Facility City	Source	Fixed process emissions allocations (B _{fp})	Cap Adjustment Factor for Fixed Process Emissions 2017 (C _p)	Cap Adjustment Factor for Fixed Process Emissions 2018 (C _p)	Cap Adjustment Factor for Fixed Process Emissions 2019 (C _p)	Cap Adjustment Factor for Fixed Process Emissions 2020 (C _p)	Historical combustion emissions allocations (B _{hc})	Cap Adjustment Factor for Combustion Emissions 2017 (C _{cd})	Cap Adjustment Factor for Combustion Emissions 2018 (C _{cd})	Cap Adjustment Factor for Combustion Emissions 2019 (C _{cd})	Cap Adjustment Factor for Combustion Emissions 2020 (C _{cd})
Carmeuse Lime Canada	Dundas Operation	Dundas	Fusite production in lime manufacturing	Emissions reported in Budget year t-2	(see Table 5)	(see Table 5)	(see Table 5)	(see Table 5)	Emissions reported in Budget year t-2	1	0.9543	0.9086	0.8629
Terra International (Canada) Inc.	CF Industries Courtright Nitrogen Complex	Courtright	Process emission in Nitric acid manufacturing	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	0.9543	0.9086	0.8629
The University of Toronto	St George Campus	Toronto	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	1	1	1
The University of Western Ontario	Main Campus	London	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	1	1	1
University of Guelph	Guelph Campus	Guelph	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	1	1	1
York University	York University - Keele Campus	Toronto	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	1	1	1
London Health Sciences Centre	Victoria Hospital	London	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	1	1	1
Hamilton Health Sciences Corporation	McMaster University Medical Centre Co-generation Plant	Hamilton	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	1	1	1

Facility Owner	Facility Name	Facility City	Source	Fixed process emissions allocations (B _{hp})	Cap Adjustment Factor for Fixed Process Emissions 2017 (C _p)	Cap Adjustment Factor for Fixed Process Emissions 2018(C _p)	Cap Adjustment Factor for Fixed Process Emissions 2019(C _p)	Cap Adjustment Factor for Fixed Process Emissions 2020(C _p)	Historical combustion emissions allocations (B _{hc})	Cap Adjustment Factor for Combustion Emissions 2017 (C _{cd})	Cap Adjustment Factor for Combustion Emissions 2018 (C _{cd})	Cap Adjustment Factor for Combustion Emissions 2019 (C _{cd})	Cap Adjustment Factor for Combustion Emissions 2020 (C _{cd})
Queen's University	Kingston Main Campus	Kingston	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	1	1	1
Emerald Energy From Waste Inc.	Emerald Energy from Waste Inc.	Brampton	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	1	1	1
Clean Harbors Canada, Inc.	Clean Harbors Canada, Inc	Corunna	Facility	n.a	n.a	n.a	n.a	n.a	Emissions reported in Budget year t-2	1	0.9543	0.9086	0.8629

Table 5: Cap Adjustment Factor

Cap Adjustment Factor for Fixed Process Emissions(C _p) for 2017	Cap Adjustment Factor for Fixed Process Emissions(C _p) for 2018	Cap Adjustment Factor for Fixed Process Emissions(C _p) for 2019	Cap Adjustment Factor for Fixed Process Emissions(C _p) for 2020	Cap Adjustment Factor for combustion emissions(C _c) for 2017	Cap Adjustment Factor for combustion emissions(C _c) for 2018	Cap Adjustment Factor for combustion emissions(C _c) for 2019	Cap Adjustment Factor for combustion emissions(C _c) for 2020
1	1	1	1	1	0.9543	0.9086	0.8629