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Introduction

The Climate Action Secretariat, Ministry of Environment (“CAS”) is in the process of developing the Emissions Trading Regulation and the Cap and Trade Offsets Regulation under the *Greenhouse Gas Reduction (Cap and Trade) Act*.

The purpose of this consultation paper is to seek responses and comments from stakeholders and the public on the proposed **Emissions Trading Regulation**. The regulation would establish the rules by which emissions may be traded under British Columbia’s cap and trade system. It is intended to establish an efficient, fair market with clear rules on how allowances are created, distributed, traded, tracked and retired for compliance.

CAS has prepared this consultation paper and an accompanying response form to provide information on the proposed regulation and solicit comment on the elements of the proposed emissions trading program for British Columbia. CAS has also prepared a *Carbon Pricing Policy Backgrounder* to provide context and a separate consultation paper and response form on the proposed Cap and Trade Offsets Regulation. These documents can be viewed and downloaded from the ministry’s consultation website or directly from: www.env.gov.bc.ca/cas/mitigation/ggrcta/emissions-trading-regulation/.

The development process for the proposed regulation consists of five phases:

1. **Scoping** – including work with the Western Climate Initiative (WCI) design process and commissioned assessments of specific technical issues and ministry staff assessment of issues and alternatives.
2. **Ministry Consultation Papers** – outlining the ministry’s proposed approach for the emissions trading system in British Columbia.
3. **Consultation** – with affected stakeholders and the general public, using this consultation paper and response forms posted on the ministry website, as well as through ongoing activities of the Climate Action Secretariat and the Western Climate Initiative.
4. **Drafting** – preparation of legal language for consideration by the Minister and Lieutenant Governor-in-Council.
5. **Implementation** – informing ministry staff and external stakeholders, and developing guidelines and/or best management practices.

Background

The *Greenhouse Gas Reduction (Cap and Trade) Act* received Royal Assent on May 29, 2008. The *Cap and Trade Act* provides the statutory basis for requiring reporting of greenhouse gas emissions by large emitters operating in the province, setting up a market-based cap and trade framework to reduce greenhouse gas emissions from large emitters operating in the province, developing and approving offsets, provisions for ensuring compliance and enforcement, and enabling B.C.’s participation in regional cap and trade systems (such as the Western Climate Initiative). A Reporting Regulation was established under the Act in 2009. Provisions on compliance and enforcement under the Act are proposed for development in 2011.

British Columbia is a partner in the Western Climate Initiative (WCI),¹ a coalition of seven U.S. states and four Canadian provinces that have been working together since 2007 to identify, evaluate and implement policies to address climate change. B.C. and its WCI partners have been developing the design for a regional cap and trade system with significant contributions from numerous stakeholders in all WCI regions. The de-

¹ See: www.westernclimateinitiative.org

sign for the WCI regional program, released on July 27, 2010, is intended as a roadmap to inform WCI partner jurisdictions as they implement the WCI cap and trade program in their jurisdictions.²

For additional information about carbon pricing in British Columbia see the *Carbon Pricing Policy Backgrounder*. This document can be downloaded from the ministry's climate action website or from: www.env.gov.bc.ca/cas/mitigation/ggrcta/.

Providing comment

CAS is seeking comments from stakeholders, First Nations and the general public on the proposed Emission Trading Regulation. Though the consultation paper outlines a particular approach for achieving regulatory objectives, CAS welcomes feedback on all aspects of the proposed regulation and will consider other approaches.

Comments regarding this proposed regulation are being solicited for a 45-day period. Following review of comments and submissions, CAS will complete legal drafting of the proposed regulation. A summary report of comments and submissions received, including both printed and web-based responses, will be compiled and summarized without specific attribution by an independent contractor and posted on the CAS website.

To provide feedback on this consultation paper you may use the response form available in various formats from the address below, or from the CAS homepage, by following the climate change links.

For more information, or to submit a response form, please visit:

www.env.gov.bc.ca/cas/mitigation/ggrcta/emissions-trading-regulation/

Comments received will be treated with confidentiality by CAS staff and contractors. Please note that comments you provide and information that identifies you as the source of those comments may be publicly available under the *Freedom of Information and Protection of Privacy Act*.

Those interested are invited to submit comments in writing to CAS care of Cindy Bertram of C. Rankin & Associates, at:

Email: cindybertram@shaw.ca

Fax: 250 598-9948

Mail: PO Box 28159, Westshore RPO, Victoria, B.C. V9B 6K8

Comments should be made on or before December 6, 2010

² See: www.westernclimateinitiative.org/designing-the-program

DISCUSSION TOPIC AREAS

1. Determining which facilities are “regulated operations” under this regulation

B.C.’s Reporting Regulation requires the reporting of GHG emissions by operations that emit more than 10,000 carbon dioxide equivalent metric tonnes (tCO₂e) in a calendar year.³ These GHG emitters are termed “**reporting operations**” under the Reporting Regulation. Reporting operations that emit more than 25,000 tCO₂e in a year are further required to have their emissions reports verified by a third party accredited verification body.

If an operation is emitting over 25,000 tCO₂e of emissions covered by the cap under British Columbia legislation, the entity would automatically be a “**regulated operation**”. See appendix A of this consultation paper for a list of covered emissions sources. The total covered emissions of a regulated operation creates a compliance obligation where the regulated operation would be required to “surrender”⁴ a quantity of compliance units equal to the sum of its covered emissions over the three year compliance period.

The objectives for establishing the applicability of operations as regulated operations are:

- ♦ To be comprehensive and transparent in defining which GHG emission sources count as “covered”; and
- ♦ To be administratively simple by creating a link between the quantity of a regulated operation’s reported GHG emissions and its compliance unit liability posted within the registry.

The B.C. Government does not intend to double regulate emission sources, meaning those emission sources included for compliance purposes under the emissions trading system would not also be required to pay the carbon tax.⁵

A. *Which operations are regulated operations*

The definition of a regulated operation applies:

- a) Starting January 1 2012, to the operator of an operation that emits equal to or greater than 25,000 tCO₂e of covered emissions within BC, under terms of the Reporting Regulation,⁶ in 2010 or 2011;
- b) Starting January 1 of the calendar year 2012 or any subsequent year in which an operation emits equal to or greater than 25,000 tCO₂e, the operator of an operation that emits equal to or greater than 25,000 tCO₂e of covered emissions within BC, under terms of the Reporting Regulation, in that calendar year; and
- c) Starting January 1 2012 or January 1 of any subsequent year in which an entity is deemed to emit equal to or greater than 25,000 tCO₂e, the operator of a first jurisdictional deliverer of electricity that is deemed to emit equal to or greater than 25,000 tCO₂e.

³ See: www.env.gov.bc.ca/cas/mitigation/ggrcta/reporting-regulation/index

⁴ “Surrender” – is the term used by the WCI. “Retire” – is the term used in B.C. legislation. Both terms refer to the process where either government takes allowances and offsets from the account of a regulated operation, or processes where operators transfer compliance units into “retirement accounts” where they cannot be used again. This paper uses the term “surrender” in reference to either process.

⁵ For further information see the *Carbon Pricing Policy Backgrounder* on the CAS consultation website.

⁶ Excluding CO₂ from biomass listed in schedule C of the regulation.

See appendix A for a table of emission sources being reported under the Reporting Regulation that are being considered for inclusion as “covered sources” in the proposed Emissions Trading Regulation.

The following source types (including those described under the existing Reporting Regulation, as well as potential new source types) are under evaluation as to whether they could be considered as “covered sources” in the first compliance period:

- ◆ Emissions from surface coal mines when coal is broken or exposed to the atmosphere during mining;
- ◆ Emissions from stored coal piles;
- ◆ Emissions from the anaerobic or aerobic digestion of wastewater⁷;
- ◆ Specific oil and gas and petroleum refinery emissions that are difficult to measure accurately; and
- ◆ Fugitive HFC emissions from cooling units at electricity generators.

It is expected that emissions from fuel combustion by mobile equipment that is part of the facility will continue to be covered by B.C.’s carbon tax. For questions related to quantification methods for the above source types, please refer to the Reporting Regulation.

CAS is considering whether an operation that is less than 25,000 tCO₂e covered emissions can “opt-in” as a regulated operation with a compliance obligation in the emissions trading system if it agrees to stay in for a nine-year period (e.g., from 2012-2020).

The regulated operation’s compliance liability starts on the first day of the first year during the compliance period that it equals or exceeds the threshold, and is maintained for the rest of the compliance period, regardless of emissions levels in the remaining years. The B.C. Government would publish the list of registered regulated operations and their verified emissions.

B. When an operation ceases to have a compliance obligation

A regulated operation has a compliance obligation for each calendar year until one of the following conditions occurs, after which the operator may apply to the Director to be dismissed of its compliance obligation for the following compliance period:

- a) If annual reports demonstrate emissions less than 25,000 tCO₂e per year during one compliance cycle; or
- b) If the regulated operation shuts down all processes, units and supply operations subject to reporting – in which case the regulated operation must submit an emissions data report for the year in which a facility or supplier’s GHG-emitting processes and operations ceased to operate, and for the first full year of non-operation following a permanent shutdown.

⁷ Anaerobic wastewater digestion is a process whereby bacteria digest biosolids in the absence of oxygen. One major feature of anaerobic digestion is the production of biogas, which can be used in generators for electricity production or in boilers for heating purposes. Aerobic wastewater digestion refers to the removal of organic pollutants in wastewater by bacteria that require oxygen to work. Water and carbon dioxide are the end products of the aerobic wastewater treatment process. Processes include trickling filtration, activated sludge, and rotating biological contactors. Bacteria that thrive in oxygen-rich environments work to break down and digest the wastewater inside the aerobic treatment plant or system.

C. *Opening an account in the registry as a regulated operation*

CAS may use information already submitted in emissions reports under the reporting regulation in setting up a compliance account in the registry for a regulated operation. The “operation representative”⁸ must nominate one primary authorized account representative, and one secondary authorized account representative with regard to all matters pertaining to B.C.’s emissions trading system. The operator is legally bound by the authorized account representative’s representations, actions, inactions and submissions.

The authorized account representatives must sign and submit to the B.C. Government a certificate of representation including the following:

- ◆ Identification of the regulated operation for which the account certificate of representation is submitted;
- ◆ The business contact information of the primary and secondary account representatives;
- ◆ The name and business contact information of the operator(s) of the regulated operation; and
- ◆ A certification statement.

Upon receipt of the certificate of representation⁹ and approval by the B.C. Government or its agent, a “compliance account” (see section 4 B of this consultation paper) would be established for the regulated operation. The regulated operation would also be required to establish an associated “general account”.

The primary and secondary account representatives might be changed at any time upon receipt and approval by the B.C. Government or its agent of a superseding complete account certificate of representation. A primary and/or secondary account representative would be able to nominate one or more authorized representatives who would have full rights and responsibilities to operate the relevant tracking system accounts.

Discussion topics (see response form)

Determining which facilities are “regulated operations” under this regulation:

- 1.1** Establishing the link between the quantity of a regulated operation’s verified GHG emissions reported and the regulated operation’s GHG compliance liability.
- 1.2** The source types of operations that are under consideration to include in the B.C. emissions trading system.
- 1.3** Potential provisions for operations to “opt-in” to the emissions trading system.
- 1.4** The approach to ceasing compliance obligations for operations that shut down.

⁸ See the definitions section of the [Reporting Regulation](#) for a legal description of an “operation representative”.

⁹ Online registration as a registry user may require a BCeID account to verify business information, please refer to <https://www.bceid.ca/>

2. Setting the number of B.C. allowances through B.C.’s nine-year allowance forecast and three-year compliance period

At the end of every three-year compliance period, one compliance unit must be retired for each tonne of covered emissions. The number of allowances issued annually would be reduced over time. The total amount of allowances equals the cap.

In the design for the WCI regional program, each partner jurisdiction will forecast the number of allowances that it will issue annually for 2012 through to 2020 in advance of the first compliance period. This will provide an early indication of the supply of allowances in the regional marketplace. Consistent with this recommendation, B.C. will publish its forecast in the first quarter of 2011. By December 31, 2014 the forecast out to 2023 would be established – with the forecast revised and published prior to the beginning of each subsequent compliance period.

The other WCI partner jurisdictions will submit a revised forecast of their allowances in 2014 – in order to reflect their incorporation of residential, commercial and transportation sectors starting in 2015. However, as recognized in the *Design for the WCI Regional Program*, B.C. may continue to establish a carbon price on emissions from the residential, commercial and transportation sectors through the carbon tax, rather than by expanding coverage of its emissions trading system.

Consistent with WCI’s design, the number of allowances issued in 2012 would be based on a “best estimate” of emissions from regulated operations in B.C. for 2012. The best estimate would be informed by emissions reported through B.C.’s Reporting Regulation, accounting for population growth, economic growth (including new and shut-down sources), and voluntary and mandatory emission reductions through 2012. The cap (the total amount of allowances) would decline over time to help achieve the Province’s legislated emission reduction targets. The covered emissions are approximately one third of B.C.’s emissions.

B.C. also intends to set a cap on allowances issued during a compliance period – i.e., a three-year allowance budget – prior to each compliance period.

The objectives in establishing the allowance forecast and allowance budget are:

- ◆ To define the requirements and processes for establishing B.C.’s nine-year allowance forecast and three-year allowance budget for the compliance period in a manner that effectively assists in achieving B.C.’s emission targets;
- ◆ To maximize price certainty to enable investment into the low carbon economy, by providing an early indication of the supply of allowances in the regional marketplace;
- ◆ To start the number of allowances in 2012 at the best estimate of what emissions would be in 2012, to enable industry and households to adjust to higher prices for carbon-intensive inputs and goods; and
- ◆ To transparently define any circumstances for which budget adjustments may be required.

In the first quarter of 2011, and every three years thereafter, the B.C. Government would publish an allowance forecast for the subsequent nine-year period in order to assist stakeholders with planning and undertaking long term investment decisions. For example, in 2011 B.C. would release its allowance forecast for 2012-2020; in 2014 B.C. would release its allowance forecast for 2015-2022; and so on.

As well, in the second quarter of 2011, and every three years thereafter, the B.C. Government would publish an allowance budget for the subsequent three-year period. For example, in 2011 B.C. would release its allowance budget for 2012-2014; in 2014 B.C. would release its allowance budget for 2015-2017; and so on.

With the allowance budget, the B.C. Government proposes to publish the amount of auctioned allowances and the offset limit that would apply for the annual allowance distribution plans within the upcoming compliance period (see section 3 of this consultation paper). The B.C. Government would consult directly with regulated emitters and other stakeholders on development of the allowance budget.

The B.C. Government's intention is that adjustments to the amount of allowances, the amount auctioned and/or the offsets limit within the allowance budget would only be made in limited, specific conditions – in order to preserve the value of the allowance forecast as an early market signal. The proposed conditions in which the allowance budget may be adjusted are when the B.C. Government has identified:

- ◆ Changes in jurisdictions participating in the emissions trading system;
- ◆ Changes in scope or threshold of the *Design for the WCI Regional Program*;
- ◆ Differences in scope or threshold between the B.C.'s final regulations and the sources included in the 2012 and 2015 allowance forecast;
- ◆ Inaccurate or new data, including emissions from new or permanently shut down regulated operations/sources not previously identified; or
- ◆ Actions of surrounding jurisdictions (including notably those of the federal Governments of the U.S. and Canada).

When publishing the allowance budget, the B.C. Government would list and explain any relevant ongoing budget adjustment processes.

Discussion topics (see response form)

Setting the number of B.C. allowances through B.C.'s nine-year allowance forecast and three-year compliance period:

- 2.1** The timing of the Province publishing the allowance forecast and budget.
- 2.2** How best to facilitate stakeholder input on the economic and emissions forecasts that support the allowance budget determination.
- 2.3** The list of factors that the Minister may consider in deciding whether an adjustment of the allowance budget is necessary.

3. Distribution (allocation) of allowances

In the third quarter of 2011 and every year thereafter, the B.C. Government would publish a B.C. allowance distribution plan. The total number of allowances in the allowance distribution plan could not exceed the number of allowances in the allowance budget for that year.

The objectives of the allowance distribution are:

- ♦ To reduce market uncertainty to enable investment in the low carbon economy by specifying B.C.'s mechanism(s) for distributing allowances and, where freely allocated, to whom; and
- ♦ To transparently establish a defined, formulaic mechanism to allocate allowances (including early reduction allowances) in a certain and predictable manner.

The two main allowance distribution mechanisms for distributing allowances to a regulated operation or other individual are described below. The choice of mechanism does not influence the allowance price. The allowance price is determined by the level of the cap and the technical opportunities for reducing emissions.

- ♦ **Auction:** Auctioning allowances is simple, transparent and the most economically efficient way to distribute allowances. Auctioning accomplishes important regulatory functions: ensuring liquidity in the market; ensuring that new or expanding regulated operations can acquire allowances; and providing a form of equity by helping ensure that allowances go to those that value them most highly. The WCI has recommended that each jurisdiction should aim to auction a minimum of 10 per cent of its annual allowance budget in the first compliance period (which begins in 2012) and a minimum of 25 per cent in 2020. B.C. may auction higher percentages than these minimums. The aspiration of B.C. and the WCI partner jurisdictions is for auctioning to become the default allocation method, with a view to most or all allowances being sold this way in the future.
- ♦ **For free:** Allowances can be allocated for free in order to compensate industries that compete for business in a global market place and where their competitors do not face the same carbon compliance costs. In these instances, industries may not be able to pass on carbon costs to consumers, potentially resulting in decreased production in the jurisdiction with carbon pricing policy and increased production in jurisdictions with no carbon pricing policy. Under these circumstances, the transfer of production between jurisdictions involves a corresponding transfer of emissions – referred to as emissions leakage. To mitigate emissions leakage, B.C. is examining a number of methods to distribute free allowances. Methods under consideration include:
 - **Benchmarking** – or output based allocation. This refers to the distribution of allowances based on the average emissions of a facility per unit of production across a specific sector. An efficiency benchmark or threshold is set to reflect the desired efficiency and determine the mode of allocation (free vs. auctioned corresponding to the benchmark level); and
 - **Grandfathering** – the distribution of allowances based on historical emission levels. Facilities could be granted allowances for all or some of their historic emissions in accordance with competitiveness impacts.

A. *Annual allowance distribution plans*

With the allowance budget, the B.C. Government proposes to publish the proposed principles and approaches for allowance distribution to apply in the upcoming compliance period. The B.C. Government

would publicly release an annual allowance distribution plan on or before September 30th of the calendar year prior to the compliance year. The plan would specify the percent of allowances B.C. would auction the following year, the quantity of allowances that it would distribute for free that year and the quantity that it would hold in reserve. Allowances would be distributed by transferring them into the tracking system account of each regulated operation, in accordance with the plan, by April 1st of each year.

In order to inform the distribution of free allowances, the B.C. Government may require information on operations' economic, trade, production or emissions data or forecasts. To receive free allowances, a reporting operation would have to provide the requested information to the B.C. Government for the government's confidential use.

Within the allowance distribution plan, the B.C. Government would be able to allocate allowances to non-regulated operations (e.g., to the operator of a VRE¹⁰ for voluntary renewable energy purchases in order to acknowledge the importance of renewable energy in a clean energy future).

The plan would identify how many allowances B.C. will issue for the year in question. Any allowances that B.C. does not auction or freely allocate would be held in a provincial holding account for future distribution.

In order to inform decisions on entity level allocations, the B.C. Government may require information from operations – such as economic, trade, production or emissions data or forecasts. To be eligible to receive free allowances, a reporting operation would have to provide the requested information to the B.C. Government for the government's confidential use.

Allowances held in the reserve established by the B.C. Government could be released to the market for a number of reasons, including mitigating persistently high allowance prices; retired to help address persistently low allowance prices; or made available to new entrants that commence or extend operations during the compliance period. The B.C. Government may divide up parts of the reserve for particular purposes.

B.C. may establish one or more reserves, to be held within the provincial holding account. The initial size of such reserves will be specified in the B.C. allowances distribution plan.

B. Allowance distribution mechanisms

i. Auction Process

B.C. and the other WCI partner jurisdictions that have the authority to auction allowances will likely hold regular (e.g., quarterly), centrally coordinated regional auctions in which any allowances offered for sale would be sold jointly by them or on their behalf by a third party (B.C. would hold its own auctions if necessary). Auctions would be held on a single round, sealed-bid and uniform price basis starting in 2011.

Eligibility

The auctions would be open to anyone with an account in the compliance unit tracking system (registry) but an eligible party would need to apply for approval to submit bids in the auction. The B.C. Government would require the party to provide specified information so that it, or a contracted entity, may carry out any relevant “know your customer” checks. The B.C. Government intends that the application and approval process to submit bids is clear, transparent and would not unfairly favour certain participants over others. B.C. would maintain and might publish a list of eligible participants.

¹⁰ A “VRE” is an electricity generation facility that uses renewable resources or fuels deemed eligible by the WCI partners and the B.C. Government.

Reserve price

B.C. would have the ability to set a minimum price (reserve price) that it is willing to accept for the allowances it offers for sale at any particular auction. A reserve price may be adopted in order to ensure against over-allocation of allowances in early years of the program. The B.C. Government would determine how the reserve price is set and whether it is announced in advance of or after the auction, or not at all.

Conduct of the auction

The B.C. Government would be able to specify how the auction would be conducted, including the length of the bidding window, the form a bid must take, the withdrawal of bids, the rejection of bids, how the clearing price would be calculated and how allowances would be allocated in the event of tied bids.

Liability

Before putting in a bid, auction participants would be required to agree to comply with the auction terms and conditions. There are a number of options for dealing with the risk of non-payment, including posting of surety bonds, taking a deposit or taking full payment in advance. The B.C. Government would determine how this risk is mitigated.

Announcing the results of the auction

B.C. would announce the results of the auction as soon as practicable after the bidding window closes. The information released would be at the discretion of the B.C. Government and might include some or all of the following: the clearing price, the total quantity of allowances sold, the number or names of successful and unsuccessful bidders, and the quantity of allowances purchased by each successful bidder.

Payment for and transfer of allowances

Transfers of allowances to the nominated accounts of the successful bidders would be processed as quickly as possible but it may take up to fifteen working days after the auction outcome is known. The recipient would have responsibility for checking that they have received the number of allowances that corresponds to their successful purchase.

Unsold allowances

All allowances that are unsold at any particular auction would be held in a B.C. holding account for later allocation, cancellation or retirement at the B.C. Government's discretion – consistent with the WCI recommendation on holding allowances beyond the end of the compliance period.

Appointing an independent observer

The B.C. Government may appoint an independent observer to oversee and to report on the conduct of the auction, in the context of preventing market abuse and maintaining confidence in the integrity of the auction process. The independent observer would be required to say whether it believes that the auction process has been correctly followed. The independent observer's auction report would be released, probably along with or soon after the auction results.

ii. Considerations for distribution of allowances

Freely distributing allowances

As described above, there are several options for how to distribute free allowances, including benchmarking and grandfathering.

B.C. Government's considerations in determining how to freely distribute allowances may include the approaches outlined in the following subsections:

Encouraging emission reductions prior to the program start

Emitters that have already undertaken emissions reductions prior to the start of the trading program should not receive smaller allocations than ones that have failed to do so. Once the program is in place the carbon price will provide the incentive to further reduce emissions. In the allowance distribution plan, the B.C. Government may designate allowances for regulated operations as an incentive for early reductions. The early reductions must have occurred in the years 2008-2011. These early reduction allowances (ERAs) will be designed to reward those who can demonstrate that they have gone beyond business as usual to contribute to B.C. progress towards the overall emissions reduction targets prior to and in anticipation of an enforceable cap. ERAs would be issued in addition to B.C.'s first annual allowance budget. This would not increase the net emissions of GHGs to the atmosphere under the emissions trading system, as ERAs would be issued in quantity no greater than realized emission reductions.

B.C. would forecast the amount of emission reductions based on this facility-level information in order to determine the maximum number of potential ERAs being planned for distribution. To ensure that an ERA is not awarded for unrealized emission reductions, the information used to determine the number of ERAs B.C. expects to issue would be verified by the B.C. Government or by an independent third party after the reductions take place. In the case that emission reductions are lower than expected, the total number of ERAs B.C. plans to issue would be reduced to reflect actual reductions that took place during the eligibility period. The Province would endeavour to award ERAs before the end of 2012 and issue them no later than the first quarter of 2013.

Leakage and Competitiveness

As long as climate policy is not global there is the potential for leakage – where emissions limits in one jurisdiction lead to increased production in jurisdictions without similar constraints. Leakage may result in the net effect on global emissions being less than the effect of the system in B.C. Within the WCI jurisdictions, leakage can be minimized by harmonizing allocation approaches for sectors that trade across the WCI region.

New Entrants

There are a number of potential methods to incorporate new entrants into the system, and to allow for the estimation of emissions and the allocation of allowances to new entrants into a compliance period. The intent of the B.C. Government is to treat new entrants in the same manner as existing facilities.

Some emissions trading systems have used two approaches to grant new entrants access to allowances:

- ◆ Requiring new entrants to purchase allowances directly from the market (either through auctions or on the secondary market); and/or
- ◆ Allowing new entrants to direct access to allowances from a new entrant reserve (NER) pool set aside within the allowance budget or carved out from the allowances that were to be auctioned at the time that the new entrant begins emitting.

In providing new entrants with free allowances, the overall allowance budget does not change, reducing the quantity of allowances that can be allocated to existing regulated operations or auctioned.

Promote the development and deployment of technologies such as renewable electricity, carbon capture and storage technologies or clean technology

Allocation can support technology adoption rates whereby the early development of projects leads to accelerated innovation and cost reductions. Emissions trading may fail to provide reliable long-term signals for the deployment of low-carbon technologies, and allocation approaches can only affect these concerns to the extent that they are linked to technology choice and investment.

Closure

When a reporting operation permanently closes, that operation would not receive free allocations in perpetuity. Closure rules are often coordinated with new entrant provisions so if an operation closes, the same demand may be met by production by new entrants. If closed operations kept their allowance allocation, and new entrants get allocations, then allowances would be awarded twice for the same production and emissions. Transfer rules could allow companies to keep the allowances of a closed operation if they can demonstrate that they will increase production capacity by an equivalent amount at another location. Closure rules may prevent leakage which may take place through the closure of production capacity within the trading system and its replacement elsewhere. To the extent closure is no longer induced by the trading program, shifts of production capacity resulting in leakage may be prevented. Effects on employment or other effects may also be reduced if closure is avoided.

Stranded Assets

The value of capital investments made prior to the start of the emissions trading program may be affected by the change in the regulatory regime.

Discussion topics (see response form)

Distribution (allocation) of allowances:

- 3.1 The process to set the three-year allowance distribution budget.
- 3.2 The process to set the annual allowance plan, such as your preference on having allowance distribution at the operation level set annually or for the duration of the compliance period.
- 3.3 The proposed date of March 31st of each year for the Minister to transfer serialized allowances into the accounts of regulated operations in accordance with the applicable quantities on the allowance distribution plan.
- 3.4 Establishing a process for applying for and obtaining approval to submit bids and for B.C. to withdraw that approval that is clear, transparent and does not unfairly favour certain participants over others.
- 3.5 Whether or not B.C. should publish a list of eligible auction participants.
- 3.6 Preferences regarding the announcement of the reserve price in advance of or after the auction, or not at all.
- 3.7 Conduct of the auction, including length of the bidding window, the form that a bid must take, withdrawal of bids, rejection of bids, calculation of the clearing price and how allowances will be allocated in the event of tied bids.
- 3.8 How to mitigate the risk of non-payment, including taking a deposit, not requiring advance payment but publicizing any default, or taking full payment in advance.
- 3.9 The means for new entrants to access allowances.

4. Registry and accounts for emissions trading system participants

B.C. would establish and maintain a registry to ensure the accurate accounting of the issue, holding, transfer, retirement and cancellation of compliance units, and the compliance obligations and status of regulated operations. B.C. may maintain the registry in a consolidated system, together with one or more other WCI partner jurisdictions. Functionally, the registry may also be integrated with the emissions reporting database and information management for offsets.

Any person or organization (not just regulated operations) – including the B.C. Government or someone acting on its behalf – may hold compliance units. The registry would contain separate accounts to record the compliance units held by each person or organization to whom and from whom compliance units are transferred.

Information collected by and stored in the registry would be used when determining the Province's performance in relation to its greenhouse gas emissions reduction targets, including those set by the *Greenhouse Gas Reduction Targets Act (GGRTA)*. The registry would also collect information that is important for market surveillance and market oversight purposes.

The objectives in the design of the registry and accounts are:

- ◆ To establish transparent requirements for opening a general account in the registry, including agreeing to comply with the terms and conditions for the registry; and
- ◆ To specify the purposes related to the *Cap and Trade Act* that the B.C. Government might use information held in the registry, particularly for market oversight.

A. *Establishing and maintaining the registry*

In order to operate the emissions trading system, B.C. would establish and maintain a registry to ensure the accurate accounting of the issue, holding, transfer, retirement and cancellation of compliance units. B.C. would be able to appoint an identified party to establish and maintain the registry on its behalf, and to maintain the registry in a consolidated system together with one or more other WCI partner jurisdictions. The mechanics of how transactions and processes may occur in the registry could be modified over time to align with other WCI jurisdictions or to reflect best practices in registry operation.

The B.C. Government would designate a tracking system administrator to operate and maintain the registry in accordance with this regulation.

Those using the registry would agree to comply with the registry terms and conditions, which would apply in addition to this or any other relevant regulations. The regulation should specify some of the issues that the terms and conditions might address, which include specifying the obligations of the registry user and limits on the liability of the B.C. Government.

B. *Accounts*

The registry would contain general accounts, compliance accounts, at least one provincial retirement account and at least one provincial cancellation account. All accounts would be capable of holding all types of compliance units. To address a compliance obligation, compliance units surrendered by each

regulated operation would be transferred into the provincial retirement account, from where they would be permanently retired.

Applying to open a general account in the registry

For each account, the applicant would need to nominate authorized account representatives. To apply to open an account, a completed application form would be submitted to the registry administrator via the registry website. The applicant would need, within 15 days, to deliver information to identify the applicant and the authorized account representatives to the administrator. The information required for identification purposes would be set out in the regulation.

The application would only be complete when all the identification information required by the regulation is received by the administrator. If the applicant fails to complete the application within the required time, the application may lapse. The applicant and/or authorized account representatives would notify the administrator of any change provided in connection with the application promptly upon becoming aware of any such change.

Accounts for regulated operations

The regulation would require that a general account and a compliance account are created for each regulated operation. The regulated operation would apply for its general account as outlined in section 1 C of this consultation paper (The regulated operation might open further general accounts but would only have one compliance account.). The regulated operation would surrender a number of compliance units equal to its verified emissions, as verified in accordance with the Reporting Regulation, by transferring them from its general account to its compliance account before the compliance deadline. Compliance units could not be transferred out of the compliance account, except by the registry administrator.

Provincial Holding Account(s)

The B.C. Government would maintain at least one general account in the registry, which would be known as a provincial holding account. The B.C. Government may use this account to hold allowances or offsets (ERUs) after they are issued but before they have been allocated (either for free or through auctioning) or transferred to the project developer. The B.C. Government may also create other provincial holding accounts, for specific purposes such as holding allowances that are to be allocated to new entrants, or for holding a quantity of compliance units as a strategic or contingency reserve. B.C. could also contribute allowances to a regional (WCI) strategic or contingency reserve.

C. Tracking, use and disclosure rules for compliance units

Serialized allowances

The B.C. Government would create B.C allowances (as described in section 2 of this consultation paper) and would assign a unique serial number to allowances that indicates the year (“vintage”) for which the allowance was issued.

Banking and expiration

The proposed regulation would include the following rules associated with banking and expiration of compliance units:

- a) Allowances may be held (“banked”) or used to meet a compliance obligation;

- b) Regulated operations may not use an allowance issued for a future compliance period to satisfy compliance requirements (described in section 6 A of this consultation paper), unless the allowance has been purchased to pay for non-compliance penalties (described in section 6 B of this paper);
- c) Compliance units do not expire and are not removed from the registry until:
 - a. they are surrendered by a regulated operation and retired by the B.C. Government,
 - b. the unit is voluntarily submitted to the B.C. Government for retirement, or
 - c. the unit is retired by the B.C. Government; and
- d) ERUs (offsets) and RCUs may be banked or used to meet a compliance obligation.

Reporting and confidentiality

CAS proposes to collect specific market information via the registry, both through account registration and compliance unit transfer requests. A subset of this information would be disclosed publicly, with some information (such as volume and price of transactions), aggregated to avoid revealing confidential business information.

Information associated with a general account in the registry that may be disclosed would include: the name, affiliations and location of the account holder and of the beneficial owners of any compliance units held in that account; the account number; and the names, addresses, telephone numbers and e-mail addresses of the authorized account representatives.

Information associated with a compliance account in the registry that may be disclosed includes: the regulated operation’s total covered emissions annually and summed for the compliance period; the amount of allowances, offsets and RCUs held and surrendered; and the compliance status of the regulated operation.

Discussion topics (see response form)

Registry and accounts for emissions trading system participants:

- 4.1** The proposed types of accounts.
- 4.2** What information to make publicly available from the registry.

5. Market design and oversight

North American emissions trading systems will have the potential to be financially significant over time. B.C. and WCI partners have evaluated potential market oversight program design options for their ability to ensure efficient operation of secondary commodities and derivatives markets. This evaluation has taken place in the context of wide ranging regional, national and international debates about comprehensive financial reform. Additional safeguards to address concerns about market manipulation are being discussed in the US and Canada.

Compliance units are interpreted as a “commodity” under B.C. legislation. Oversight of transactions in the primary and secondary commodity markets, which are physically settled through the registry, would be overseen by the B.C. Government, similar to other commodities such as energy. The BC *Securities Act*, *Securities Regulation*, and *Securities Rules*, as well as notices, instruments, and policy documents, regulate trading in securities and exchange contracts within BC. The *Securities Act* is the statute that establishes BC's securities laws and gives the BC Securities Commission (BCSC) its powers and duties. The Securities Rule establishes requirements that apply to self regulatory bodies, exchanges and dealers. In a cap-and-trade system, BCSC would have the authority to oversee the commodity *derivatives* market (i.e., futures contracts, options and swaps for delivery of compliance units) through exchanges and over-the-counter transactions through investment dealers.

There several marketplaces where transactions in compliance units and compliance unit derivatives may take place. The market types and proposed regulator for each are summarized in the following table:

Market Type	B.C. Government Oversight	B.C. Securities Commission Oversight
Primary commodities market (i.e., government distribution)	<ul style="list-style-type: none"> ◆ Direct allowance allocation ◆ Allowance auction ◆ Offset credit issuance 	
Secondary commodities market (i.e., spot/ cash market)	<ul style="list-style-type: none"> ◆ Over-the-counter transactions ◆ Exchange-based trade 	
Derivatives market (e.g., futures, swaps, options)		<ul style="list-style-type: none"> ◆ Over-the-counter transactions ◆ Exchange-based trade

The objectives of market design and oversight are:

- ◆ To have a liquid market that promotes transparent price discovery;
- ◆ To support market efficiency, maturation and innovation – facilitating the creation of new instruments and risk management options for regulated operations;
- ◆ To provide regulated operations and other market participants with fair and equal access to the market;
- ◆ To support transparency through the collection and disclosure of relevant market information – the benefits of transparency are balanced with the confidentiality of protected information associated with regulated operations;

- ◆ To promote compliance through the design and oversight of the market in a way that effectively prevents fraud and manipulation (e.g., transaction reporting requirements within the tracking system, auction pre-conditions and public disclosure of significant market positions) – regulated operations and other market participants are accountable for their actions and for their compliance liabilities; and
- ◆ To design the market to enable trading between linked systems and to interact effectively with financial markets.

A. *Trading venues*

In the early stages of the emissions trading system development, B.C. would allow for transactions to be over-the-counter until the volume, complexity, number of participants and issues in the market dictate otherwise. It would not mandate exchange trading for any instruments in the compliance unit market during that time.

Recognizing that trading venues like exchanges may enhance price discovery and increase transparency, B.C., along with its WCI partner jurisdictions, would work to enable and encourage exchange trading. It is anticipated that private exchanges may choose to develop trading of compliance units and their derivatives. Any exchange must comply with all existing and applicable commodities and securities laws. B.C. may require additional conditions for exchanges, including registration, licensing, and/or an agreement to collect and aggregate emissions trading system data for the B.C. Government.

B. *Information and disclosure*

For transactions that are physically settled in the compliance unit tracking system, the authorized account representative would be required to report certain information regarding those transactions to the B.C. Government through the compliance unit tracking system. This would create a record of ownership in the tracking system, and enable disclosure of basic information on aggregate transactions.

The B.C. Government may require the following and/or additional information to be submitted through the registry as a condition for transferring compliance units between accounts:

- ◆ Identifying number of the account of origin;
- ◆ Name of the account representative authorizing the transfer from the account of origin;
- ◆ Identifying number of the receiving account;
- ◆ Name of the account representative authorizing the transfer to the receiving account;
- ◆ Serial numbers of the compliance units transferred; and
- ◆ Price for each type of compliance unit.

B.C. would consider accommodating exchanges or others that may wish to “net” transactions and provide net reports, and may not require price information for transfers between corporate affiliates.

The B.C. Government may: (a) mandate that the transaction history for each compliance unit remain accessible and visible in the registry; and (b) order to allow the B.C. Government to collect, analyze, aggregate and report on aggregate information and facilitate market surveillance.

C. *Maintaining integrity of the market*

Market manipulation can stem from the acquisition and exercise of “market power,” the ability of an actor to alter a price, usually due to control of a significant proportion of the market. In order to promote compliance in a way that effectively prevents fraud and manipulation, the B.C. Government is considering applying an accountability limit. At a given percentage of market holdings or market position, a review would be triggered, and the B.C. Government would have the authority to require the beneficial owner to make a reduction in the holding or not acquire further holdings if deemed necessary.

Surveillance of the primary and secondary commodities markets

In order to effectively oversee the primary and secondary commodity markets, the B.C. Government would collect and analyse information on transactions in these markets when they are physically settled through the compliance unit tracking system. The B.C. Government is looking at what new regulatory requirements are necessary to effectively guard against market manipulation and when breached what enforcement actions to take.

Market surveillance activities may include:

- ◆ Requiring that basic information on all transactions in the primary and secondary market must be disclosed to the B.C. Government or a delegated entity on a confidential basis;
- ◆ Collection of and access to relevant data;
- ◆ Monitoring, analysis and reporting on compliance with rules, standards, procedures and practices to reduce the potential for market manipulation, and guard against potential collusion;
- ◆ Evaluating early warning of trends in the market;
- ◆ Uncovering structural problems in the market that may inhibit robust and competitive market;
- ◆ Advice on market design and operation that will clearly define prohibited behaviour and improve monitoring and detection;
- ◆ Identifying on an ongoing basis any design flaws in market rules, standards and procedures;
- ◆ Raising the visibility of behaviour that is inconsistent with the system goals and will require further investigation and/or enforcement measures by the B.C. Government; and
- ◆ Frequent interaction and close relationship with the enforcement staff designated by the B.C. Government.

Surveillance of the derivatives market

The British Columbia Securities Commission (or potentially a federal securities regulator if such a body is created in the future) would be responsible for oversight of the derivatives markets, as per its existing practice.

Discussion topics (see response form)

Market design and oversight:

- 5.1** Whether to require reporting of over-the-counter derivative contracts to a central registry.
- 5.2** Whether to limit the number of compliance instruments an entity could hold.

6. Compliance of regulated operations with program requirements

The *Cap and Trade Act* allows for allowances, offsets and recognized compliance units (RCUs) to be used by regulated operations for compliance. The proposed Emissions Trading Regulation would set out how approved allowances, offsets and RCUs may be used for compliance by surrendering them through the registry. These provisions are discussed further in the sections of this consultation paper pertaining to the registry, regulated operations and B.C. compliance accounts (see section 4 above).

The objectives of the compliance requirements are to:

- ◆ Promote and enforce full compliance with the emissions trading system within B.C.;
- ◆ Facilitate electronic compliance of regulated operations through the registry;
- ◆ Assure accurate compliance utilizing a link between the quantity of a regulated operation's reported emissions and its compliance unit liability posted within the registry;
- ◆ Assure availability of compliance units in the market by approving RCUs from other jurisdictions; and
- ◆ Secure that the environmental goal of the emissions trading system is achieved by limiting the use of offsets and applying penalties in case of non-compliance.

A. Evidence of compliance

A regulated operation would demonstrate compliance with the *Cap and Trade Act* and the Emissions Trading Regulation by transferring a quantity of compliance units into its compliance account equal to its compliance obligation. Compliance units transferred into a compliance account would be transferred into the B.C. retirement account, where the serialized compliance units would be permanently retired. The regulated operation's compliance obligation associated with the submitted compliance units would be considered met upon receipt of the appropriate number of compliance units in the B.C. compliance (retirement) account.

One option for the B.C. Government to avoid late attempts to transfer compliance units after the compliance deadline, would be to temporarily freeze the compliance accounts of regulated operations starting July 1 of the calendar year following the last year of the compliance period.

B. Penalties

Before July 1 of the calendar year following the last year of the compliance period, regulated operations would be required to transfer a quantity of compliance units at least equal to their compliance obligation into their compliance account. Compliance penalties would be assessed and owing for each compliance period until July 1 of the calendar year following the last year of the compliance period.

Regulated operations that do not meet their compliance obligations would be required to obtain and surrender three allowances for every metric ton of CO₂e not covered by a compliance unit at the deadline. This obligation would not preclude B.C. from establishing administrative, civil and criminal penalties for non-compliance.

The three-to-one obligation would not affect the liability of the owners and operators of a regulated operation to immediately surrender sufficient compliance units into the regulated operations compliance

account. It also would not affect their liability for any fine, penalty or assessment, or their obligation to comply with any other remedy, as ordered under applicable jurisdiction law.

To pay for penalties, the B.C. Government could allow the use allowances from future vintages.

In limited circumstances, the B.C. Government would be able to determine a regulated operation's emissions so that the compliance obligation can be calculated.

C. Using offsets for compliance

The *Design for the WCI Regional Program* recommends a limit on the use of offset credits issued by WCI partner jurisdictions, as well as the use of compliance units from other GHG emission trading systems that are recognized by the WCI partner jurisdictions (RCUs), to no more than 49 percent of the total emission reductions from 2012 to 2020. This limit would be set at an equal percentage of compliance obligations across compliance periods.

Consistent with this recommendation, the B.C. Government would set limits on the use of offsets and RCUs as a percentage of an operator's compliance obligation and is still evaluating and seeking stakeholder input about the percentage to be adopted in B.C.

D. Compliance flexibility

The emissions trading system approach being proposed by the B.C. Government incorporates multiple design features that provide compliance flexibility while ensuring that emission goals are achieved. These include:

- ◆ Permitted use of a limited number of offset certificates and approved compliance units from other systems;
- ◆ Unlimited banking;
- ◆ Multi-year compliance period;
- ◆ Linking with other partner jurisdictions;
- ◆ Broad scope; and
- ◆ Supporting low-carbon policies and programs.

Regulated operations can manage their liability risk using these and using market instruments. The B.C. Government will consider additional mechanisms being assessed by the WCI for use in a condition in which the allowance prices were unacceptably high process, but they are not incorporated in the current consultation paper.

Discussion topics (see response form)

Compliance of regulated operations with program requirements:

- 6.1** The process for regulated operations to demonstrate compliance.
- 6.2** The setting of a limit on the use of offsets for compliance.

Appendix A: Source types being considered for inclusion in the regulation

Source types being considered for inclusion as “covered sources” include the following:

Required in the Reporting Regulation – schedule A	
Single facility operations	
1	(a) Emissions from general stationary combustion of fuel or waste with production of useful energy at a single facility operation (b) Emissions from general stationary combustion of waste without production of useful energy
2	(a) Emissions from anode consumption in electrolysis cells, anode and cathode baking, or green coke calcination (b) Emissions from anode effects (c) Emissions of cover gas from electrolysis cells
3	Emissions from steam reformation or gasification of a hydrocarbon during ammonia production
4	Emissions from the calcination of limestone, shale, sand, slag or other raw materials used to produce clinker, as well as the oxidization of organic carbon in the raw material
5	Emissions from coal (surface or underground) when broken or exposed to the atmosphere during mining
6	Emissions from stored coal piles
7	Emissions associated with removal of impurities using carbonate flux reagents, the use of reducing agents, the use of material (e.g., coke) for slag cleaning, and the consumption of graphite or carbon electrodes during copper or nickel smelting or refining
8	(a) Emissions from fuel combustion for electricity generation (b) Emissions from acid gas scrubbers and acid gas reagent (c) Emissions from cooling units (d) Emissions from geothermal geyser steam or fluids (e) Emissions from installation, maintenance, operation and decommissioning of electrical equipment
9	Emissions from electronics manufacturing, including the cleaning of chemical vapor deposition chambers and plasma/dry etching processes
10	Emissions associated with removal of impurities using carbonate flux reagents, the use of reducing agents, the use of material (e.g., coke) for slag cleaning, and the consumption of graphite or carbon electrodes during ferroalloy production
11	Emissions from the calcination of carbonate materials
12	Emissions from steam reformation of hydrocarbons, partial oxidation of hydrocarbons, or other transformation of hydrocarbon feedstock
13	Emissions from the anaerobic or aerobic digestion of wastewater
14	Emissions from the use of reducing agents during lead production
15	Emissions from the calcination of carbonate materials in lime manufacturing
16	(a) Emissions from the use of reducing agents in magnesium production (b) Emissions of cover gases or carrier gases in magnesium production
17	Emissions associated with catalytic oxidation, condensation and absorption processes during nitric acid manufacturing

Required in the Reporting Regulation – schedule A

Single facility operations

- | | |
|----|---|
| 18 | (a) Petrochemical production related emissions from flares and oxidizers
(b) Petrochemical production related emissions from process vents
(c) Petrochemical production related emissions from equipment leaks |
| 19 | (a) Petroleum refining related emissions from catalyst regeneration
(b) Petroleum refining related emissions from process vents
(c) Petroleum refining related emissions from asphalt production
(d) Petroleum refining related emissions from sulphur recovery
(e) Petroleum refining related emissions from the flare pilot and the combustion of purge gas
(f) Emissions from above ground storage tanks at refineries
(g) Emissions from oil-water separators at refineries
(h) Emissions from equipment leaks at refineries |
| 20 | Emissions from the reaction of calcium carbonate with sulphuric acid |
| 21 | Emissions from pulping and chemical recovery |
| 22 | Emissions from combustion of refinery fuel gas, still gas, flexigas or associated gas |
| 23 | Emissions from the use of reducing agents during zinc production |
-

Linear facilities operations

- | | |
|---|---|
| 1 | (a) Emissions from general stationary combustion of fuel or waste with production of useful energy at a linear facilities operation
(b) Emissions from general stationary combustion of waste without production of useful energy at a linear facilities operation |
| 2 | (a) Flaring emissions from oil and gas extraction and gas processing activities
(b) Venting emissions from oil and gas extraction and gas processing activities
(c) Fugitive emissions from oil and gas extraction and gas processing activities |
| 3 | Emissions from installation, maintenance, operation and decommissioning of electrical equipment |
| 4 | (a) Flaring emissions from natural gas transmission, natural gas distribution or natural gas storage
(b) Venting emissions from natural gas transmission, natural gas distribution or natural gas storage
(c) Fugitive emissions from natural gas transmission, natural gas distribution or natural gas storage |
| 5 | (a) Flaring emissions from oil transmission
(b) Venting emissions from oil transmission
(c) Fugitive emissions from oil transmission |
| 6 | (a) Flaring emissions from carbon dioxide transportation
(b) Venting emissions from carbon dioxide transportation
(c) Fugitive emissions from carbon dioxide transportation |
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Appendix B: Acronyms and abbreviations

Acronym	Definition
B.C.	British Columbia
BCSC	British Columbia Securities Commission
CAS	Climate Action Secretariat
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide-equivalent (one metric tonne of CO ₂ emissions)
e.g.	for example
ERAs	Early reduction allowances
ERU	British Columbia emission reduction unit (offset)
FOI	<i>Freedom of Information (Act)</i>
GGRCTA	<i>Greenhouse Gas Reduction Cap and Trade Act</i>
GHG	Greenhouse gas
HFC	Hydrofluorocarbon
i.e.	that is
ISO	International Organization for Standardization
NER	new entrant reserve (pool)
OTC	Over-the-counter (commodities)
RCU	Recognized compliance unit (a compliance unit recognized by B.C. under GGRCTA but not issued by B.C.)
tCO ₂	Tonnes of carbon dioxide
VCS	Voluntary compliance standard
VRE	Voluntary renewable energy
WCI	Western Climate Initiative