



Environment
Canada

Environnement
Canada

Canada

Renewable Fuels Regulation

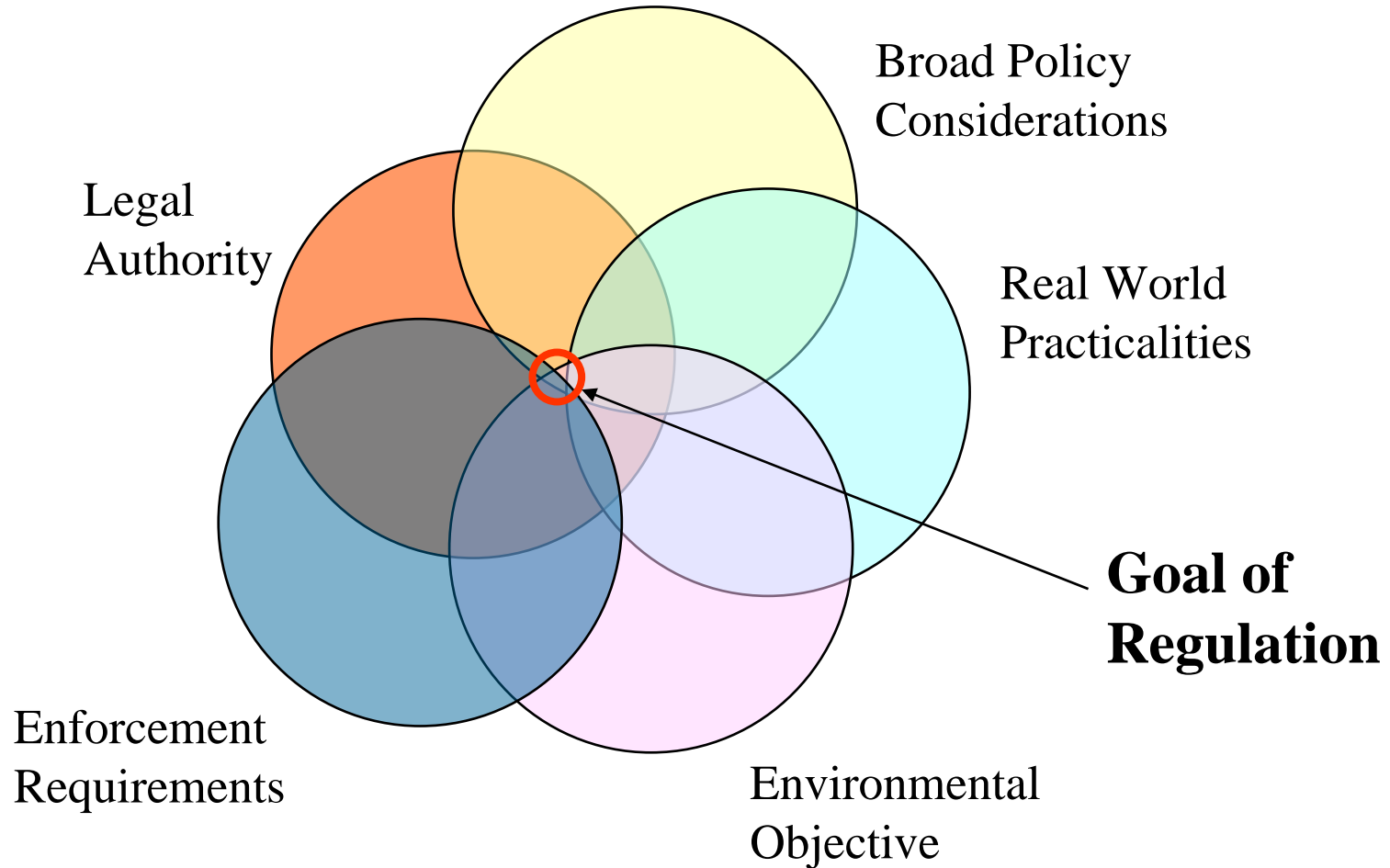
Overview of
Working Document for Consultation



Meeting of Industry Technical Advisory Group

Development of Regulations

Competing considerations



Legislative authority is the *Canadian Environmental Protection Act, 1999* (legal considerations)

- Fuels Division of CEPA
 - Section 139: Prohibition and exceptions
 - Section 140: Regulation-making authority to prescribe the scope of the prohibition
- Economic Instruments
 - Section 326: Regulation-making authority for tradeable units systems
- Recent amendments (enacted in 2008) add authorities regarding:
 - Exceptions
 - Blending
 - Reporting on exports
 - Exemption for producers & importers of < 400 m³/year
- Enforcement Provisions (offences and punishment)
 - These are covered in CEPA, not the regulations themselves
 - Section 272: Contravention of the Act or the regulations
 - Section 273: Providing false or misleading information
 - Penalties: up to \$1,000,000 and/or up to 3 years imprisonment

Current Status

- Considerable design work completed
 - Incorporating all of the Government's policy decisions
- Preliminary draft has been prepared incorporating all policy elements
- Draft being reviewed by Justice Canada & EC Enforcement staff
 - Changes to the draft are expected
- This presentation reviews all the elements of the proposed regulatory structure



Section 1

Interpretation - key definitions:

primary supplier

- producer in Canada of gasoline, diesel fuel or heating distillate oil
- importer into Canada of gasoline, diesel fuel or heating distillate oil
 - [for Federal regulations, “import” means import into Canada, not inter-provincial transfers]

gasoline

- includes finished gasoline and unfinished gasoline

gasoline and distillate compliance periods

- a calendar year, except for the first periods (which are > 12 months)

gasoline pool

- volume of gasoline produced or imported during a gasoline compliance period

distillate pool

- volume of diesel fuel and heating distillate oil produced or imported during a distillate compliance period

renewable fuel

- liquid fuel produced solely from biomass

bio-crude

- liquid renewable feedstock used as a feedstock in a refinery

Section 1

Interpretation - Key definitions (continued)

Zone TNL

- Territories (YK, NWT and NU), and NL for gasoline

trading system participant

- primary suppliers, plus others who elect

compliance unit

- a tradeable unit created pursuant to the Regulations

gasoline compliance unit

- for use in meeting the 5% gasoline requirement

distillate compliance unit

- for use in meeting the 2% distillate requirement or the 5% gasoline requirement

trading period

- runs from the start of a compliance period to Feb 15 after the period ends



There are 2 Parts to the Regulation

- Part 1 - Requirements pertaining to gasoline, diesel fuel and heating distillate oil
 - Most of Part 1 applies to primary suppliers only
 - application
 - prescribed quantities
 - calculation of pools
 - quantity of renewable fuel
 - method for measuring volumes of fuels
 - registration information, records and reports
 - Plus: general recordkeeping and submission provisions
- Part 2 applies to:
 - Trading system participants (primary suppliers, plus others who elect to participate)
 - election to participate in trading system (and registration information)
 - rules for compliance units (creation, ownership, exchange, use and cancellation)
 - records, reports and audit
 - Persons selling fuel for export
 - records and reports
 - Producers or importers of renewable fuel
 - registration information, records, reports and audit

Part 1

Requirements pertaining to gasoline,
diesel fuel and heating distillate oil



Section 2

Application

- This section defines persons to whom the regulations do not apply

Ss (1): Substantive provisions do not apply to anyone who produces or imports less than 400 m³ per year of fuel (including renewable fuel)

- Some recordkeeping requirements apply

Ss (2): The above exclusion does not apply for those who elect to create or exchange compliance units

- If a person decides to participate in the trading system, then the Regulations apply in full

Ss (3): Regulation does not apply to fuel imported in the fuel tank of a vehicle



Section 3

Prescribed Quantities

- The prohibition is the very essence of the regulations
- Requirements for minimum quantity of renewable fuel in:

Gasoline

Ss (1): Effective September 1, 2010, renewable fuel quantity shall not be less than 5% of a primary supplier's gasoline pool

Diesel Fuel & Heating Distillate Oil

Ss (2): UNDER DEVELOPMENT

Eventually, Ss (2) would be amended to be:

- Effective DATE, renewable fuel quantity shall not be less than 2% of a primary supplier's distillate pool
 - "DATE" is to be determined

Section 4

Calculation of Pools

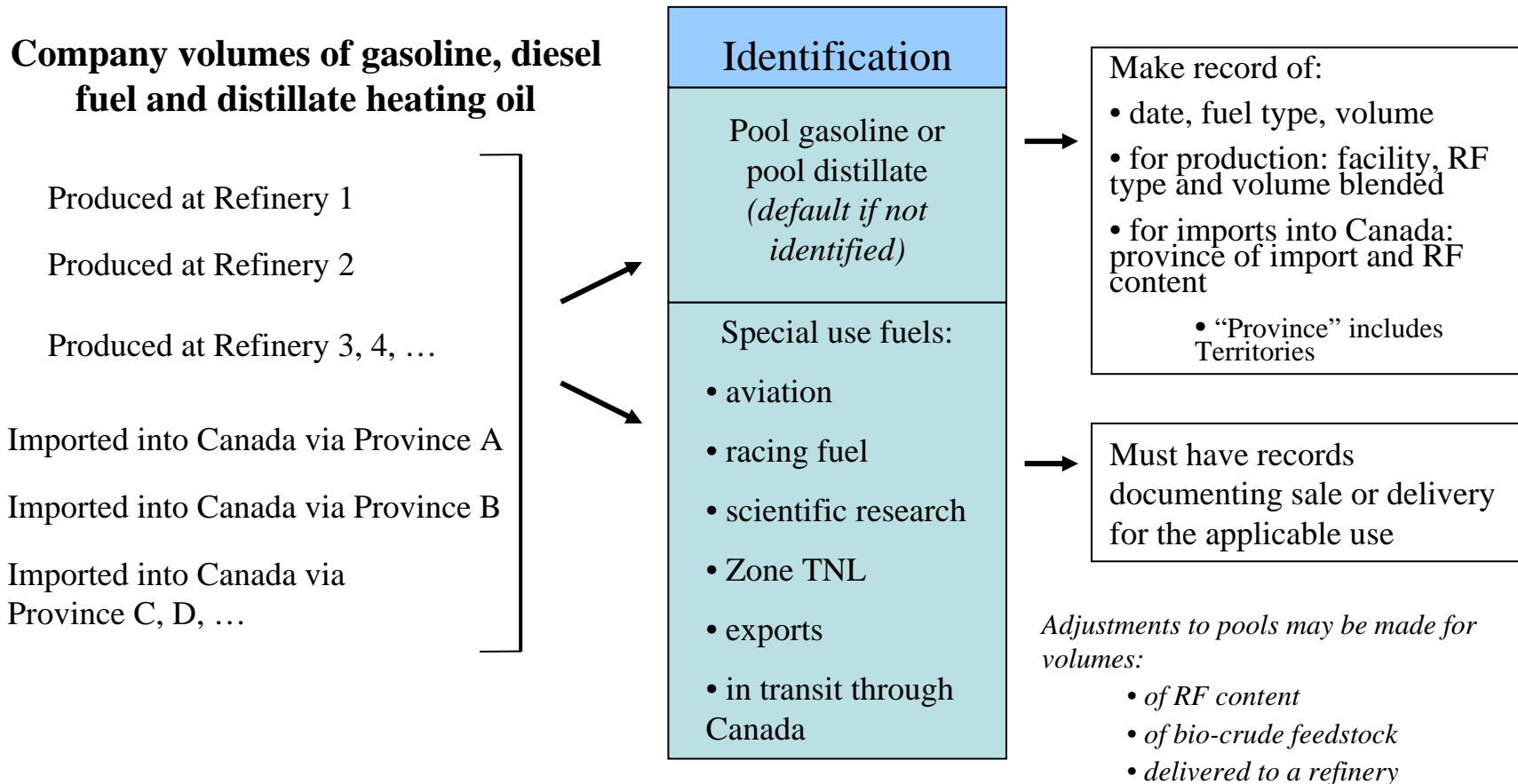
Ss (1) and (2): Primary suppliers must calculate their gasoline and distillate pools for each compliance period

Some volumes may be excluded from the pool:

- Ss (3): exports by primary supplier or affiliate
- Ss (4) and (5): volume of renewable fuel in the gasoline, diesel fuel or heating distillate oil, or volume of bio-crude
- Ss (6) and (7): batches delivered to a refinery the person owns
- Ss (8) to (10): batches delivered to a refinery owned by another person

Gasoline Pool & Distillate Pool

These determine a company's renewable fuel requirements



Section 5

Quantity of Renewable Fuel

- Provides the formulae for calculating the quantity of renewable fuel in:
 - Ss (1): Gasoline
 - Ss (2): Diesel fuel and heating distillate oil



Subsection 5(1)

**Formula for quantity of renewable fuel for gasoline;
the quantity is calculated as:**

$$\text{CRE}_{\text{GAS}} + \text{REC}_{\text{GAS}} - \text{TRF}_{\text{GAS}} - \text{CAN}_{\text{GAS}} + \text{DTG}_{\text{DG}}$$

↓ ↓ ↓ ↓ ↓

1a 1b 2a 2b 3

1. Add together gasoline compliance units that the company:

1a: Created for:

- RF blended with gasoline
- RF blended with non-distillate product
- RF content in imports of blended gasoline & non-distillate
- use of bio-crude as feedstock
- carry forward of gasoline compliance units

1b: Received from others

2. Subtract gasoline compliance units that the company:

2a: Transferred to another person

2b: Cancelled for RF content in exported blended gasoline & non-distillate

3. Add the number of distillate compliance units the company decides to use for its gasoline pool requirement

Subsection 5(2)

Formula for quantity of renewable fuel for diesel fuel & heating distillate oil; the quantity is calculated as:

$$\text{CRE}_{\text{DIS}} + \text{REC}_{\text{DIS}} - \text{TRF}_{\text{DIS}} - \text{CAN}_{\text{DIS}} - \text{DTG}_{\text{DD}}$$

↓ ↓ ↓ ↓ ↓

1a 1b 2a 2b 3

1. Add together distillate compliance units that the company:

1a: Created for:

- RF blended with diesel fuel & heating distillate oil
- RF content in imports of blended diesel fuel & heating distillate oil
- use of bio-crude as feedstock
- carry forward of distillate compliance units

1b: Received from others

2. Subtract distillate compliance units that the company:

2a: Transferred to another person

2b: Cancelled for RF content in exported blended diesel fuel and heating distillate oil

3. Subtract the number of distillate compliance units the company used for its gasoline pool requirement



Section 6

Method for Measuring Volumes of Fuel

Ss (1): Volumes must be measured by meters that are calibrated to industry standards

- by an independent person at least once every 3 months

Ss (2): Importers must have written evidence that volumes have been measured according to industry standards

Ss (3): Rules for rounding



Section 7

Registration as a Primary Supplier

- Provides the Government details on the regulated community
 - Assists in effective administration and enforcement of the regulations
 - Modelled after *Sulphur in Diesel Fuel Regulations* and *Benzene in Gasoline Regulations*

Ss (1): A primary supplier must submit a one-time registration report

Ss (2): Information must be reported for each production facility, blending facility, facility using bio-crude, province of import:

- Name, address, contact person, name of facility
- Previous year's volumes
- Type of renewable fuel feedstock used
- Location of meters, except for importers
- Location in Canada where records will be kept

Ss (3): Report must be updated if information changes

- No later than 5 days after the change

Ss (4): Reported volumes exclude fuel for special uses and export

Section 8

Compliance Period Report by Primary Suppliers

Ss (1): The primary supplier must submit a report with information by facility and province of importation

- By February 15 of the year following each compliance period
 - same date as other Federal fuel regulations

Ss (2): Report must include:

- Name and address
- Volume of regulated pool and values of equation parameters
- Total volume for each production facility and province of importation by type of fuel
- Other information required in Part 2, as applicable

Ss (3): Reported volumes exclude fuel for special uses and export

Ss (4): Exempted from reporting if not producing or importing gasoline during the compliance period



Section 9

Record of Type of Fuel

(modelled after Sulphur in Gasoline Regulations)

Ss (1): The primary supplier may record fuel “type” before dispatch or import of a batch of gasoline, diesel fuel and heating distillate oil

Ss (2): Any batch not identified is considered to be in the primary supplier’s pool

Ss (3): All batches identified as for special use must have written evidence that they were sold or delivered for the appropriate use

- Key features:
 - Defines pool volume
 - Provides for exclusion of:
 1. Fuel for special uses (aviation, competition, scientific research)
 2. Fuel for use in Zone TNL (Territories plus Newfoundland & Labrador)
 - For Newfoundland, only gasoline volumes can be excluded, not diesel fuel or heating distillate fuel
 3. Fuel for export from Canada or in transit through Canada

Sections 10 and 11

Records

General Records by Primary Suppliers

- S 10: The primary supplier must make a record for each batch dispatched or imported into Canada, including:
- Fuel volume, fuel type, renewable volume, facility or province of importation, date of dispatch or importation

Retention of Records

- S 11: Records must be maintained in Canada for 5 years after creation
- Same length of time as under other Federal fuels regulations
 - Applies to all



Section 12

Submission of Samples, Records and Reports

(applies to all)

Ss (1): Minister may request samples and records

Ss (2) and (3): Reports must be submitted in format provided by Environment Canada

- Only if a format has been provided
- Reports must be signed by authorized official, and include registration number (if one has been provided)

Ss (4): No reports are required for those who only produce or import fuels for special use or fuels for use in Zone TNL



Part 2

Requirements pertaining to a system of tradeable compliance units



Compliance is based on compliance units that a company:

1. Created

one compliance unit may be created for each litre of:

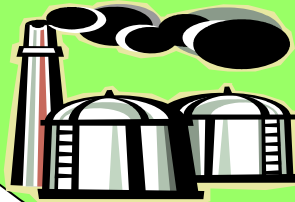
Blending facilities



RF in a blended product that is imported

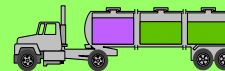
Imports

Refineries



RF blended into fuel at any facility

Bio-crude used as feedstock at a refinery



or

units not used in a compliance period may be re-created for use in the following period

2. Acquired from others



Section 13

Election to Participate in a Trading System for Compliance Units

- Provides the Government with baseline information on the trading participants
 - Assists in effective administration and enforcement of the regulations
 - Parallel to the registration of primary suppliers under section 7

- Ss (1): A non-primary supplier who blends, uses bio-crude as feedstock, or imports blended product may elect to participate by notifying the Minister and providing a one-time registration report
 - One day before creating their first compliance unit
 - Primary suppliers may automatically participate in the trading system

- Ss (2): Information is required for each blending facility and province of import
 - Name, address, contact person, name of facility
 - Previous year's volumes for each facility and province of importation
 - Type of renewable fuel feedstock used
 - Location of volumetric meters, except for importers
 - Location in Canada where records will be kept

- Ss (3): Report must be updated if information changes
 - No later than 5 days after the change

- Ss (4): Notification of withdrawal
 - A person may withdraw from participating in the trading system by notifying the Minister



Section 14

Creation of Compliance Units

- One litre of renewable fuel = one compliance unit

A gasoline compliance unit may be created for each litre of renewable fuel

- Ss (1): blended into gasoline or other petroleum fuel (other than diesel fuel and heating distillate oil)
- Ss (2): contained in imported gasoline or other petroleum fuel (other than diesel fuel and heating distillate oil)

A distillate compliance unit may be created for each litre of renewable fuel

- Ss (3): blended into diesel fuel or heating distillate oil
- Ss (4): contained in imported diesel fuel or heating distillate oil

Ss (5): Compliance units may be created from use of bio-crude feedstock

- For each 10 litres of bio-crude: 3 distillate compliance units and 7 gasoline compliance units
 - ratio is based on national distillate production fraction for 2007 (i.e., 29.7% of total)



Section 14 (continued)

Rules around creation of compliance units

Ss (6): Time of creation (commencing September 1, 2010)

- For blending, when a batch is blended
- For imports, when a blended batch is imported
- For bio-crude use, when the record of feedstock use is made (at least weekly)

Ss (7): Maximum content of renewable fuel

- Compliance units are not created if a batch has a renewable fuel content
 - > 86% for gasoline (to permit E85 blends)
 - > 80% for any other fuel (based on U.S. rule's level for diesel)

Ss (8): Single owner upon creation

- If more than one person owns a batch, compliance units may only be created if there is an agreement identifying a single owner of the compliance units



Section 14 (continued)

Carry-over of compliance units

Ss (9): Gasoline compliance units not used in a compliance period may be re-created for use in the following period

- Ss (10): to a maximum of 20% of renewable fuel requirement for gasoline pool for primary suppliers (based on U.S. rule)
 - For others, maximum of owned at end of trading period less the number of gasoline compliance units that it re-created during the compliance period (effectively a two-year life, as per U.S. rule)

Ss (11): Distillate compliance units not used in previous compliance period may be re-created for use in the following period

- Ss (12): to a maximum of 20% of renewable fuel requirement for distillate pool for primary suppliers
 - For others, maximum of owned at end of trading period less the number of distillate compliance units that it re-created during the compliance period



Section 15

Ownership of Compliance Units

Ss(1): Compliance units are owned by the trading system participant who creates them

Ss(2): A compliance unit may only have a single owner at any time

Ss(3): Only trading system participants may own compliance units



Section 16

Exchange of Compliance Units

Ss(1): Compliance units may be exchanged provided both parties make a record of the exchange

Ss(2): Compliance units created during a compliance period cannot be exchanged after the end of the trading period for that compliance period (February 15)

Ss(3): A compliance unit may only be transferred to a primary supplier

- No exchanges allowed between non-primary suppliers
- Helps ensure compliance units end up with those required to meet renewable fuel requirements



Summary - Exchanges of Compliance Units

Ensuring that compliance units reach obligated parties

		Recipient		
		Primary supplier	Non-PS trading system participant	Another party
Transferor	Primary supplier	Yes	No	No
	Non-PS trading system participant	Yes	No	No
	Another party	No	No	No

Section 17

Use and Cancellation of Compliance Units

Ss(1): Compliance units are valid only for the compliance year in which they are created (or “re-created”)

Ss(2): A trading system participant must cancel one compliance unit for each litre of renewable fuel in a batch of fuel exported

Ss(3): A trading system participant must cancel the original unused compliance unit that was used to “re-create” a new compliance unit



Section 18

Compliance Unit Account Book

- First-level tool for tracking and enforcement of compliance units

Ss (1): Participants shall make a compliance unit account book

- An ongoing record of the balance of their compliance units
- Separately tracks gasoline and distillate compliance units

Ss (2): Record changes and balance for each facility, province of import, province of export, transfer and receipt, carry-over, re-creation and total

Rules regarding compliance unit account book

- Ss (3): set balance to zero at the beginning of each compliance period
- Ss (4): record creations and cancellations at least monthly
- Ss (5): record transfers and receipts when they occur
- Ss (6): balance can never be negative

- An illustrative example on next slide
 - Transactions for gasoline compliance units for one company for one month

Compliance Unit (CU) Account Book

An illustrative example for gasoline compliance units

CU Account Book for 2014 (gasoline)	Blending Facility, Province of Import, or Participant	Transaction Details	CU's Created	CU's Received	CU's Transferred	CU's Cancelled	Period-to-date: by Facility, Province or Participant	Period-to-date: Total CU's
November 30	Facility 1	Monthly blending	123,012				1,258,158	3,258,102
November 30	Facility 2	Monthly blending	200,454				2,123,098	3,381,114
November 30	Ontario	Monthly imports into Canada <i>(common event)</i>	5,200				15,058	3,386,314
December 11	Company Y	Transfer <i>(second of the year)</i>			10,000		20,000	3,376,314
December 17	Alberta	One-time export <i>(unusual event)</i>				800	800	3,375,514
December 31	Facility 1	Monthly blending	129,589				1,387,747	3,505,103
December 31	Facility 2	Monthly blending <i>(unplanned 19-day shutdown)</i>	50,550				2,173,648	3,555,653
December 31	Ontario	Monthly imports into Canada <i>(Seaway closed)</i>	0				15,058	3,555,653
January 13 <i>(2015)</i>	Company Z	Receipt		150,500			150,500	3,706,153
February 15	All	Final balance at the end of the trading period						3,706,153

2014 gasoline pool = 74,856,212 litres → 5% requirement = 3,742,811, which is more than CU balance
Company uses 36,658 unused 2014 distillate CU's to bring it into compliance

Section 19

Additional Records for Trading System Participants

Ss (1): For each batch blended

- Facility location, type and volume of renewable fuel, type of renewable fuel feedstock, type and volume of petroleum fuel, date of blending, provider of the renewable fuel, producer of renewable fuel (if known)

Ss (2): Similar information for weekly bio-crude use

Ss (3): Similar information for each batch imported

Ss (4): For compliance units “re-created”

- Quantity of each type and date of re-creation

Ss (5): For each fuel produced, imported or sold for export by the participant

- Fuel type, volume of renewable fuel, quantity of compliance units cancelled

Ss (6): Additional records evidencing information recorded in the compliance unit account book and above records

- For example: metered values, bills of lading, sales receipts, records of payment, transaction receipts
- Modelled after Ontario’s *Ethanol in Gasoline Regulation*



Section 20

Compliance Period Report for Trading System Participants

Ss (1): Participants must submit a report for each compliance period

- With information by facility and province of import or export where compliance units were created, exchanged or cancelled
- Submission by February 15 following the end of the compliance period

Ss (2): Report must include:

- Name and address of participant
- Name and address of independent calibrator of volumetric meters
- For each facility: number of compliance units created, volume of renewable fuel blended or bio-crude used, total volume of resulting blend, type of fuel
- For each province of importation: number of compliance units created, volume of renewable fuel in the imported fuel, total volume of imported fuel, type of fuel
- For each province of export: number of compliance units cancelled, volume of renewable fuel in the exported fuel, total volume of exported fuel, type of fuel
- For each participant from whom the person received compliance units: name and quantity
- For each participant to whom the person transferred compliance units: name and quantity
- Quantity of compliance units owned at the end of the trading period
- Quantity of compliance units re-created
- Names of persons from whom renewable fuel or bio-crude was obtained and volumes
- Year-end volumes and exports of renewable fuels
- Copy of compliance unit account book



Section 21

Records and Reporting on Sales of Fuel for Export

- This section is necessary for the tracking of renewable fuel and the cancellation of compliance units
 - Similar provisions for primary suppliers and other trading system participants are found in sections 19 and 20

Ss (1): A person, other than a trading system participant, who sells fuel for export, must make a record

- For fuel exported with renewable fuel content, and for renewable fuel exported
- The record shall contain the type of fuel and the volume of renewable fuel

Ss (2): The person must provide a report by February 15

Ss (3): The report must contain information on

- Volume of fuel exported
- Volume of renewable fuel in the fuel exported
- Volume of renewable fuel exported (if not contained in a petroleum fuel)

Section 22

Records and Reporting on Renewable Fuel

- This section is necessary to track the transactions of renewable fuels and to verify the creation of compliance units

Ss (1): A person that produces or imports renewable fuel must provide a one-time report with registration information

Ss (2): Report must include:

- name, address, contact person, facility location, province of importation, type and volume of renewable fuel produced or imported in the previous year, location of volumetric meter

Ss (3): Report must be updated if information changes

- no later than 5 days after the change



Section 22 (continued)

Records and Reporting on Renewable Fuel

Ss (4): A person that produces or imports renewable fuel must make a record for each batch dispatched from a production facility or imported, including:

- volume, renewable fuel type, type of feedstock, facility or province of import, date of dispatch or importation, whether the batch will be exported (if known), where and by whom the batch will be blended (if known)

Ss (5): A similar record is required for each batch sold

Ss (6): A renewable fuel producer / importer must submit a report with information by facility and province of importation

- by February 15 of the year following each compliance period

Ss (7): Report must include:

- name and address
- type of renewable fuel, type of feedstock, volumes produced or imported, volumes sold, volumes sold for export
- names to whom the renewable fuel was sold and volumes

Section 23

Auditor's Report

- The requirement for a third-party independent audit is modelled after the provisions in the *Sulphur in Gasoline Regulations* and the *Benzene in Gasoline Regulations*

Ss (1): Trading system participants and producers or importers of renewable fuel, shall have their records and reports audited each compliance period

- Submit the auditor's report by May 31
- Signed by auditor and containing
 - names and addresses,
 - procedures followed,
 - review of documentation on exchange of compliance units,
 - review of compliance unit account book,
 - assessment of evidencing of entries by records,
 - total volumes of fuel,
 - recalculation of pool volumes and equation parameters (if applicable),
 - assessment of compliance,
 - description of non-compliance (if any)

Ss (2): Does not apply to a person only producing or importing fuel for special uses or for use in Zone TNL, unless compliance units are created or exchanged

Ss (3): Exempted from audit report if not producing gasoline or importing during the compliance period



Section 24

Coming into Force

- *“These Regulations come into force upon registration of these Regulations.”*
 - not including requirements that have the effect of prescribing a prohibition for diesel fuel and heating distillate oil
- The final requirements for 2% in diesel fuel and heating distillate oil are to be brought into force at a later date



Summary of key requirements

Requirement	Primary supplier (producer or importer)	Non-PS trading system participant (blender)	Seller for export	Producer or importer of renewable fuel
Renewable fuel in gasoline, diesel fuel, and heating distillate oil	Yes	No	No	No
Election into the trading system	Automatic	Optional	No	No
One-time registration	Yes	Yes	No	Yes
Annual reports	Yes	Yes	Yes	Yes
Compliance unit account book	Yes	Yes	No	No
Other records	Yes	Yes	Yes	Yes
Third-party audits	Yes	Yes	No	Yes



Questions and Comments?

The Regulatory Equation

$$\text{Flexibility} \times \text{Enforceability} = \text{Regulatory Complexity}$$