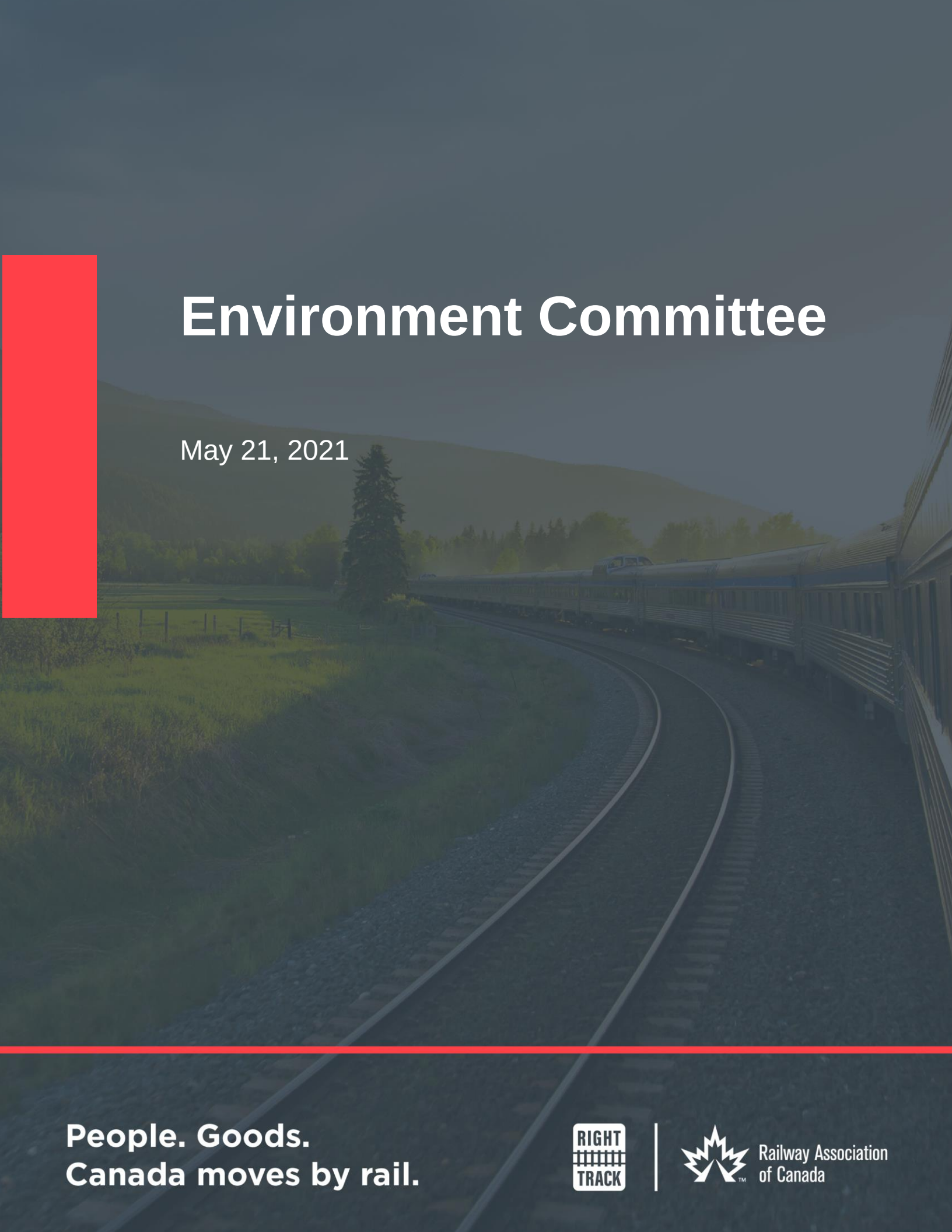
Environment Committee

May 21, 2021



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Railway Association of Canada

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Competition Law Compliance Policy

STATEMENT

The RAC believes in fair competition for businesses in the transportation sector and for their customers.

The RAC is committed to comply with competition laws applicable in Canada.

Under the leadership of its Board of Directors, the RAC carries out its activities, in a way as to not prevent or lessen competition, provides guidance to its committees and its employees on how to comply with applicable competition laws, and promotes with them the importance and value to the RAC of complying with competition laws.

The RAC Corporate Secretary ensures that RAC, its committees and its staff are familiar and comply with this policy.

COMPETITION LAW

The thrust of competition laws is to maintain and encourage competition in the market place and as a result to prohibit any act or agreement that might lessen competition. Non-compliance with the law could constitute a criminal offence to which significant fines might be attached.

RAC is a forum for railway members to exchange information and views on the railway sector. Particularly because RAC is an association that represents most of the players in the rail sector in Canada, any activity it conducts that might have the result of lessening competition or might be perceived as such should be carefully scrutinized.

PROHIBITED ACTIVITIES

Any activity, including discussions or agreements that relates to the following issues could result in the lessening of competition and as such is strictly not allowed.

- Prices (rates) charged to shippers for services provided by members of the RAC
- Prices (costs) paid to suppliers for services provided to members of the RAC
- Any other conditions associated with services provided to shippers or received from suppliers of RAC members, including discounts, rebates, etc. and level of service provisions
- Customer or territory allocation
- Limitation of supply of services provided by RAC members to their customers

GUIDANCE

Any activity, including discussions or agreements that could even remotely be construed as being an agreement or arrangement covering issues that could prevent or lessen competition, cannot take place at the RAC or any of its committees or any meeting organized or attended by RAC staff.

When meeting, members of a RAC committee or of the Board of Directors should

- Have a preset agenda and take minutes, recording resolutions adopted and summarizing the essentials of conversations that took place.
- Limit themselves to issues identified on the agenda, except if circumstances call for other issues to be addressed.
- Require legal assistance if any issue to be discussed might cause the members to believe that competition laws could be infringed.
- Suspend or even postpone to a later date discussions on such issues if legal advice cannot be sought in a timely manner.

Staff of the RAC shall in their duties ensure the confidentiality of information brought to their attention by members, avoid conflict of interest or situations that would discredit the RAC.

September 2016

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RAC Environment Committee Meeting Agenda 2021-02
Friday, May 21, 2021
1:00 pm – 3:00 pm EST
Video Conference Link

	Items for Discussion	Lead	Time	D/I	Enc.
1.	**Introductory Remarks and Administrative Issues**				
1.1	Welcome & Call to Order	Ben	1:00	-	-
1.2	Competition Law Compliance Policy	Ben	1:05	-	
1.3	Approval of Past Meeting Minutes	Ben	1:10	-	
1.4	Committee Chair Announcement	Ben	1:15	-	-
1.5	Committee Goals and Vision	Emily	1:20	-	-
2.	**Guest Speaker**				
2.1	*Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 Guest Speaker: Mr. Dino Rossi, Partner, LLP	Mr. Rossi	1:30	I	-
3.	**Committee Members Roundtable**				
3.1	Member reports (i.e. provide update on last 6 months regarding environmental matters, existing and future initiatives, legislative updates, lessons learned or best practices to share)	Emily	1:45	I	-
4.	**Industry Programs & Studies**				
4.1	LEM Report Update	Jonathan	2:05	**I**	**-**
4.2	Rail Pathways Initiative	Ben	2:10	I	-
4.3	EMS Pilot Study with SRY	Emily	2:15	I	-
5.	**Regulatory Affairs Issues**				
5.1	*Cross-Border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations*	Ben	2:25	I	
5.2	Manitoba Biofuels Submission	Ben	2:30	I	
5.3	Clean Fuel Regulation Submission	Ben	2:35	I	
5.4	Ontario Hydrogen Submission	Ben	2:40	I	
5.5	Monitoring -CEPA Reform -Wood preservatives -Glyphosate	Ben	2:45	I	-
5.6	RAC Outreach	Ben	2:55	I	-
6.	**Closing**				
6.2	End	ALL	3:00	-	-

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RAC Environment Committee Meeting 2021-01

Clean Fuel Standrad (CFS)
February 2, 2021
Virtual Meeting
15:00 – 17:00 EST

Meeting Minutes

Attendees:

Adrian Atena-Russell (GWRR)
Nirwair Bajwa (CP)
Brianna Bowman (RAC)
Jean Francois Boucher (VIA)
Ben Chursinoff (RAC)
Chantale Despres (CN)
Gregory Kolz (RAC)
Caroline Healey (RAC)
David Huck (CP)
Emily Mak (SRY)
Stephanie Montreuil (RAC)
Aline Porrior (RAC)
Marta Swiercz (Metrolinx)
Jonathan Thibault (RAC)

Absent:

Keith Dagg (Translink)
Stephanie Daneau (exo)
Robert Egar (NBMR)
Benoit Gringas (exo)
Stella Karnis (CN)
Arjun Kasturi (Metrolinx)
Andre Lapalme (GWRR)
Jeremie Largeaud (GWRR)
Murray Macbeth (GWRR)
Thomas Rolland (exo)
Bruno Riendeau (VIA)
Sylvain Rodrigue (exo)
Joe Van Humbeck (CP)

1. Welcome and Call to Order

Ben Chursinoff called the meeting to order at 13:04 EST

Ben Chursinoff noted that this meeting is held in compliance with Canadian Competition Law and a copy of the law is available upon request. He also noted that moving forward the Canadian Competition Law will be included in the briefing booklets.

2. Meeting Objectives

Ben Chursinoff notes that the purpose of this meeting is to discuss the Clean Fuel Standards (CFS) and to reaffirm the Railway Association of Canada (RAC) policy positions.

Cara LaRochelle from Delpi will be presenting on the proposed clean fuel standard regulations that were proposed in Canada Gazette 1 on December 18, 2020. The due date for the written feedback is March 4, 2021. The RAC will be compiling industry comments. The target for publisihing the final regulations is late 2021 with requirements coming into force in 2022.

The committee will be reviewing the previous policy positions to refine the advocacy points, prioritize the messaging and to potentially identify any policy gaps in the policy positions.

3. CFS Regulations Briefing & Review Policy Positions

CFS: BACKGROUND

- **Timeline:**
  - 2016: Announced as part of the Pan Canadian Framework on Clean Growth and Climate Change
  - 2017: CFS Regulatory Framework released;
  - 2018: CFS Regulatory Design Paper released;
  - 2019: CFS Regulatory Approach released;
  - 2020: Liquid Fuels Regulations released.

CFS: PURPOSE

- The CFS aims to reduce emissions from Canada's transportation and oil & gas sectors, which account for 25% and 26% respectively of the total GHG emissions in Canada
- The CFS has been designed to increase the cost of liquid fossil fuels and decrease the cost of low carbon energy sources
- By 2040, the CFS is expected to result in GHG emissions reductions of ~221 megatonnes(Mt), at a cost of ~20.6 billion. This amounts to a societal cost of ~$94/tonne. This is less than the estimated social cost of carbon (SCC)
- The CFS is expected to work hand-in-glove with carbon pricing to reduce overall emissions: while carbon pricing will provide the incentive to transition to lower carbon options, the CFS will increase the availability of the latter and ensure a range of choices

CFS: CHANGES ANNOUNCED IN DECEMBER 2020

- CFS regulations were originally being developed for liquid, gaseous, and solid fossil fuels –**they will now cover liquid fuels only**
- Originally aimed to reduce GHG emissions from fuels used in transportation, buildings and industry –**now focus is on transportation and oil & gas**
- The CFS originally aimed to reduce greenhouse gas (GHG) emissions by 30 million tonnes(Mt) a year by 2030 –**that target has been reduced to 20 Mt per year**. To offset this difference, the government now plans to increase the carbon price to $170 a tonneby 2030

LIQUID FUEL REGULATIONS (DRAFT)

Carbon Intensity (Ci) Reductions

- The Liquid Fuel Regulations target carbon intensity (CI) reductions in liquid fossil fuels produced and imported into Canada
- Liquid fossil fuel primary suppliers (i.e., fuel producers and importers) are the regulated parties

Credit Market –Credit Creation

- Annual CI reduction requirements will be met via a credit market, where each credit represents a lifecycle emission reduction of one tonneof CO2e.
- There are three ways to create credits:
  - (1) Actions that reduce the CI of the fossil fuel throughout its lifecycle,
  - (2) Supplying low-carbon fuels, and
  - (3) Specified end-use fuel switching in transportation.

Compliance Fund & Credit Clearance Mechanism

- Compliance Fund: to provide a flexibility mechanism, a primary supplier may also fulfill up to 10% of its credit requirements by contributing to a registered funding program. Cost: $350 per credit in 2022.

    - Funds/programs may be eligible if they operate in Canada, fund projects or activities that support the deployment or commercialization of technologies or processes that reduce CO2e emissions and provide publicly available annual audited reports.
    - Contributions to the fund must be used for projects or activities that reduce emissions within a five-year period from the time the contribution is made. It is expected to be used initially in 2027, and be active at or near the 10% limit until 2036 when contributions will begin to decline.
- A credit clearance mechanism (CCM) will be available for primary suppliers to acquire credits following the end of each compliance period. Cost: $300 per credit in 2022.

Credit Creation Category 1: Reduce Lifecycle CI Of Fossil Fuel

- Lifecycle carbon intensity (gCO2e/MJ) regulations for extraction + production + distribution + use
- Quantification methods will be developed for various project types, starting with carbon capture and storage; low-carbon intensity electricity integration; enhanced oil recovery; and co-processing of biocrudes in refineries and upgraders.
- Other projects* could be recognized under a generic quantification method that will also be developed, provided they meet the eligibility criteria. The latter may only amount to a maximum of 10% of their liquid class reduction requirement.
    - Project proponents will have to apply to have a project recognized for credit creation and submit a validation report. Annual reporting accompanied by a third-party verification report and a verification opinion will be required.
    - Credits would be created for 10 years for emission reduction projects, except for carbon capture and storage projects, which would create credits annually for a minimum of 20 years. As long as an applicable quantification method still exists, projects may be renewed once for an additional 5 years.
- Primary suppliers can also create credits by reducing the CI of gaseous or solid fuels as well, but this can only amount to a maximum of 10% of their liquid class reduction requirement

Credit Creation Category 2: Supply Low Carbon Fuels

- Low carbon fuel (biofuels, synthetic fuels with CI= or < 90% of the credit reference CI value) producers and importers will be able to create credits as voluntary credit creators.
- Fuel LCA model under development will be used in credit quantification.
- Note that land use and biodiversity (LUB) criteria are being established. Biomass feedstocks will have to comply with these for the fuel to be eligible to create credits.

Credit Creation Category 3: Specified End Use Fuel Switching In Transportation

- Credits are created by changing or retrofitting a fossil fuel combustion device to be powered by another fuel or energy source.
- As described in Section 18, all low carbon energy volumes supplied for transportation would be eligible to create credits, except for rail vehicles.
- Low carbon energy sources include hydrogen in fuel cell vehicles, electricity in electric vehicles, natural gas and renewable natural gas (including CNG and LNG) or hydrogen (including compressed and liquefied) in natural gas vehicles, and propane and renewable propane in propane vehicles

End-Use Fuel Switching In Transportation -Credit Transfers

- While credits from transportation fuel switching are generated by owners/ operators of the fueling facility; the producers and importers of low CI fuels; owners or operators of hydrogen fueling stations for dispensing hydrogen to hydrogen fuel cell vehicles; charging network operators for residential and public charging of EVs; and charging site hosts for private or commercial charging of EVs, credits may be transferred to the owners/ users of the vehicles themselves:

- Section 21 outlines that the right to create compliance credits may be transferred to another party in specific circumstances under a written agreement for specified compliance period(s). This includes users of electric or hydrogen fuel cell vehicles.
- Similarly, section 92 outlines how credits created by producing or importing low CI fuel may be transferred upon creation to another party who purchases the fuel.

End Use Fuel Switching In Transportation EER

- Credit creation for switching to electricity or hydrogen fuel cell is based on the energy efficiency ratio (EER) for an internal combustion engine vehicle compared to the alternate propulsion option. EERs have been estimated and are included in the Fuel LCA alternate propulsion option. EERs have been estimated and are included in the Fuel LCA Model Methodology document:

Vehicle Type	EER
Light- and medium-duty electric vehicles	4.1
Heavy-duty electric vehicles	5.0
Electric marine vessels	3.1
Light- and medium-duty hydrogen fuel cell vehicles	2.1
Heavy-duty hydrogen fuel cell vehicles	1.9

- These will be “updated periodically and new vehicle types may be added to reflect new technologies or improved understanding of these technologies as they are deployed”

2019 Regulatory Approach Included Rail Vehicles In End-Use Fuel Switching

- The **2019 Proposed Regulatory Approach included** fuel switching in vehicles, both on-road and off-road, and in **locomotives**and marine vessels.
- Excerpt from the Proposed Regulatory Approach “Charging site hosts will be eligible to create credits for electricity supplied to electric trains and other rail transport vehicles propelled by an electric motor whose source of electricity is from a third rail, overhead catenary system or a rechargeable battery, with similar requirements for the electricity supplied to be measured by a dedicated meter. Environment and Climate Change Canada is considering setting a baseline for credit creation for electricity supplied to trains and other rail transport vehicles. Subways will not be considered as electric trains for the purposes of credit creation, however, as these are by default powered by electricity.”
- “Electric trains” were assigned an EER of 3.3

Change In The 2020 Liquid Fuel Regulations: Exclusion Of Rail Vehicles From End-Use Fuel Switching

- In July 2020, the Multi Stakeholder Committee was told:
  - Change from previous approach: No credit creation from rail vehicles as many existing and future light rail systems are already by default
  - High potential for significant credit creation with a single rail system

Change From 2019 Regulatory Approach: Exclusion Of Rail Vehicles From End Use Fuel Switching

- When asked about the potential to unintentionally incentivize a modal shift in freight transport from rail to trucking, resulting in a net increase in GHG emissions for the transport sector, ECCC replied:

  “The current proposal does not consider credit creation for electric rail vehicles based on existing systems. Note that EER values will be updated periodically, and new vehicle types may be added to reflect new technologies. As such, ECCC could consider the possibility of adding EERs for future types of rail vehicles, if or when they are deployed,

and once use data become available to enable determination of an EER relative to comparable diesel powered trains.

The proposal to include electric heavy duty on road vehicles is intended to incent additional use and adoption of currently emerging technologies. ECCC will monitor the performance of the CFS and its impact on the transportation sector and will be able to make adjustments in future amendments if necessary."

Expected Impacts on the Freight Sector

- The CFS Liquid Fuel Regulations are expected to increase liquid fuel prices for freight transportation, due to increases in production costs for primary suppliers.
    - Freight transportation represents 40% of the liquid energy demand (second only to households, which represent 41%).
    - Increases will be minimal in 2022, but will increase: estimates of incremental fuel prices in the diesel pool range from 4 to 13 cents per litreby 2030, based on how many credits go to market (if fewer credits that go to market, incremental costs are reduced)*
    - The freight transportation sector is expected to incur increased costs due to the proposed Regulations. As this sector is not trade-exposed and does not compete directly in international markets, it is expected that these will be passed on to customers. However, it is possible that some firms in the freight transportation sector may not be able to fully pass on increased costs and may need to absorb some of these costs, depending on market share competition in the regions in which they operate. As a result, additional compliance costs may require those firms to alter operations due to the proposed Regulations.
- The ground freight transportation sector is among the most affected in terms of output (at a projected decrease of 1.2% by 2030), based on the expected increase in liquid fossil fuel prices and how sectors are expected to adapt to these changing prices in order to maximize profit*
- Many of the sectors that rely on rail to are also expected to be affected:
    - Mining and iron and steel are called out as sectors that will experience increased costs impact on output is 0.1% less
    - The agriculture, forestry and lumber sectors are estimated to have a negative output effect (0.2% less output by 2030) because low carbon fuels used for blending are assumed to be imported. To the extent that the low carbon fuels used for compliance with the CFR are produced domestically, the impact on output would be lower or even positive
    - Chemicals and manufacturing & construction are also projected to see 0.1% less output by 2030

4. Previous Advocacy Messaging

- In response to the 2019 Proposed Regulatory Approach, RAC made the following requests, **that have not been recognized in the draft Liquid Fuel Regulations**:
- That the CFS recognize the Memoranda of Understanding (MOU) between the RAC and Government of Canada to reduce railway emissions produced by locomotives;
- That ECCC ensure through regulation that the composition of blended fuels is disclosed to railway companies on a transactional basis;
- That ECCC prevent market distortions in the transportation industry; and
- That ECCC broaden the definition of transportation end-use fuel switching to include loading and unloading equipment.
- Further**, in now excluding rail from credit generation by fuel switching, ECCC has moved in the opposite direction from what had been hoped.**

That The CFS Recognize The MOU Between the RAC and The Government of Canada (GOC) To Reduce Railway Emissions Produced By Locomotives

- Rail is an extremely efficient transportation modality for moving both people and freight. Modal shift to rail continues to provide an excellent opportunity to decarbonize the transportation sector per The Future of Rail report developed by the IEA.
- Due to high cost, long-lasting equipment with high energy requirements, decarbonizing this sector presents unique challenges. It will require strategic cooperation from several sectors including academia/research, OEMs, fuel producers, rail operators and government bodies. The RAC and Transport Canada are working together under the 2018 MOU to advance collaborative public-private efforts and to develop a pathway to decarbonize the rail sector.
- Precedent: *Liquid fuels for international marine use will not be subject to the Clean Fuel Standard, based on the following: the International Maritime Organization adopted an interim strategy for greenhouse gas emissions in 2018, which will be reviewed in 2023. ECCC recognizes the IMO as the appropriate forum to address international maritime shipping emissions, and the work it has undertaken to address these emissions*.
- Asking for an exemption such as the one that has been granted for international maritime shipping would run contrary to the goals of the Pathway project, and further would be challenging to navigate based on provincial fuel standards
- The CFS could recognize the MOU by earmarking a portion of the compliance fund revenue to support rail based technology developments identified by the Pathway

Recommendation : look to other jurisdictions for best practices, beginning with California

That ECCC Ensure Through Regulation That The Composition Of Blended Fuels Is Disclosed To Railway Companies On A Transactional Basis

- The CFS will reduce the Canadian average baseline carbon intensity value for diesel from its current 100 g CO2e/MJ to 90.0 g CO2e/MJ by 2030. In order to achieve this, average biofuel blend rates in diesel by 2030 will likely be between 10-20%.
- OEM warranties currently limit biodiesel to 5% and HDRD to 30%
- These higher blends of fuel could be help the rail sector to reduce emissions if they can be used safely: i.e. without damaging engines, causing negative operational impacts, or voiding warranties.
- **OEMs have signaled that they are aware of and working to mitigate this issue**

That ECCC Prevent Market Distortions In The Transportation Industry

- Rail is the most fuel-efficient mode for movement of both people and freight by a very large margin. As it is written, the CFS will incentivize a shift away from rail, instead making it more economically attractive for people to move in cars and freight to move on trucks.
- This is expected to result in a net increase in GHG emissions for the transport sector
- Rail should be able to generate credits based on conversion of both locomotives and yard equipment to electricity or hydrogen fuel cell technologies

That ECCC Broaden The Definition Of Transportation End-Use Fuel Switching To Include Loading And Unloading Equipment.

- Due to its localized operating area and reduced energy intensity requirements, yard equipment is widely seen as a possible “first step” to electrification of rail –allowing smaller scale testing of catenary, battery, or hydrogen fuel cell
- Allowing credit generation based on conversion of yard equipment to electricity or hydrogen fuel cell technologies would hasten the development and testing of this important interim step in rail decarbonization

NOT ADDRESSED IN PREVIOUS ADVOCACY MESSAGES

- Freight rail, both long haul and short line, serves sectors such as agriculture, forestry, mining and chemicals, which are foundational to Canada's economy
- As fuel costs rise, the freight rail sector will be forced to pass these costs on to customers.
- **Allowing rail vehicles to generate credits through end use fuel switching would reduce the scale of these additional costs and benefit multiple sectors of the economy**

5. Open Discussion

Chantale Despres from CN suggested that the committee look to other jurisdictions such as California and Europe to see what's been done there to help inform and potentially pull some language that could be included in this advocacy piece.

6. Adjournment

Meeting adjourned at 17:01 EST.

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RAC Environment Committee Meeting 2020-02

October 28, 2020
Virtual Meeting
13:00 – 15:00 EDT

Meeting Minutes

Attendees:

Brianna Bowman (RAC)
Peter Bedrossian (RAC)
Jean Francois Boucher (VIA)
Ben Chursinoff (RAC)
Chantale Despres (CN)
Caroline Healey (RAC)
David Huck (CP)
Stella Karnis (CN)
Murray MacBeth (GWRR)
Emily Mak (SRY)
Stephanie Montreuil (RAC)
Thomas Rolland (exo)
Marta Swiercz (Metrolinx)
Jonathan Thibault (RAC)

Absent:

Emily Cosburn (Metrolinx)
Keith Dagg (Translink)
Stephanie Daneau (exo)
Robert Gaudet (exo)
Benoit Gringas (exo)
Andre Lapalme (GWRR)
Jeremie Largeaud (GWRR)
Arjun Kasturi (Metrolinx)
Eager Robert (NBMR)
Bruno Riendeau (VIA)
Sylvain Rodrigue (exo)
Adrian Atena-Russell (GWRR)
Joe Van Humbeck (CP)

1. **Introductory Remarks and Administrative Issues**

   A. Chantale Despres called the meeting to order at 13:03 EDT.

   B. The March 9th, 2020 meeting minutes were reviewed and approved. The committee did not provide any comments on the meeting minutes.

   C. David Huck explained to the committee that the terms of reference were last updated in 2012. Minor amendments are proposed to the document to align it with current realities (e.g. currently, there are two Co-Chairs instead of a Chair and Vice-Chair) and the committee is invited to review the document to bring forward any suggestions at the next committee meeting.

2. **Regulatory Affairs Issues & Updates**

   1. ***Cross-Border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations***

      Ben Chursinoff provided an overview of past activities from engagements with Environment and Climate Change Canada (ECCC) over the last year. RAC and its members continue to advocate for a Permit of Equivalent Levels of Environmental Safety (PELES). ECCC has offered to review a draft PELES proposal and provide feedback.

      Action item: RAC to ask Ken Roberge to work with a couple of volunteer railways to develop a draft PELES template.

2. Federal Carbon Pricing Update

The Supreme Court of Canada held hearings at the end of September regarding the constitutional challenges brought forward by Alberta, New Brunswick, Ontario, Saskatchewan, and Quebec. A decision is being reserved for several months. RAC will continue monitoring this file.

3. *Canadian Environmental Protection Act* (CEPA)

CEPA Modernization

Peter Bedrossian provided an update to the committee on CEPA modernization. The committee was informed that RAC participates in a cross-sectoral working group led by Scott Thurlow from Dow Canada. Some of the proposed changes to CEPA from Environmental Non-Government Organizations (ENGOs) that this working group is prepared to push back against include:

- Revision of current citizen engagement provisions of the Act (Section 22), language inserted to prevent companies from seeking financial recourse from intervenors that sue or call out alleged interventions of the Act.
- Strengthening of provisions that touch on investigations
- Pushing for human rights linked to a healthy environment including fundamental right to breathe clean air, drink clean water, consume safe food, and know about containments.
- Proposing to define vulnerable populations
- Adopting list of substances identified by other countries as prohibited
- Product labelling to better identify toxic substances
- Industry feedback is also against the name of the toxic substance list of the Act as there are many substances on the list that are not accurate. Feedback is that the list should be split, or title changed.

Action item: Chantale Despres to circulate a document providing a global view of the intersection of human rights and the transportation sector.

Glyphosate Monitoring

CN continues to hear concerns raised from landowners and other stakeholders in British Columbia. CP has been facing similar pressure on the West Coast. Both Class 1s maintain that glyphosate remains a critical cost-effective tool for vegetation management. David Huck will request an update from CP's vegetation management team.

exo informed the committee that they must advise the public when they are using glyphosate and other products. Other than that, they are not hearing much from the public in Montreal regarding glyphosate. They are not sure where to look for alternative products.

SRY is interested to learn what the Class 1s are doing in terms of research as SRY is open to changing products however they must be effective.

Action item: Class 1 members to invite internal experts to next Environment Committee meeting to present on vegetation management research / products.

PCBs: CP owns thousands of pieces of equipment with PCB. Equipment will need to be retired by 2025. Some owned by CP and others owned by utility companies providing the service.
Need to continue monitoring this file. Light ballasts, etc.

Plastic Pollution

- A key part of the plan is a ban on harmful single-use plastic items where there is evidence that they are found in the environment, are often not recycled, and have readily available alternatives. Based on those criteria, the six items the Government proposes to ban are plastic checkout bags (1), straws (2), stir sticks (3), six-pack rings (4), cutlery (5), and food ware made from hard-to-recycle plastics (6).
- Comments or information can be provided to the Minister of the Environment until December 9, 2020, by email to ec.plastiques-plastics.ec@canada.ca.

4. Special Review of Pentachlorophenol by Health Canada (PMRA)

- Health Canada will be phasing out the use of PCP.
- RAC members and associate members report no negative impacts with this ban. Rather there will be positive environmental benefits and improvements to safety.
- Members report using copper naphthenate or creosote.

5. Polychlorinated biphenyls (PCBs) Regulations

- This was shared with the Environment Committee via email for feedback due by November 6.
- The RAC tasked Ken Roberge with reviewing the discussion draft and found that:
    1. This consultation is looking at PCBs in areas associated with nuclear facilities and the challenge with PCB equipment and radioactivity. **This would have no impact on the rail sector.**
    2. Removing the prohibition on importing PCB materials with concentrations between 2 ppm and 50 ppm for safe disposal. The only impact here would be the possibility of customers approaching the railway to complete the movement of these materials rather than anything with PCB equipment that the industry owns.
- They are looking for any comments with respect to the Regulations including challenges with meeting the 2025 phase out deadline for the remaining PCB-containing equipment as well.

6. ECCC Forward Regulatory Plan

Peter Bedrossian reviewed ECCC's forward regulatory plan, available on their website. The plan lists planned or anticipated regulatory changes (regulatory initiatives) that ECCC intends to propose or finalize within a 2-year period. Based on Peter's review, he think the committee is doing a good job in staying on top of things - aside from the Clean Fuel Standard Regs, and the Cross-border Movement Hazardous Waste Regs, the only other regs that may be of interest to the committee are:

- **Environmental Violations AMPs Regulations (Administrative Monetary Penalties)**
  Proposed Amendments will update the regulations to reflect new and newly amended CEPA regs by adding or modifying sections that are subject to AMPs and removing those that are not. The Department is targeting publishing the proposed Regulations in the *Canada Gazette*, Part I, in 2020.

- **Regulations Amending the Release and Environmental Emergency Notification Regulations**
  The proposed amendments to these regs will not change how they function, but reduce the need for future amendments, as well as update references to recently revised Canadian statutes and regulations. the proposed regulations are targeting publication in the *Canada Gazette*, Part I, in 2020 for a 60-day public comment period.

Peter Bedrossian does point out that their regulatory plan was impacted by the Government's response to the pandemic, which included prioritizing resources towards regulatory initiatives related to COVID-19.

7. Canadian Chamber of Commerce: CFS Campaign

- Canadian Chamber does not support current CFS design
- The Canadian Chamber has four asks:
  1. Ensure future designs of CFS are aligned with other jurisdictions that have exempted industrial fuels from own standards
  2. Design CFS that is tech neutral, with consistent costs & stringency
  3. Ensure CFS is aligned with OBPS (Out-put based Price System) and design low cost carbon credit and offset options for compliance across both regimes
  4. Complete due diligence to ensure all three fuel streams are subject to a regulatory impact assessment before going into force.
- Chamber is urging Cabinet and MPs to work with ECCC to address key competitiveness concerns
- Ways to partner with the Chamber:
  1. Campaign Supporter – association logo visibility on their materials (free for members)
  2. Campaign Champion – cost to be determined. Includes: seat on campaign steering committee, invitation to advocacy meetings, participate in video series
- **The committee decided they will not be supporting the Canadian Chamber of Commerce's position on the CFS as there is insufficient alignment.**

Action item: RAC to provide industry with a letter explaining the rational for not supporting the Canadian Chamber of Commerce.

8. Port of Vancouver Consultation

- The Port of Vancouver missed consulting with railways for phase 3 of their engagements for developing a clean air strategy.
- A meeting has been scheduled for November 4th with the Port of Vancouver, RAC, CN and CP to receive an overview of the draft strategy. SRY has scheduled a 1 on 1 meeting with the Port.
- SRY has concerns over the potential for raising of fees / costs as there are no other options for switchers right now or alternative fuels readily available.
- SRY would like to see a delay in the proposed timelines as presented in the Port of Vancouver presentation deck.

Action item: RAC to provide industry comments to the Port of Vancouver.

9. Modernizing Hazardous Waste Reporting in Ontario

- RAC provided feedback to the Government of Ontario for their hazardous waste reporting modernization consultation in August 2020.
- Our feedback included requesting alignment with federal reporting requirements (federal cross border movement and transportation of DG) to limit compliance costs and reduce regulatory administrative burdens.

Member Reports

CN

Stella Karnis noted that COVID-19 has provided a silver lining in that processes that were predominantly paper based have transitioned to electronic based. CN is implementing a compliance management system.

There has been a renewed interest in Nova Scotia from Environment & Climate Change Canada to inspect facilities with respect to the Petroleum Storage Regulations. Stella Karnis says the inspections have all gone well.

CP

David Huck discussed navigating through the challenges of COVID-19. CP has had a lot of support from regulatory agencies and flexibility provided which is helpful.

CP has not experienced any recent major compliance or environmental issues. However, audit program had to be cancelled this year. Focus has been working on programs and implementation where they can.

SRY

Emily Mak raised the Vancouver Fraser Port Authority's North West Ports Clean Air Strategy with the committee. The goal of this strategy is to achieve net zero by 2050. However, Metro Vancouver which is the regional level of government in Vancouver which covers 21 member municipalities and 1 member First Nation are not subject to the North West Ports Clean Air Strategy even though they work in lock step with the port because they don't want to have regulations of non road diesel engines that are different when you are on port property versus off port property because the ports are geographically integrated into the lower main land.

Metro Vancouver Regional District is looking to significantly increase their fees for the tier zero and tier one non road diesel engines. This won't have much impact on the Class 1's but will significantly impact SRY as a provincially regulated railway.

VFPA is looking to finalize their North West Ports Clean Air Strategy in Q2 and will be looking to engage with industry on what the new non road diesel emission fees will look like.

RAC is working on synthesizing a letter to send to the VFPA.

Action item: SRY to send information to RAC on Metro Vancouver consultation.
Action item: RAC to circulate letter being sent to the Vancouver Fraser Port Authority.

3. Industry Programs and Studies

1. Hydrail SOW

It was recently brought to the RAC's attention that TC hired a consultant, Bob Oliver, to explore the technical, operational, economic, and societal factors (TOES) that would affect the viability of transitioning a diesel driven railway industry to a railway system centered around hydrogen. The sole-source contract (amounting to about $40K) will endeavor to conduct a high-level study to identify the DETERMINATES for this transition. The RAC will share the Statement of Work for this contract with the committee following the meeting.

The scope of work will include five principal components:

1. Document a THOROUGH literature review of all Hydrail projects around the world.
2. Identify the technical and/or engineering challenges that hinder the progression of Hydrail for the entire spectrum of possible railway operations in Canada
3. Identify the operational impacts, both positive and negative, that a Hydrail system would impose on an operating railway, whether passenger, freight, or commuter service.
4. Identify all the possible capital and operating cost to permit the transition
5. Identify all the societal benefits, should a transition occur

Peter Bedrossian was told that this study is small and exploratory in nature. Its aim is eliciting some preliminary thoughts around Hydrail and that Bob Oliver is open to soliciting feedback from the committee through the RAC and is open to sharing the outcome of the study upon its completion.

2. EMS Pilot Study with Southern Railway of British Columbia Ltd.

Emily Mak from SRY said that things are going very well with the EMS pilot study. Ken Roberge will be conducting site visits starting on Monday November 16, 2020 to do a site inspection of their operation and facilities. Emily noted that progress has been stop and go. SRY hit the ground running at the beginning of 2020 and had made a lot of progress on planning how they were going to follow the steps on the RAC EMS guidelines than COVID-19 hit in March which put the brakes on progress as they shifted their focus to operational issues.

Emily noted that they are halfway through the first dozen steps in the EMS guidelines. SRY is now working on other steps such as instruments that govern environmental regulations in British Columbia and identifying and looking at all the different aspects of a shortline on the environment. The next phase is to have a consultant come and verify the groundwork that SRY has done on developing the EMS. SRY is expecting to have a large majority of the EMS framework completed by Q1 of 2021.

3. Memorandum of Understanding (MOU) to reduce locomotive emissions

Clean Fuel Standard

- The Purpose of the CFS is to reduce greenhouse gas (GHG) emissions by 30 million tonnes (Mt) a year by 2030.
- RAC provided feedback on the Proposed Regulatory Approach – it is not yet known how that will be reflected in the Liquid Fuel Regulations.
- RAC requested the following on behalf of its members:
    - That the CFS recognize the Memoranda of Understanding (MOU) between the RAC and Government of Canada to reduce railway emissions produced by locomotives.

  - That ECCC ensure through regulation that the composition of blended fuels is disclosed to railway companies on a transactional basis.
  - That ECCC prevent market distortions in the transportation industry.
  - That ECCC broaden the definition of transportation end-use fuel switching to include loading and unloading equipment.
  - That ECCC continue to work with Emissions-Intensive and Trade-Exposed (EITE) industries to find mutually agreeable solutions to risks posed by the CFS.
- Proposed Liquids Class Regulations will be published in the Canada Gazette, Part I in Fall 2020, followed by a 75-day consultation period.
- **Delphi is monitoring the Gazette and will notify RAC when the Regulations are released – a summary of key points will be provided within one week for review and discussion in preparing a response**

- Final regulations will be published in Canada Gazette, Part II in late 2021 and will come into force in 2022

Rail Pathway Initiative

- The MOU between RAC and Transport Canada commits both parties to working together to further reduce emissions from rail
- The Rail Pathways project is building on the successes achieved to date by the MOU by developing a clear path towards deeper emissions reductions.
- It is advancing collaborative public-private efforts to explicitly target GHG reductions from Canada's rail sector.
- The project is unfolding in two phases:
  - Phase 1: Landscape Document – *delivered August 2020*
  - Phase 2: Pathway Development – about *to kick off (~ 6-month duration)*
- The Delphi Group and Pollution Probe are working with stakeholders at RAC and TC to deliver this important initiative.
- Phase 1 explores the current state of play on rail-related greenhouse gas reduction activities and policies in Canada. It has three objectives:
  - Develop a common understanding of the current state of rail sector decarbonization in Canada, which can be used as a tool for collaboration between industry and government;
  - Create an inventory of decarbonization initiatives; and
  - Contribute to next-phase work on a roadmap to achieving future GHG reductions in Canada's rail sector.
- Phase 1 outlines and describes the current landscape, consisting of:
  - Federal and provincial regulations, policies and programs;
  - Research, development and demonstration initiatives;
  - Canadian Rail Industry Activities related to efficiency, alternative fuels, alternative propulsion and infrastructure; and
  - International rail GHG reduction landscape and best practices.
- The areas of focus include fuel efficiency; alternative fuels; alternative propulsion; infrastructure; and modal shift
- Phase 2 will identify and assess GHG reduction opportunities in Canada's rail sector to inform decarbonization priorities in the years and decades ahead.
- Objectives:
  - Develop an analytical framework for assessing GHG reduction opportunities in Canada's rail sector.
  - Identify and assess potential GHG reduction measures.
  - Create a multi-stakeholder work plan for GHG reduction actions.

- Develop and initiate a Roadmap implementation strategy.

4. Hydrogen Strategy for Canada

- Tabitha Takeda from Natural Resources of Canada gave an overview of the Hydrogen Strategy for Canada that they have been working on for the last year.
- A Hydrogen Strategy for Canada will:
  - Ensure supply and demand grow together
  - Balance economic and environmental considerations
  - Grow domestic opportunities, and expand export market potential
  - Identify opportunities for job growth and skills development

Proposed Implementation of the H2 Strategy

Implementation Strategic Steering Committee

- A high-level committee, composed of senior level private sector stakeholders, federal departments and interested PTs, Indigenous groups, academia, and ENGOs.
- Mandate: Provide guidance and oversight on activities related to the Strategy recommendations, ensuring deployment efforts are coordinated.

Working Groups

- Targeted teams, composed of subject area experts from public, private and Indigenous groups, focused on specific recommended actions
- Mandate: Share knowledge/experience and identify areas for additional targeted analysis or effort based on deployment activities.
- Early working groups could focus on:
  - Mass transit
  - Infrastructure
  - Natural gas/hydrogen synergies
  - Awareness
  - Codes/standards/regulations
  - Innovation
  - Emerging markets

- For member's wishing to follow-up with Tabitha she can be reached at Tabitha.Takeda@Canada.ca or by phone at 343-551-8295

Meeting adjourned at 3:00 pm EST. With a follow up meeting scheduled on November 13, 2020 from 1300 to 1400 EST to address outstanding agenda items.

New Action Items – October 28, 2020		
Item	**Owner**	**Status**
Regulatory Affairs Issues		
1. RAC to ask Ken Roberge to work with a couple of volunteer railways to develop a draft PELES template	Ben C.	Ongoing
2. Chantale Despres to circulate a document providing a global view of the intersection of human rights and the transportation sector.	Chantale D.	Outstanding
3. RAC to provide industry comments to the Port of Vancouver and share submission with the Environment Committee.	Ben	Complete
4. RAC to provide industry with a letter explaining the rational for not supporting the Canadian Chamber of Commerce.	Ben C.	Complete
5. SRY to send information to RAC on Metro Vancouver consultation	Emily Mak	Outstanding

Introduction

The Railway Association of Canada (RAC) represents close to 60 freight and passenger railway companies—railways that complete more than 107 million passenger-trips and move approximately $320 billion worth of goods across our country each year. With a network spanning over 44,000 kilometers nationally, RAC members continuously demonstrate reliability and high safety standards in moving a diverse suite of goods across the country including hazardous and dangerous goods.

The proposed *Cross-border Movement of Hazardous Waste and Hazardous Recyclable Materials Regulations* will impact Canada's railways as they transport hazardous waste and hazardous recyclable materials. Based on our discussions with ECCC to date, a Permit of Equivalent Level of Environmental Safety (PELES) appears to have the potential to satisfy the needs of both parties. This document outlines the challenges for railways under the proposed regulations and provides draft PELES language for consideration by ECCC to address those challenges.

Background

In 2006, the RAC received a PELES from Environment Canada on behalf of the Minister of Environment, issued under s. 190 of the *Canadian Environmental Protection Act, 1999*, which authorized rail carriers to transport products regulated under the *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations* and the *Interprovincial Movements of Hazardous Waste Regulations* without copies of the movement document or import, export or transit permit provided that specific information was included on the shipping document/train consist that accompanied the shipment. Since individual railway companies will need to obtain their own PELES as opposed to operating under one provided to the industry, the RAC reviewed the previous PELES with member railways as a possible framework for a new PELES. The review explored the challenges related to the movement of customer hazardous waste and hazardous recyclable materials and to the movement of railway treated wood generated as part of maintenance activities. Further detail on these challenges and draft PELES language to address them is provided below.

Movement of Customer Hazardous Waste and Hazardous Recyclable Material

Railway companies manage the movement of hazardous waste and hazardous recyclable materials without managing hard copy movement documents by rail crews or by rail office staff. Customers send information on the proposed shipment to the railway company, where it is stored electronically. Once the movement is approved, the railway completes the pickup at the consignor location and completes transportation to the consignee or to the next authorized carrier. Movement document signatures are either obtained after the movement has taken place or through a Power of Attorney process whereby the railway company has provided the consignor with the legal authority to complete and sign Part B of the movement document on their behalf. The following proposed PELES language would allow for compliance with the proposed regulations while recognizing the approach followed by Canadian railways.

Railway Treated Wood - Background

As part of regular maintenance activities, used railway treated wood such as railway ties and bridge timbers are generated then shipped to processing facilities where they are chipped and then sent to an approved final recycling facility such as a co-generation facility or cement kiln.

Railway ties are used to transfer loads to the track ballast and subgrade, hold the rails upright and keep them spaced to the correct gauge. Most railway ties in service are made of wood and treated with a wood preservative to allow for a longer life in service, often between 30 and 40 years. There are on average 3,250 ties for every mile of track and while the standard railway tie is between eight and nine feet long, there are different lengths of railway treated wood for different purposes. Ties used around track switches at turnouts on curved tracks can exceed 15 feet in length and bridge timbers can exceed 25 feet long. Once railway treated wood's structural properties are no longer sufficient, it must be removed and replaced.

Treated wood is either removed in small numbers by regional track maintenance personnel using hand tools or small hydraulic equipment as part of day to day maintenance or in a more systematic approach by engineering work crews as part of annual capital maintenance programs. In either case, the wood is placed alongside the right of way in small piles, eventually being accumulated into larger piles (Figure 1) from which they are loaded into open top gondola cars for transportation. Once a railcar has reached volume capacity, it is billed to destination using an

Figure 1 - Railway Ties Ready for Loading

internal billing system that is different than the one used to move customer goods. As with all rail movements, documentation is electronic and is designed to provide specific information relevant to the movement. Field personnel responsible for loading the cars are not involved in the documentation process with the exception of confirming once the car is full and can be billed. Eventually each car is delivered to a receiving facility where the ties are unloaded and further processed (e.g. chipping or grinding) prior to being sent by truck to an authorized facility for recycling.

Railway Treated Wood - Compliance Challenges

There are a number of challenges involving railway treated wood with respect to compliance with the proposed *Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations.*

First is the determination of site of generation. As has been discussed, the wood is generated by removing individual ties from the track and placed on the side of the right of way, where they are eventually accumulated into larger piles. These piles can be located anywhere across the rail network and as a result the sheer number of potential origin points of the movement are endless.

Second is the determination of the mass of each individual shipment which is an individual railcar. The number of ties is not counted as they are loaded into gondola cars, rather they are loaded until the car is full to its volume capacity, which varies by car. These cars are also not scaled so the weight per car is not known. The best estimate is a total mass per car based on an approximation of the number of ties per car and the average weight of an individual tie which is around 60-70 kilograms.

Tracking of the movement of railway treated wood is also complicated at the receiving end. Once the wood is unloaded from the rail car, it is stored and processed with other treated wood at the site and eventually chipped. At this stage, it is no longer recognizable as the individual shipment (Figures 2 and 3). Further, some railway tie processing facilities chip ties and then supply the chips to various authorized facilities based on their own agreements. It is therefore difficult to confirm the fate of the initial movement beyond unloading them at the processing facility.

Figure 2 - Tie Stockpile at Processing Facility

Figure 3 - Chipped Railway Ties

Recommended Approach for Railway Compliance under *Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations*

Due to the challenges outlined above, an alternative approach to compliance is critical for railway companies. The suggested approach is the provision of a regular report, at a frequency to be agreed upon between Environment and Climate Change Canada and the individual railway company. This report will provide information on the date of the movement from point of origin and the province to the date it arrives at the initial processor (consignor). As tracking movements beyond that point is impossible as outlined, this would be the end of the movement process. While the processor may be co-located at the eventual recycling facility, that is not always the case. The report would confirm which processing facility is used, where it is located, and which authorized facilities normally receive chipped ties from the processor. Should provincial authorities wish to receive a copy of this movement report it could be provided upon request.

Draft language for a PELES has been provided below. Please note that at this time the railway companies would prefer applying for one PELES that would speak to both issues:

1) customer waste movements; and
2) railway treated wood.

Permit of Equivalent Level of Environmental Safety issued under Section 190 of the *Canadian Environmental Protection Act, 1999*

1. **Permit No: XX-XX-XX**
2. **Permit Holder:**

   Company Name:
   Head Office Address:
   Contact Name:
   Contact Phone:
   Contact Email:

3. **Mode of Transport: rail**
4. **Issue Date: DD Month, Year**
5. **Expiry Date: DD Month, Year**
6. **Regulations:** Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations
7. **This Permit of Equivalent Level of Environmental Safety ("Permit") authorizes the permit holder identified in section 2 ("Permit Holder"), to transport the hazardous recyclable material (railway treated wood –** consisting of treated railway ties, switch ties, bridge timbers and other treated wood generated as part of railway maintenance and operations) in a manner that is at variance with PART 2 of the Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations, under the following conditions:
8. **CONDITIONS**
   a) The hazardous recyclable (railway treated wood) transported by rail under the Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations
   b) A movement document is not required to be generated or accompany the rail portion of any movement made under this Permit;

c) A rail movement report will be created and sent to Environment and Climate Change Canada covering all movements of railway treated wood covered by this Permit;
d) The movement report must contain the following as a minimum:

- Name and head office location of the consignor/authorized carrier;
- Name and street address of the consignee (processor);
- Date and province of origin for each movement of hazardous recyclable material (railway treated wood) that is shipped;
- Date each movement of hazardous recyclable material (railway treated wood) arrived at consignee;
- Railcar Identification Number
- Quantity of railway treated wood in each shipment (based on an average mass per piece and number of pieces in the rail car)
- Agreed upon waste description (Railway Treated Wood/Railway Ties/etc.)
- Emergency telephone number and name of contact person;
- the following statement:
    - "Shipped in accordance with the Permit of Equivalent Level of Environmental Safety XX-XX-XX";

e) the Permit Holder will inform in writing the Director of the Waste Management Division of Environment and Climate Change Canada of any change to the information set out in section 2 within 30 days of the change;
f) the Minister of Environment may revoke this Permit as provided in subsection 193(3) of the *Canadian Environmental Protection Act, 1999*
g) this Permit is non-transferable;

Sample Movement Report Providing Required Information

Consignor/Carrier:
Iron Highway Ltd.
460 Steel Ribbon Way
Van Horne, ON
Emergency Number: 1-800-222-2222
Contact: Joe Timber
Hazardous Recyclable Material: Railway Treated Wood

Shipped in Accordance with the Permit of Equivalent Level of Environmental Safety XX-XX-XX

Date	Subdivision	Prov.	Car	Quantity (est.)	Mass (est.) (kg)	Processor	Date
1/25/2021	Riverbend	ON	RW808440	450	30150	Tie Chip Co.	2/03/2021
1/25/2021	Swanson	BC	RW998023	620	41540	Woodland	2/03/2021
1/26/2021	Johnson	SK	LC2090	305	20435	Power Co.	2/04/2021

Processors:

Tie Chip Co.
150 Main Street
Fruittown, BC V6H 1J2

Woodland
200 Station Avenue
Valleydale, QC G0A 4V0

Power Co.
560 Cement Lane
Lobsterville, NS B3H 9L7

Conclusion

The RAC has reviewed the proposed regulations with member railways and identified compliance challenges with respect to the movement of customer's hazardous waste and hazardous recyclable materials and treated wood generated as part of railway maintenance activities. Based on our discussions with ECCC, the PELES approach appears to have the potential to satisfy the needs of both parties and ECCC indicated a willingness to review draft PELES language to provide member railways with a level of assurance that the approach would be acceptable. This document presents the proposed PELES language that will address the challenges faced by member railways and allow for compliance with the proposed regulations for your consideration.

Railway Association of Canada | RIGHT TRACK

mincc@leg.gov.mb.ca

December 15, 2020

The Honourable Sarah Guillemard
Minister of Conservation and Climate Change
Room 344 Legislative Building
450 Broadway
Winnipeg MB R3C 0V8

Subject: **Comments on proposed amendments to *Manitoba's Biofuels Act* (to come in force on January 1, 2021)**

Dear Minister:

I am writing to provide comments on behalf of the Canadian rail industry regarding the proposed amendments to the *Manitoba Biofuels Act*, specifically to the *Biodiesel Mandate for Diesel Fuel Regulation*.

The Railway Association of Canada (RAC) represents freight and passenger railway companies that move more than 88 million people and $328 billion worth of goods in Canada each year. Freight railways move around 50 per cent of the country's goods destined for export (by volume) and 70 per cent of intercity freight traffic in Canada. As the voice of Canada's railway industry, the RAC advocates on behalf of its members to ensure that the rail sector remains globally competitive, sustainable and safe.

The RAC would like to acknowledge the Government of Manitoba's efforts to reduce carbon emissions and protect the environment: the impacts of climate change affect us all. Overall, the rail sector sees the greater use of renewable fuel as a pathway to decarbonize the transportation sector in the short and medium-term. Therefore, efforts to decarbonize are supported by railways, however, as written, the proposed amendments to the *Biodiesel Mandate for Diesel Fuel Regulation* will have direct and immediate negative consequences for our member rail companies that operate within the province of Manitoba.

New locomotives are routinely added to Canada's 3,000-strong fleet. Each one represents an investment of several million dollars and carries an extensive warranty from the Original Engine Manufacturer (OEM). In most cases, OEMs specify that the use of fuel with a biodiesel content above 5% or hydrogenation-derived renewable diesel (HDRD) content greater than 30% will void engine warranties. Per the proposed regulatory amendments, primary fuel suppliers providing fuel to the Manitoba market will be required to meet an annual average diesel fuel blend rate of 5% biodiesel. This is likely to result in blend rates at least occasionally exceeding the 5% average, which would risk voiding locomotive engine warrantees. A locomotive warranty is tied to the use of fuels that comply with specific standards. The regulation includes an updated biofuel standard from the current B5 to a B20 standard. There is significant risk to railways becoming non-compliant with B5 locomotive warranties. The RAC recommends that OEMs be included in this consultation to provide technical feedback regarding locomotives and their warranties. Bringing together all parties will support good policy decisions for decarbonization efforts.

The proposed regulatory amendments do not currently address blend rate disclosure from primary suppliers to consumers. Without visibility to specific fuel qualities, our members are concerned that this lack of transparency will potentially void hundreds of previously negotiated warranties and expose them to millions of dollars in unforeseeable liabilities. Awareness of renewable content of fuel is an important component of mitigating rail emissions and essential information in accounting for total carbon emissions reductions in the transportation sector – a key driver for increasing renewable content associated with the *Manitoba Biofuels Act*. Ensuring full transparency from fuel producers regarding blend rates is important for railway voluntary and regulatory reporting of GHG emissions.

In order to avoid issues with locomotive warranties, the RAC respectfully asks that the Government of Manitoba ensures through regulation that the composition of blended fuels is disclosed to all fuel consumers on a transactional basis. Specifically, we request that the regulations require fuel vendor disclosure highlighting the actual percentage of renewable content for biodiesel and renewable diesel.

The RAC appreciates the opportunity to participate in this important process as the Government of Manitoba works towards decarbonization. We welcome any queries about the issues raised in this letter.

Sincerely,

Caroline Healey
Executive Vice-President and General Counsel

CLERK OF THE EXECUTIVE COUNCIL
Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

MAR 2 3 2021

Caroline Healey
Executive Vice-President and General Counsel
Railway Association of Canada
901 - 99 Bank Street
Ottawa ON K1P 6B9
BChursinoff@railcan.ca

Dear Caroline Healey:

Thank you for your email dated December 15, 2020 to Honourable Sarah Guillemard, Minister of Conservation and Climate, regarding increases to the provincial biodiesel mandate from 2% to 5%. As Deputy Minister for the Climate and Green Plan Implementation Office, I have been asked to respond on her behalf.

The variability of biodiesel blending in different seasons and the potential impact to engine warranties is addressed by the regulations. I can assure you that Manitoba does not require any fuel supplier or consumer to utilise fuels that will cause operational failures or void any manufacturer engine warranty. The practice of variable blending ratios you mentioned in your letter is determined by fuel suppliers to ensure the best possible fuel products are sold in Manitoba. The proposed regulations were carefully prepared to ensure that fuel suppliers will still be able to continue to sell high quality petroleum and renewable fuels that meet or exceed industry fuel standards developed by the Canadian General Standards Board, which is a requirement in all engine manufacturer warranties. Manitoba's biodiesel mandate permits the use of biodiesel (i.e., fatty acid methyl esters, or FAME) and/or hydrogenation derived renewable diesel (HDRD) as eligible fuels. As regulated entities, fuel suppliers can demonstrate compliance with the provincial mandate by blending these fuels with petroleum diesel in any combination, and they can do so in a way that provides a minimum of 5% renewable content in diesel fuel all year long while meeting manufacturer warranties in all seasons.

The amendments proposed in fall 2020 were revised to include an incremental increase to biofuels blending requirements. On January 1, 2021, biodiesel blends increased to 3.5% and ethanol blends increased to 9.25%. Blending requirements increase again on January 1, 2022 to 5% biodiesel and 10% ethanol. There will also be a northern exemption on the biofuel blending requirement until December 31, 2022. Our department received other recommendations that were not related to the regulatory amendments, but nevertheless warrant further consideration. Your concern regarding vendor disclosure is one of these items, as such the department will review this suggestion further.

On behalf of the department I would like to apologize for the delay in responding to your inquiry and thank you for bringing this concern to our attention, your input is greatly appreciated. If you would like to discuss this in greater detail, I encourage you arrange a meeting with the Climate and Green Plan Implementation Office at ccinfo@gov.mb.ca or 204-945-7246.

Sincerely,

David McLaughlin
Clerk of the Executive Council and
Cabinet Secretary
Deputy Minister of Intergovernmental Affairs
Deputy Minister of Conservation of Climate
and Green Plan Impementation Office

c. Honourable Sarah Guillemard, Minister of Conservation and Climate
Climate and Green Plan Implementation Office

Railway Association of Canada | RIGHT TRACK

March 4, 2021

Sent via email

Ms. Paola Mellow
Executive Director
Low Carbon Fuels Division, Carbon Markets Bureau
Department of the Environment
351, boul. Saint-Joseph
Gatineau, QC K1A 0H3
Email: ec.cfsncp.ec@canada.ca

Subject: ***Canada Gazette, Part I, Volume 154, Number 51: Clean Fuel Regulations*, December 19, 2020**

Dear Ms. Mellow:

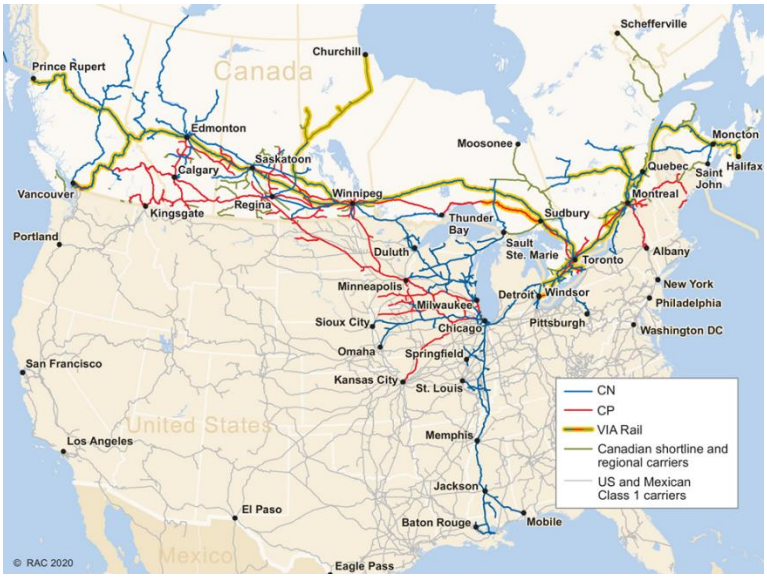
This submission presents the views of the Railway Association of Canada (RAC), on behalf of its members, concerning the proposed *Clean Fuel Regulations* (the Regulation) as published in *Canada Gazette*, Part I, on December 19, 2020.

The RAC and its members support the federal government's commitment to decarbonization. Railways in Canada are committed to being key partners in the transition towards a low-carbon economy, and are actively working with the federal government to chart a course towards deep decarbonization of the sector. As written, however, the Regulation limits the role of the rail sector in contributing meaningfully towards Canada's net zero targets. This submission outlines how the proposed Regulation could be amended to ensure a more robust role for rail in furthering a transition to lower carbon fuels, and in so doing advance progress towards the overall targets.

The RAC's recommendations are summarized here for the consideration of Environment and Climate Change Canada (ECCC). It is our belief that these amendments would ensure that the proposed Regulations support the rail sector in contributing to the transition to a low carbon economy.

1. That ECCC reintroduce an energy efficiency ratio (EER) for rail to the Regulation, allowing railroads to generate end-used fuel switching credits under Compliance Category 3.
2. That ECCC broaden the definition of transportation end-use fuel switching under Compliance Category 3 to include yard equipment.
3. The RAC asks that ECCC protect Canadian railway companies' commercial agreements with OEMs – and improve ongoing investment certainty – by requiring vendor disclosure of energy density and percent of renewable content whenever a batch of fuel contains more than 5% biodiesel or 30% renewable diesel.
4. That ECCC earmark a portion of the compliance fund to support rail specific technology research, development, and deployment.

Background on Canada's Railway Sector



The Railway Association of Canada (RAC) represents freight and passenger railway companies that move more than 100 million people and $320 billion worth of goods in Canada each year. Rail services are provided over a network that runs from coast to coast, spanning nearly 43,000 km of track infrastructure. Both the tracks and the land upon which they are built are owned and maintained by private railway companies, which operate 24/7 and 365 days a year to meet customer demand.

Passenger rail is not only a safe and low-carbon mode for daily commutes and intercity travel; but also provides economic and environmental benefits by reducing on-road vehicle traffic. This reduces emissions, road congestion, and wear and tear on publicly funded roads and highways.

Freight rail is on average three to four times more fuel efficient than trucking, making it among the lowest emitting modes of freight transportation[1]. Canadian freight railways literally move the economy: transporting about 50 percent of the country's goods destined for export (by volume) and 70 percent of intercity freight traffic. Despite being the most prevalent method of transporting freight (on a tonne-km basis), the rail sector accounts for only 4% of Canada's total transportation-related greenhouse gas (GHG) emissions.[2] This is a testament to the fuel efficiency of this mode.

For over twenty-five years, Canada's railways have worked with the federal government to reduce emissions produced by locomotives. Since 1995, Transport Canada (TC) and the RAC have signed four Memoranda of Understanding (MOU) to establish voluntary reduction targets for emissions produced by locomotives in Canada. Performance under the MOU agreements has been positive, with railways demonstrating that investments in technology and more efficient operating practices are improving fuel economy and reducing emissions. In fact, by consistently investing in efficiency and sustainability, Canada's freight railways have reduced their GHG emissions intensity by over 40%, and intercity passenger railways have reduced their GHG emissions intensity by more than 35%.[3]

The most recent MOU, signed in 2018, includes a commitment to collaborate on a comprehensive pathway to reduce emissions produced by the railway sector (Rail Pathway Initiative). This Rail Pathways Development project, underway now, will align government and industry efforts to

[1] https://www.aar.org/wp-content/uploads/2020/06/AAR-Sustainability-Fact-Sheet.pdf
[2] Transport Canada, 2017
[3] Baseline year: 1990

support the development, testing and commercialization of next generation technologies that will allow for deep reductions of emissions from the rail sector.

Reintroduction of an EER for Rail

While railways may have some opportunities to generate credits under Compliance Category 2 for importing low-carbon fuels, the RAC and its members have significant concerns over the unexpected change in position since the 2019 Clean Fuel Standard: proposed regulatory approach. The proposed regulatory approach outlined an important credit generation opportunity via rail end-use transportation fuel switching in Compliance Category 3 and included energy efficiency ratios (EER) for rail aligning with best practices in other jurisdictions. The RAC urges ECCC to reintroduce the EER for rail and the reference to rail for end-use fuel switching prior to the next publication of the CFR in CG2. This would send important market signals from the onset of the CFR and allow rail to meaningfully contribute to emission reduction in the transportation sector.

The rationale for excluding these elements that was provided by ECCC at the June 2020 stakeholder meetings was that there would be "no credit creation from rail vehicles as many existing and future light rail systems are already electric by default". This rationale is not applicable or relevant to the freight rail sector as it currently operates largely on diesel. However, given adequate support and opportunities, there is significant potential and interest in switching to renewable fuels. Excluding rail as a compliance option in Compliance Category 3 places Canadian railways and shippers at a competitive disadvantage both in comparison to other transportation options and as the North American rail sector is integrated. This exclusion also risks limiting future opportunities for rail.

The RAC firmly believes that encouraging a modal shift to rail would lead to immediate GHG reductions in the transportation sector based on the increased efficiency of rail over trucking for the movement of freight. As currently drafted, the CFR may create a policy environment where it is more economical for shippers to turn to trucking over rail, resulting in a net increase of GHG emissions in the transportation sector. This outcome would run counter to the stated objectives of the CFR.

There are other jurisdictions with clean fuel regulatory frameworks that take a more inclusive approach in their treatment of rail. These jurisdictions include the European Union, California, and Oregon where fuel switching in rail is eligible for credit generation. In the California Low Carbon Fuel Standard for example, eligible entities that provide electricity or hydrogen as a transportation fuel may generate credits or designate a third-party entity on its behalf to generate credits. More specifically, in the regulations under *95483 section (c) for electricity used as a transportation fuel*, the California Low Carbon Fuel Standard includes light rail and heavy rail.[4] Similarly, the Oregon Clean Fuels Program allows credit generation opportunities for electrification of heavy rail.[5] Rather than excluding rail, these jurisdictions have structured their low carbon fuel standards in such a way that could incentivize end-use fuel switching in rail thereby resulting in reduction of GHG emissions. It is crucial that ECCC allow credit generation opportunities for rail to spur innovation and send a market signal for continued investment.

[4] https://ww2.arb.ca.gov/sites/default/files/classic//fuels/lcfs/lcfs_meetings/03082016regguidance_16-06.pdf
[5] http://records.sos.state.or.us/ORSOSWebDrawer/Recordpdf/7604338

Recommendation 1: The RAC recommends that ECCC reintroduce the EER for rail and the reference to rail for end use fuel switching prior to the next publication of the CFR.

Inclusion of Yard Equipment

At a minimum, the RAC asks that as ECCC clarifies the specific types of vehicles eligible for credit creation as of the registration of the final Regulations and publishes vehicle classes and their associated EERs in the Fuel LCA Model Methodology document that they broaden the definition of transportation vehicle end-use fuel switching to include yard equipment. Intermodal equipment used to shift railcars in yards and to load and unload containers is essential to the movement of goods within the transportation sector.

Both California and Oregon include various credit generation opportunities for the electrification of yard equipment. In California for example, their LCFS includes Electric Cargo Handling Equipment for rail yards and also specifies electrification of yard trucks for credit generation under their definition of Electricity/BEV and PHEV Trucks.[6] In the European Union, the Fuel Quality Directive is more flexible in its approach by using broad terminology such as "non-road mobile machinery" which supplementary documents outline, contains everything from construction and farming machinery, to railcars, locomotives, and inland water vessels.[7]

Due to its localized operating area and reduced energy intensity requirements, yard equipment is widely seen as a possible "first step" to electrification of rail – allowing smaller scale testing of catenary, battery, or hydrogen fuel cells. Furthermore, it is often the least efficient, oldest locomotives that are used in the yards, so potential for credit generation for electrification of these provides the opportunity to make a significant impact.

Allowing credit generation based on conversion of yard equipment like shunters to electricity or hydrogen fuel cell technologies would hasten the development and testing of this important interim step in rail decarbonization.

As illustrated above, the RAC believes that Compliance Category 3 should be expanded to include locomotives, but at a minimum, should at least include yard equipment, essential in the transportation sector. The inclusion of yard equipment would provide additional opportunities to incent rail's transition to lower carbon fuels.

Recommendation 2: The RAC recommends that ECCC include yard equipment for credit generation under Compliance Category 3.

Vendor Disclosure of Fuel Blending Rates

Locomotives represent significant capital investments for Canada's railway companies, costing several million dollars each and expected to last upwards of forty years. Based on operational

[6] See https://ww2.arb.ca.gov/sites/default/files/classic//fuels/lcfs/guidance/faq_eche_eligibility.pdf for more information

[7] See https://ec.europa.eu/growth/sectors/automotive/environment-protection/non-road-mobile-machinery_en

concerns, most original engine manufacturer (OEM) warrantees currently limit the blending of biodiesel to 5% and renewable diesel to 30%. Use of blends higher than these limits risks causing negative operational impacts, damaging engines, and voiding warranties.

Given that the liquid fuel regulations will reduce the Canadian average carbon intensity (CI) value for diesel from 93.6 g CO2/MJ in 2022 to 84 gCO2/MJ by 2030, average biofuel blend rates are expected to rise. This raises the possibility that they could exceed the blending limits imposed by OEM warrantees. OEMs have signaled that they are aware of and are working to mitigate this issue. Research is underway, including testing in conjunction with railroads, to identify technical, maintenance and operational changes that could be implemented to reduce the negative impacts incurred using higher biofuel blends. It is hoped that the warrantied blend limits will increase as solutions are identified, but as of yet neither new safe blending limits, nor timelines for ascertaining these have been identified.

Operational impacts of renewable fuel content must also be considered. Renewables fuels typically have lower energy content than current Ultra Low Sulfur Diesel (ULSD). As fuel suppliers increase the renewable fuels blended with ULSD, rail operations could experience issues with maintaining adequate range between fueling locations. Mitigating this risk may require additional fueling infrastructure, locomotive modifications, and possibly result in the increase of fuel consumption to maintain normal rail network operations. Primary fuel suppliers will need to assure clarity in fuel content, energy density, and quality to assure reliable rail operations under the proposed Regulations.

Higher blends of fuel could help the rail sector to reduce emissions if they can be used safely, something that is welcomed by the industry. Our members must always strive to purchase and use fuel that conforms to the limits established by OEMs at all times. However, under the draft liquid fuel regulations, fuel vendors are not required to disclose the percentage of biodiesel or renewable diesel in their products. Our members are concerned that the lack of transparency with regards to blend percentages will potentially void hundreds of previously negotiated warranties and expose them to millions of dollars in unforeseeable liabilities.

Recommendation 3: The RAC asks that ECCC protect Canadian railway companies' commercial agreements with OEMs – and improve ongoing investment certainty – by requiring vendor disclosure of energy density and percent of renewable content whenever a batch of fuel contains more than 5% biodiesel or 30% renewable diesel. At a minimum, primary suppliers should be compelled to provide this in a timely manner upon formal request.

Compliance Fund

The RAC believes that the compliance fund associated with the *Clean Fuel Regulations* presents an opportunity to support technology research, development, and demonstration efforts that will advance the transportation sector's transition to a low-carbon economy. Particularly in the rail sector, alternative technologies such as non-combustion propulsion (e.g., hydrogen fuel cells and battery electric locomotives) still require additional research, development, and demonstrations before achieving commercial viability in Canada. Government support for such initiatives would help to spur innovation and private investments into these technologies.

Recommendation 4: the RAC recommends that a portion of the compliance fund be earmarked towards supporting rail specific technology research, development, and deployment.

Summary

Rail is already an extremely efficient transportation modality for moving both people and freight. Notwithstanding this fact, the rail sector is actively seeking opportunities for deeper decarbonization. This is challenging, however. Rail is a capital-intensive sector, and locomotives are long-term assets. There are significant economic barriers to large scale fleet replacement: each locomotive represents an investment of several million dollars and is expected to last for upwards of forty years. Where refueling infrastructure is also required, the costs become significantly higher, given the long distances that locomotives may travel. The rail sector must be able to generate end-use fuel switching credits under the *Clean Fuel Regulations* to offset some of these costs if they are to meet their decarbonization goals.

Zero-emission technology for locomotives is still nascent and will require additional testing and demonstration prior to commercialization. Allowing railroads to generate credits for end-use fuel switching in yard equipment would provide the opportunity for the sector to offset some of the costs which they will incur in supporting testing and demonstration scale projects.

Further, allowing for credit generation for end-use fuel switching in mainline rail would ensure that developing technologies that prove successful in the less intensive operations in rail yards continue to be scaled up for wider scale use in mainline rail applications. This would also serve to prevent unintentional distortions of transportation markets in Canada. As written, the *Clean Fuel Regulations* risks shifting both passengers and freight away from more efficient modes such as rail and back into cars and trucks.

Ensuring that blend rates are disclosed on a transactional basis for batches of fuel containing higher amounts of biodiesel or renewable diesel than allowed under OEM warrantees would ensure that railroads were supported in maximizing their use of low carbon fuels while maintaining engine warrantees. This will represent an important interim step to decarbonization of the rail sector.

Finally, ensuring that a portion of the compliance fund is used to support rail specific technology development will help to advance the commercial viability of rail specific technologies. Research and pilot demonstrations are still required for rail technology therefore supporting these initiatives with government funding will help to spur innovation and more private investment.

In closing, the RAC and our members support ECCC's efforts to reduce the carbon intensity of fuels used in the Canadian transportation sector. As significant transportation fuel consumers, Canadian railways hope to continue to play a key role in decarbonizing the transportation sector through generation of end-use fuel switching credits.

We appreciate the opportunity to participate in this consultation process and we thank you for taking the time to review our submission.

Respectfully,

Caroline Healey
Executive Vice-President and General Counsel
Railway Association of Canada

January 18, 2021

Subject: Ontario Low-Carbon Hydrogen Strategy Discussion Paper

Dear Sir/ Madam,

I am writing to provide comments on behalf of the Canadian rail industry regarding the Ontario Low-Carbon Hydrogen Strategy Discussion Paper (Discussion Paper)

The Railway Association of Canada (RAC) represents freight and passenger railway companies that move more than 100 million people and $360 billion worth of goods in Canada each year. Freight railways move about 50 percent of the country's goods destined for export (by volume) and 70 percent of intercity freight traffic in Canada. As the voice of Canada's railway industry, the RAC advocates on behalf of its members to ensure that the rail sector remains globally competitive, sustainable and safe.

The RAC would like to acknowledge the Province of Ontario's efforts to work with other levels of government and the private sector in a collaborative approach to reducing carbon emissions. The impacts of climate change affect us all and identifying and implementing innovative solutions will require that we all work together. We believe that the production and use of hydrogen represents the type of innovation that can support decarbonization efforts while also boosting the economy and job creation.

Collaboration is at the heart of the Canadian railway industry's efforts to decarbonize its operations. For over twenty-five years, Canada's railways have worked with the federal government to reduce emissions produced by locomotives. Since 1995, Transport Canada and the RAC have signed four Memoranda of Understanding (MOU) to establish voluntary reduction targets for emissions produced by locomotives in Canada. Performance under the MOU agreements has been positive, with railways demonstrating that investments in technology and more efficient operating practices are improving fuel economy and reducing emissions.

The most recent MOU, signed in 2018, includes a commitment to collaborate on a comprehensive pathway to reduce emissions produced by the railway sector (Rail Pathway Initiative). This Rail Pathways Development project, underway now, will align government and industry efforts to support the development, testing and commercialization of next generation technologies that will allow for deep reductions of emissions from the rail sector, including hydrogen co-combustion and hydrogen fuel cells, among other options.

A key principle of the Discussion Paper is to use hydrogen "where and when it makes sense" and seeks to "focus on areas where hydrogen is most likely to become cost-competitive ...". Based on the initial findings of the Rail Pathways Development project, this will prove to be true for many applications in the rail sector, including equipment used in rail yards, as well as in locomotives used in various applications. As noted in Canada's Hydrogen Strategy, "Rail … applications are well suited to hydrogen because their energy intense duty cycles and long ranges make them particularly hard to electrify."

The Discussion Paper identified hydrogen as an alternative or complement to diesel fuel in the medium to long term: after 2030. In fact, Cummins fuel cells are already powering Alstom regional commuter trains in commercial operation internationally. In Canada, pilot projects are testing hydrogen fuel cell powered rail (hydrail) in Canada now both in shunter (Southern Railway of British Columbia) and mainline freight locomotives (CP Rail), and Metrolinx has been investigating the feasibility of using a hydrail system for the GO rail network. Furthermore, as Cummins and Next Hydrogen manufacturing facilities exist in Ontario, this could allow for partnership opportunities to help testing of hydrogen fuels cells for railway operations. The Government of Ontario can promote partnerships between regional fuel cell developers and rail companies on discussions regarding hydrogen pilot projects in the rail sector.

Commercial use of hydrail technology is possible in Ontario by, or even prior to 2030, and could therefore contribute to Ontario's 2030 greenhouse gas emission reduction target. In order to make this a reality, however, pilot deployments of hydrail technologies in Ontario are necessary. Unlike in other areas, technology development in the rail sector must rely on rail companies to provide the assets (trains) to use in demonstration and pilot projects, and the person-hours to support these projects. This will require financial support from the province.

Further, rail is a capital-intensive sector, and locomotives are long-term assets. Each locomotive represents an investment of several million dollars and is expected to last for upwards of forty years. Where refueling infrastructure is also required, that cost becomes significantly higher. Once the technology is commercially available, our view is that funding will be required to support the rail industry in making the transition to hydrogen.

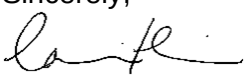
In developing a hydrogen strategy, the RAC further encourages the province of Ontario to consider that for regions identified as potential producers or users of hydrogen that are not serviced by existing pipelines, rail provides an efficient and economical option for transporting it. Railways may also provide a viable option for the storage, production, and usage of hydrogen at rail-yard facilities, which can provide an option to generate electricity to power the grids when hydrogen is not required.

We also encourage the province to explore and support training and knowledge needs of the railway sector to build capacity and hydrogen knowledge within rail companies. The goal of such training would be to educate rail companies on new hydrogen technologies from successful pilot projects, academia, and vendors from across the world.

Developing standards for hydrogen fuel quality should be considered as part of the strategy. Lower grade hydrogen can be suitable for use in combustion processes but will lead to fouling in high end fuel cells. Standards ensure that railways understand the type and quality of hydrogen fuel purchased so that compliance with OEM requirements and warranties can be met.

The RAC appreciates the opportunity to provide input to the development of the provincial hydrogen strategy and looks forward to further discussions on this topic.

Sincerely,



Caroline Healey
Executive Vice-President and General Counsel
Railway Association of Canada

Government of Canada
Gouvernement du Canada

BILL C-28

Strengthening Environmental Protection for a Healthier Canada Act: Summary of Amendments

Canada

Bill C-28, *Strengthening Environmental Protection for a Healthier Canada Act*

Summary of Amendments

The following is intended to provide a plain language summary of key amendments put forward in Bill C-28, *Strengthening Environmental Protection for a Healthier Canada Act*. For the comprehensive and detailed list of amendments, please refer to the Bill.

Contents

April 13, 2021

Note on clause references: *the references in this document are to the Bill clauses (i.e. the bolded paragraphs in the Bill). There are 69 clauses in the Bill. Each clause may modify several different provisions (e.g. sections, subsections, paragraphs) of the Act.*

Environmental Rights

Right to a Healthy Environment under CEPA

- The preamble to the Act will recognize that every individual in Canada has a **right to a healthy environment** as provided under CEPA, and section 2 of the Act (respecting administrative duties) will require that the Government protect that right *[clause 2(1), clause 3(2)]*.
    - Within two years, the Ministers must develop an **implementation framework to set out how that right will be considered in the administration of the Act** *[clause 5]*.
        - Interested persons (e.g., stakeholders, partners) will have an opportunity to participate in the development of the implementation framework.
        - The Minister of Environment and Climate Change must publish the framework and annually report on its implementation.
    - The Ministers must **conduct research, studies or monitoring activities** to support the Government in protecting a right to a healthy environment *[clause 7]*.
- In addition, the preamble to the Act will include related statements:
    - confirming the Government's commitment to implement the **United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)** *[clause 2(3)]*;
    - recognizing the importance of considering **vulnerable populations** in risk assessments and of minimizing the risks posed by the **cumulative effects** of toxic substances *[clause 2(4)]*;
    - endeavouring to reduce, refine or replace the use of **animal testing** *[clause 2(5)]*; and
    - recognizing the importance of **Canadians having information** regarding the risks of toxic substances, including by **labelling products** *[clause 2(6)]*.

Strengthening Chemicals Management: Existing Substances

Risk Assessment

Plan of Chemicals Management Priorities and Public Request Mechanism

- Within two years, the Ministers must develop, consult on, and publish a **Plan of Chemicals Management Priorities**, which will set out a multi-year, integrated plan for the assessment of substances as well as the activities and initiatives that support chemicals management, such as information-gathering, risk management, risk communications, research and monitoring *[clause 19]*.
    - The Ministers are empowered **to consult with interested stakeholders and partners**, such as Indigenous peoples, representatives of industry, labour and municipal authorities, or other interested persons, in the development and implementation of the Plan of Chemicals Management Priorities. The public can also influence these priorities through the draft publication framework, which provides for a public comment period.
    - The Plan of Chemicals Management Priorities must specify the term of the plan, after which time the Ministers will be **required to review the Plan**.
    - Stakeholder engagement and public consultation requirements will also apply to any updates to the Plan following the Ministers' review of it.

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- In developing and implementing the Plan, the Government will continue to set priorities, and assess and manage substances by taking a risk-based approach that accounts for the properties of a substance as well as exposure to the substance, and must consider a number of factors of importance to Canadians, including:
    - vulnerable populations and cumulative effects;
    - particular properties and characteristics of substances, such as carcinogenicity, mutagenicity or neurotoxicity;
    - the capacity of substances to disrupt reproduction or endocrine systems;
    - the advantages of class-based assessments (e.g., as a means of avoiding regrettable substitutions);
    - safer or more sustainable alternatives; and
    - means of providing information to the public, such as through labeling and other risk communication strategies *[clause 16]*.

- The Ministers must **report annually to Parliament**, as part of the CEPA annual report, on their progress in implementing the Plan of Chemicals Management Priorities *[clause 19]*.

- The spent **categorization provisions** and dated **Priority Substances List (PSL) provisions will be repealed** *[various clauses]*.

- In addition, a **new provision will allow any person to request that the Ministers assess a substance** to determine whether it is toxic or capable of becoming toxic. The Ministers must reply within 90 days indicating how they intend to deal with the request and the reasons for dealing with it in that manner *[clause 20]*.

Vulnerable Populations and Cumulative Effects

- The Ministers must consider available information regarding **vulnerable populations** and **cumulative effects** when conducting and interpreting the results of certain risk assessments under CEPA (i.e. all assessments other than assessments of new substances and significant new activities) *[clause 20]*.

- These amendments complement the recognition of a right to a healthy environment and support the Government's duty to protect it *[clause 2(1), clause 3(2)]*.

    - The preamble to the Act will include new language recognizing the importance of considering **vulnerable populations** in risk assessments and of minimizing the risks posed by the **cumulative effects** of toxic substances *[clause 2(4)]*.

    - The Act will define a "vulnerable population" in a manner that captures **biological susceptibility** (e.g. infants, pregnant women) and **potential exposure** (e.g. Indigenous communities eating traditional foods, areas where pollution standards may be exceeded) *[clause 4(2)]*.

    - Explicit recognition that the **Government's duty** (under section 2) to exercise its powers in a manner that protects the environment and human health **includes the health of vulnerable populations** *[clause 3(1)]*.

    - The Act will provide that the **Minister of Health's obligation to conduct biomonitoring surveys,** as part of the obligation to conduct research and studies in relation to the health effects of substances, may include vulnerable populations *[clause 8]*.

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- Ensuring **vulnerable populations and cumulative effects** are reflected under the list of **matters** that must be considered when developing and implementing the **Plan of Chemicals Management Priorities** *[clause 16(2)]*.

- In addition, amendments will facilitate the making of **geographically targeted regulations** that could, for example, be used to help address pollution **"hot spots"** *[clause 54]*.

Public Accountability Framework (Sections 77 and 91-92)

Transparency, Participation and Accountability in Assessment and Management of Risks

- The public accountability framework under section 77 and the CEPA "time-clock" in sections 91 and 92 **will now apply to all risk assessments of substances to determine whether they are "toxic" under CEPA**, except for assessments of new substances and significant new activities *[clause 21(1)]*.

  - This broadens the scope of section 77, which previously only applied to certain risk assessments of substances, and will have the resulting effect of broadening the scope of the CEPA time-clock obligation as well.

- Following an assessment of whether a substance is toxic or capable of becoming toxic, the Ministers must propose one of four measures under section 77:
  a) taking no further action – e.g. if the substance is not toxic.
  b) adding the substance to the Watch List – e.g. if the substance is of potential concern and requires monitoring *(see "Watch List" section below)*.
  c) recommending that the substance be added to Part 1 of Schedule 1 *(see "Prohibiting Toxic Substances that pose the Highest Risk" section below).*
  d) recommending that the substance be added to Part 2 of Schedule 1 *[clause 21(1)]*.

- If the proposed measure is a recommendation that the substance be added to Schedule 1 (i.e. either (c) or (d) as per above), then the CEPA time-clock obligation is triggered and the Ministers must develop a risk management instrument in relation to the substance *[clause 21(2)]*.

  - The particular risk management approach will differ depending on whether the toxic substance is added to Part 1 (priority to prohibition) or Part 2 (priority to pollution prevention) of Schedule 1 (*see "Prohibiting Toxic Substances that pose the Highest Risk" section below).*

Timelines for Additional Planned Risk Management

- Where the Ministers propose to develop more than one risk management instrument in respect of a substance, the Ministers must **communicate the timelines for making the additional planned instruments** when publishing the first finalized instrument *[clause 22]*.

Risk Management

Watch List

- The Ministers must publish and maintain a **list of substances of potential concern**, due to their hazardous properties for example *[clause 20]*.

- The decision to declare that a substance is "capable of becoming toxic" and add it to the **Watch List** will be one of the four options under section 77 that the Minister may take following a risk

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assessment (*see "Transparency, Participation and Accountability in Assessment and Management of Risks" section above*) *[clause 21(1)]*.

Prohibiting Toxic Substances that pose the Highest Risk

- **Generally**
  The unworkable provisions for **virtual elimination (VE)** of toxic substances that are persistent and bioaccumulative (PBTs) **will be repealed and replaced** with a new regime that remains risk-based but provides that toxic substances of highest risk should be managed by giving priority to prohibition *[various clauses]*.

    - Recall that substances that are found "toxic" under section 64 of CEPA have been assessed as such according to a risk-based process that looks at both hazard and exposure.

  The list of toxic substances in Schedule 1 will be split into two parts to implement a two-track approach for managing toxic substances under CEPA *[clause 57]*.

    - Toxic substances that are either persistent and bioaccumulative (PBTs), or inherently toxic and found to pose the highest risk will be added to **Part 1** and subject to a more stringent risk management objective (i.e. **priority given to prohibition**) *[clause 21(1), clause 29]*.

        - Initially, toxic substances on Part 1 will be those that have been found to meet the criteria in the existing *Persistence and Bioaccumulation Regulations.*

        - It is anticipated that those regulations would be amended or new regulations made to define "highest risk" by reference not only to persistence and bioaccumulation but also to prescribed thresholds for **carcinogenicity, mutagenicity and reproductive toxicity (CMR)**, and any other relevant circumstances or conditions (see proposed regulatory authorities under subsection 67(1)) *[clause 15]*.

        - The Government will engage interested stakeholders in the development of the new regulatory criteria to define toxic substances that pose the highest risk.

    - Other toxic substances will be added to **Part 2** and continue to be subject to regular risk management actions (i.e. **priority given to pollution prevention**) *[clause 21(1), clause 29]*.

- **Prohibiting PBTs and Toxic Substances that Pose the Highest Risk**
  Under the amendments, the Ministers must recommend that toxic substances of highest risk, as defined by regulations made under section 67, be added to the **new Part 1 of Schedule 1** *[clause 15, clause 21(1)]*.

  When developing risk management instruments in respect of these toxic substances, the **Ministers must give priority to the total, partial or conditional prohibition** of activities in relation to these substances *[clause 29]*.

    - **total prohibition** could be implemented as a complete ban or phase out of all activities involving the substance (e.g. for persistent and bioaccumulative toxic substances in accordance with Canada's international commitments).

    - **partial prohibition** could be implemented as a ban or phase out of activities of concern involving the substance, which may be most uses in some cases, with exemptions for critical or essential uses for which there are no feasible alternatives (e.g. prohibition of all uses except for essential medical uses or other similarly essential uses).

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- **conditional prohibition** could be implemented such that all new activities involving the substance are prohibited unless the Ministers have specifically authorized the use (e.g. through a permit) on the basis that the activity can be undertaken in a manner that minimizes or eliminates any harmful effect on human health or the environment, and there are no feasible alternatives.

In summary, the amendments provide that prohibition would be the starting point for risk management of toxic substances added to Part 1 of Schedule 1, while recognizing that, as the list of toxic substances on Part 1 grows to include toxic substances with properties or characteristics beyond persistence and bioaccumulation, more tailored approaches to managing the risks may be needed. As noted above, partial or conditional prohibitions may be more appropriate in some cases, and indeed necessary in other cases.

- **Supporting Powers**
  In support of this new priority to be given to prohibition, amendments will add a new provision to section 93 (i.e. the main regulation-making authority for toxic substances) that explicitly enables ministerial permitting regimes *[clause 33(7)]*.

  - This **permitting power** will allow the Minister to require that proponents first demonstrate that a prohibited activity can be **undertaken safely** and that there are **no feasible alternatives** before deciding whether to issue a permit authorizing the proponent to undertake the activity according to specific conditions or control measures.

  - Permitting decisions by the Minister could also be discretionary under this new authority (this can be contrasted with existing regulatory permitting regimes that require the Minister to issue a permit if prescribed conditions are met).

- **Other Toxic Substances**
  As noted above, for toxic substances that do not meet the regulatory persistent and bioaccumulative or inherently toxic and of "highest risk" criteria, the Ministers will continue to recommend that these other toxic substances be added to **Part 2 of Schedule 1**, and they will continue to be required to **give priority to pollution prevention actions** (which may include prohibition) when managing the risks posed by those substances *[clause 21(1), clause 29]*.

- **Application**
  The amendments to CEPA will not affect products, such as pesticides, which are specifically regulated under other federal Acts, such as the *Pest Control Products Act* (PCPA). This is consistent with certain frameworks and provisions under CEPA and the best-placed act approach to chemicals management.

  The amendments do not require that the Government of Canada's Toxic Substances Management Policy (TSMP) be updated; the new proposed regime and the TSMP can stand together. Any future decision to update the TSMP would be done in consultation with the relevant departments, agencies and stakeholders in order to ensure that it is updated in a manner that accommodates the particularities posed by pesticides, for example.

Products that May Release a Toxic Substance

- Information-gathering and regulatory authorities may be exercised in respect of **products that may release a toxic substance** (even though the products themselves do not contain the toxic substance) *[various clauses]*.

  - New powers will allow control measures that target the design and functioning of products such as portable fuel containers (vis-à-vis the release of volatile organic compounds listed on Schedule 1).

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Best-Placed Act / Best-Placed Minister

- The Ministers may "operationalize" and **rely on an existing federal measure** under another Act or regulation by clarifying how that measure addresses the risks of a toxic substance that were identified during the risk assessment *[clause 21, clause 23, clause 30, clause 40]*.

    - Examples of existing federal measures include the following general prohibitions:
        - subsection 36(3) of the *Fisheries Act* (prohibition on the deposit of deleterious substances);
        - section 16 of the *Food and Drugs Act* (prohibition on the sale of cosmetics containing substances that may cause injury); and
        - sections 7 and 8 of the *Canada Consumer Product Safety Act* (prohibitions on the manufacture, import, advertisement and sale of consumer products that are a danger to human health).

    - Where the Ministers decide to rely on an existing federal measure that addresses the risks identified for a toxic substance, they must make a statement to that effect and outline additional administrative measures that will be taken to ensure it is effective and, in which case, they do not need to develop a new risk management instrument.

- In cases where **another federal Act or minister is best placed** to manage the risks identified for a toxic substance, a **new** regulation or instrument can be made under that other federal Act in order to formally fulfill the legal obligation under CEPA to develop a risk management instrument *[clause 30, clause 31]*.

- Similarly, the **Minister of Health will be responsible** for fulfilling the risk management obligation under CEPA where the Minister of Health will be leading the development and implementation of the new risk management instrument(s) in relation to substances that pose health concerns *[clause 30, clause 31]*.

Renaming Schedule 1

- The title of Schedule 1 (i.e. "List of Toxic Substances") will be removed so that the title will simply be "**Schedule 1**" *[various clauses]*.

Domestic Substances List (DSL)

Power to Add In-Commerce List (ICL) Substances to the DSL

- The Minister will be able to **add substances on Health Canada's "In-Commerce List"** (ICL) to the Domestic Substances List (DSL) under CEPA to reflect the fact that they are in Canadian commerce *[clause 4(1), clause 14, clause 26, clause 28, clause 38, clause 55]*.

    - The In-Commerce List is comprised of substances used in products regulated under the *Food and Drugs Act* and that were in Canadian commerce between January 1, 1987 and September 13, 2001.

Power to Remove Substances No Longer in Commerce from the DSL

- The Minister will be able to **remove substances from the Domestic Substances List (DSL)** to reflect the fact that they are no longer in Canadian commerce *[clause 4(1), clause 13, clause 14, clause 28, clause 38, clause 55]*.

Note on clause references: *the references in this document are to the Bill clauses (i.e. the bolded paragraphs in the Bill). There are 69 clauses in the Bill. Each clause may modify several different provisions (e.g. sections, subsections, paragraphs) of the Act.*

- In the interests of transparency and fairness, the Minister will publish a notice of the proposed removal in the *Canada Gazette* and provide for a **60-day comment period** *[clause 14, clause 38]*.

New Substances and Significant New Activities

Varying Significant New Activity (SNAc) Information

- The Minister will be able to **vary elements of a significant activity notice or order** beyond the significant new activity itself, such as the data or information that needs to be submitted for evaluation prior to undertaking the activity, as well as the timelines for submitting that information *[clause 24, clause 26, clause 41, clause 43]*.

Downstream Communication of Significant New Activities (SNAc)

- The transferor of a new substance must notify transferees of any obligation to comply with the significant new activity provisions in respect of the new substance. This obligation will be extended so that it also applies vis-à-vis any obligation to comply with the **significant new activity provisions in respect of *existing* substances** *[clause 24, clause 25, clause 26, clause 27, clause 41, clause 42, clause 43, clause 44]*.

- The Minister will be able to **tailor the scope of that obligation** by specifying, in the SNAc notice or order itself, the class of persons who are not required to be so notified.

    - For example, the Minister may specify that persons downstream of product formulators, such as retailers of finished products, do not need to be notified of the obligation to comply with the SNAc.

Amendments to the *Food and Drugs Act* (FDA)

- Amendments to the *Food and Drugs Act* (FDA) will enable the creation of an environmental risk assessment and risk management regime for drugs under the *Food and Drug Regulations* (currently limited to health risk) *[clause 64, clause 65, clause 66, clause 67]*.

- This will enable the Government of Canada to move towards creating an environmental notification, risk assessment and risk management framework for drugs under the FDA that the Minister of Health could recommend to the Governor in Council for addition to CEPA's Schedules 2 and 4 (e.g. a regime that provides CEPA-equivalent pre-market notification and assessment for certain new substances).

    - If the environmental notification, risk assessment and risk management framework for drugs under the FDA is found to meet the requirements necessary to be added to Schedules 2 and 4, this regime would be treated in the same manner as the *Pest Control Products Act*, the *Fertilizers Act* and the other scheduled federal statutes and regulations—that is, new substances that are manufactured or imported for use in drugs would no longer be notifiable or assessed under CEPA, as this would happen entirely under the FDA.

    - This regime would strengthen the environmental risk assessment and risk management of drugs, and remove the duplicate notification process between the FDA and CEPA (for safety, efficacy and quality and environmental assessments), creating a more streamlined regulatory approach for industry with respect to the assessment and approval of drugs in Canada.

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Information-Gathering

Powers to Compel Information

- Amendments will strengthen the Minister's primary information-gathering authority under **section 71** by ensuring that it can be used to specify the **methods for quantifying** the required information as well as the **test procedures or laboratory practices to be followed** in performing any required tests *[clause 18]*.

- Amendments will also allow the Minister to **require supplementary information** (e.g. models or methods used) as well as to **require that samples be provided** along with test results *[clause 18]*.

Confidential Business Information (CBI)

- Unless otherwise specified, amendments provide that **confidentiality requests** made under section 313 must be **accompanied by reasons** (e.g. explaining the basis upon which confidentiality is claimed) *[clause 49, clause 53]*.

- Amendments will authorize the Minister to **disclose the explicit name** of a masked substance when **risk management instruments** have been put in place for the substance (e.g. when the significant new activity provisions have been applied to the substance) *[clause 50, clause 52]*.

- Amendments will also authorize the Minister to **disclose explicit names after ten years** have passed from the date the name was masked, but will give proponents the opportunity to demonstrate that it should nevertheless remain confidential *[clause 50, clause 52]*.

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