

TRUCK AND ENGINE MANUFACTURERS ASSOCIATION COMPLIANCE WORKSHOP

Transportation Division
Environment and Climate Change Canada
April 27, 2021



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

OPENING REMARKS

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- Notice of Defect
- National Emission Mark
- Import Declarations
- Transition engine annual reports and end of model year reports for off-road vehicle and engines and on-road motorcycles
- General inquiries and regulatory administration

- End of model year reports for light-duty vehicles (both GHG and air pollutant regulations)
- Regulatory development for on-road light-duty vehicles, motorcycles and small off-road engines
- International engagement (WP.29)

- End of model year reports for heavy-duty vehicles and engines (GHG emission regulations)
- Regulatory development and administration for heavy-duty vehicles and engines (including trailers)
- Regulatory development for large spark-ignition/compression-ignition engines
- Heavy-duty technical amendments

- Submission of Evidence of Conformity
- Canada Unique Submissions
- Compliance verification and testing

AGENDA ITEMS

- Opening Remarks (Jeffery Goodman)
 - CI/LSI/SCI Regulations (Leigh Evans)
 - Regulatory Overview
 - Frequently Asked Questions
 - Technical Amendments (Lauren Rowland)
 - Covid-19 Guidance (Jeffery Goodman)
 - Questions and Closing Remarks (Jeffery Goodman)
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DISCLAIMER

- The following information is intended for guidance only. It does not in anyway supersede or modify the requirements of the *Canadian Environmental Protection Act, 1999* (CEPA) or the vehicle and engine emission regulations (Regulations) made under CEPA. In the event of an inconsistency between this information and CEPA and/or the Regulations, CEPA and the Regulations shall prevail.
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**OFF-ROAD COMPRESSION-IGNITION
(MOBILE AND STATIONARY) AND
LARGE SPARK-IGNITION ENGINE
EMISSION REGULATIONS**

OFF-ROAD COMPRESSION-IGNITION ENGINE EMISSION REGULATIONS

- *Off-Road Compression-Ignition Engine Emission Regulations (CI Regulations):*
 - Came into force in January 2006.
 - Introduced emission standards aligned with those of the United States Environmental Protection Agency (U.S. EPA).
 - Apply to all persons importing or manufacturing off-road diesel engines (or machines containing such engines) such as those typically found in construction, farming, forestry and mining machines.
 - Regulations Amending the CI Regulations:
 - Came into force in January 2012.
 - Introduced new Tier 4 emission standards and included new transition engine provisions based on the U.S. EPA's program for equipment manufacturer flexibility.
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OFF-ROAD COMPRESSION-IGNITION (MOBILE AND STATIONARY) AND LARGE SPARK-IGNITION ENGINE EMISSION REGULATIONS

- Proposed in March 2019; Published Gazette II December 2020.
 - The *Off-road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations* (Regulations) will come into force on **June 4, 2021**.
 - The Regulations will repeal and replace *Off-Road Compression-Ignition Engine Emission Regulations*.
 - Transitional provisions will maintain some provisions from the *Off-Road Compression-Ignition Engine Emission Regulations* for mobile compression-ignition engines that were manufactured before the new Regulations come into force, instead of the new provisions.
 - In the case of transition engines, the existing regulations apply and are unchanged.
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PRESCRIBED ENGINES AND STANDARDS

- The Regulations set out emission standards for the following types of engines:
 - Mobile compression-ignition (MCI) engines:
 - These engines are typically found in machinery used in construction, agriculture, forestry, and industrial applications.
 - EPA Tier 4
 - Stationary compression-ignition (SCI) engines:
 - These engines have a displacement of less than 30 L per cylinder and are used to provide primary sources of electricity and power machines such as fire pumps and emergency back-up generators.
 - EPA Tier 4
 - Large spark-ignition (LSI) engines:
 - These engines develop more than 19 kW of power and are used in machinery such as forklifts and ice resurfacers.
 - EPA Tier 2
 - Exclusions to the prescribed engines are set out in section 5.
 - Flexibilities to the emission standards are outlined in sections 12 –22.
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PERSONS

- The Regulations apply to all persons in the business of manufacturing, distributing or importing prescribed engines for sale (i.e. a company under the *Canadian Environmental Protection Act, 1999*) and to persons who import such engines for their own use.
 - Generally, four different types of persons could be subject to the Regulations:
 - a person, who is not a company, importing an engine or machine containing an engine;
 - an importer of engines or machines containing engines for the purpose of sale;
 - a Canadian engine or machine manufacturer; and
 - a distributor of Canadian engines or machines containing Canadian engines.
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REGULATORY REQUIREMENTS

- Importers and manufacturers in Canada must meet certain regulatory requirements, including:
 - Markings / Labels
 - Import Declarations
 - Evidence of Conformity
 - Defect Information
 - Maintenance and Submission of Records
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FREQUENTLY ASKED QUESTIONS

IMPORTATION DECLARATION

How can Importation Declarations be provided under the new Regulations?

- The Importation Declaration, pursuant to section 44-46, may be provided in one of three ways:
 - Transactional declarations submitted directly to ECCC prior to importation.
 - Bulk declarations submitted directly to ECCC on an annual basis (for companies that import over 50 engines per calendar year). Please note that to use this method the company is required to submit a notice of intent to ECCC and be approved to submit declarations on an annual basis.
 - Single Window Initiative Integrated Importation Declaration (SWI IID) submitted to Canada Border Service Agency (CBSA). Using a single electronic portal, the SWI incorporates ECCC's importation declaration requirements with the data elements required by CBSA and other government programs in an IID.
 - Products should only be declared through one submission method.
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STATIONARY

Under the new Regulations, what is the definition of a “stationary” engine?

- Any engine that is designed to be used in or on a machine that is designed to be stationary.
- Meaning, the engine and the machine must not move (e.g. a CI engine mounted on a trailer is considered mobile).

What EPA tier should be used for stationary engines? Stationary emergency engines? Stationary engines used in remote locations?

- Applicable tiers for Canadian SCI engine imports:

Power range	Non-backup and non-remote	Backup/emergency or remote
≤37 kW	Tier 4	Tier 2
>37 kW to ≤560 kW	Tier 4	Tier 3
>560 kW	Tier 4	Tier 2

Note: Fire pumps have separate, less stringent standards.

FAMILY EMISSION LIMITS

For stationary engines, can EPA-certified, credit-using engines be imported into Canada? Is the EPA certificate and EPA label sufficient for evidence of conformity? No separate request or documentation is necessary for importation of higher FEL, EPA certified engine?

- Engines, including those using Averaging Banking and Trading (ABT), that are covered by an EPA certificate and that conform to the standards referred to in the EPA certificate are eligible for importation into Canada. This applies to all engines captured by the Regulations, including stationary compression-ignition engines.
 - Evidence of conformity requirements can be found under section 40 of the Regulations.
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REMOTE LOCATIONS

Do EPA certified stationary engines intended for use in remote locations need to be specifically labelled to identify them for use in remote locations?

- For SCI engines covered by an EPA certificate, the EPA label must contain a statement that states the engine will be used in a remote location.
 - Subsection 32(b) of the Regulations outlines the labelling requirements for the United States emission control information label.
 - SCI engines used in remote locations that are not covered by an EPA certificate, must bear a label that states:
 - “STATIONARY ENGINE FOR USE IN REMOTE LOCATIONS /MOTEUR FIXE POUR UTILISATION EN RÉGIONS ÉLOIGNÉES”
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REPLACEMENT ENGINES

Can I stock replacement engines?

- Yes, replacement engines imported under 153(2) of CEPA can be stocked in Canada.
 - Importer must submit a declaration set out in section 46 prior to the engine's importation.
 - Importer must submit evidence of conformity set out in section 41 prior to the engine leaving the company's possession or control.
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TECHNICAL AMENDMENTS

TECHNICAL AMENDMENTS REGULATORY INITIATIVE

- U.S. EPA is proposing changes to test procedures for heavy-duty engines and vehicles to improve accuracy and reduce testing burden.
 - Minor regulatory amendments concerning light-duty vehicles, heavy-duty vehicles, highway motorcycles, locomotives, marine engines, other off-road engines and vehicles, and stationary engines are being proposed.
 - Meant to provide clarity to existing requirements and correct errors, along with general housekeeping such as removing obsolete provisions and their references, and updating references in the CFR.
 - No change in the stringency of the corresponding standards is proposed.
 - No expected significant environmental impacts nor any significant economic impacts.
 - EPA pre-published Final Rule on December 28, 2020, and re-issued the pre-publication on March 10, 2021 after undergoing a review.
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TECHNICAL AMENDMENTS REGULATORY INITIATIVE

- Most changes in the EPA's Final Rule will automatically take effect in Canadian vehicle and engine emission regulations through Incorporation by Reference.
 - ECCC is working to prepare amendments to the Canadian vehicle and engine emission regulations that will be required to maintain alignment with the EPA.
 - Proposed Amendments targeted for CGI publication in 2021.
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COVID-19 GUIDANCE

CLOSING REMARKS

- If you have any further questions, please do not hesitate to contact us
 - General Inquiries and Reporting:
 - ec.vehicleandengineinfo.ec@canada.ca
 - Evidence of Conformity (including Canada Unique) and Emission Verification Testing:
 - ec.verifications-des-emissions-emissions-verification.ec@canada.ca
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USEFUL LINKS

Canada Border Services Agency Memorandum D19-7-4

- Importation of Engines, Vehicles, Vessels and Machines: <https://www.cbsa-asfc.gc.ca/publications/dm-md/d19/d19-7-4-eng.html>

Canadian Environmental Protection Act, 1999

- Part 7, Division 5 - Vehicle, Engine and Equipment Emissions: <https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/canadian-environmental-protection-act-1999/part-7.html#t5>
- Part 10 - Enforcement: <https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/canadian-environmental-protection-act-1999/part-10.html>
 - Compliance and Enforcement Policy: <https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/compliance-enforcement-policy.html>
 - Environmental Violations Administrative Monetary Penalties Regulations: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2017-109/page-1.html>

Off-Road Compression-Ignition Engine Emission Regulations

- CEPA Registry: <https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=68>
- Read the regulations: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2005-32/index.html>

Off-road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations

- CEPA Registry: <https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=1160>
 - Read the regulations: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2020-258/index.html>
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USEFUL LINKS

Off-Road Small Spark-Ignition Engine Emission Regulations

- CEPA Registry: <https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=61>
- Read the regulations: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2003-355/index.html>

Marine Spark-Ignition Engine, Vessel and Off-Road Recreational Vehicle Emission Regulations

- CEPA Registry: <https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=85>
- Read the regulations: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2011-10/index.html>

On-Road Vehicle and Engine Emission Regulations

- CEPA Registry: <https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=46>
- Read the regulations: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2003-2/index.html>

Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations

- CEPA Registry: <https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=104>
- Read the regulations: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-201/index.html>

Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations

- CEPA Registry: <https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?Id=119>
 - Read the regulations: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2013-24/index.html>
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