

ECCC'S VEHICLES & ENGINES REGULATORY PRESENTATION

Transportation Division
Environment and Climate Change Canada
September 18, 2019



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Canada

Disclaimer



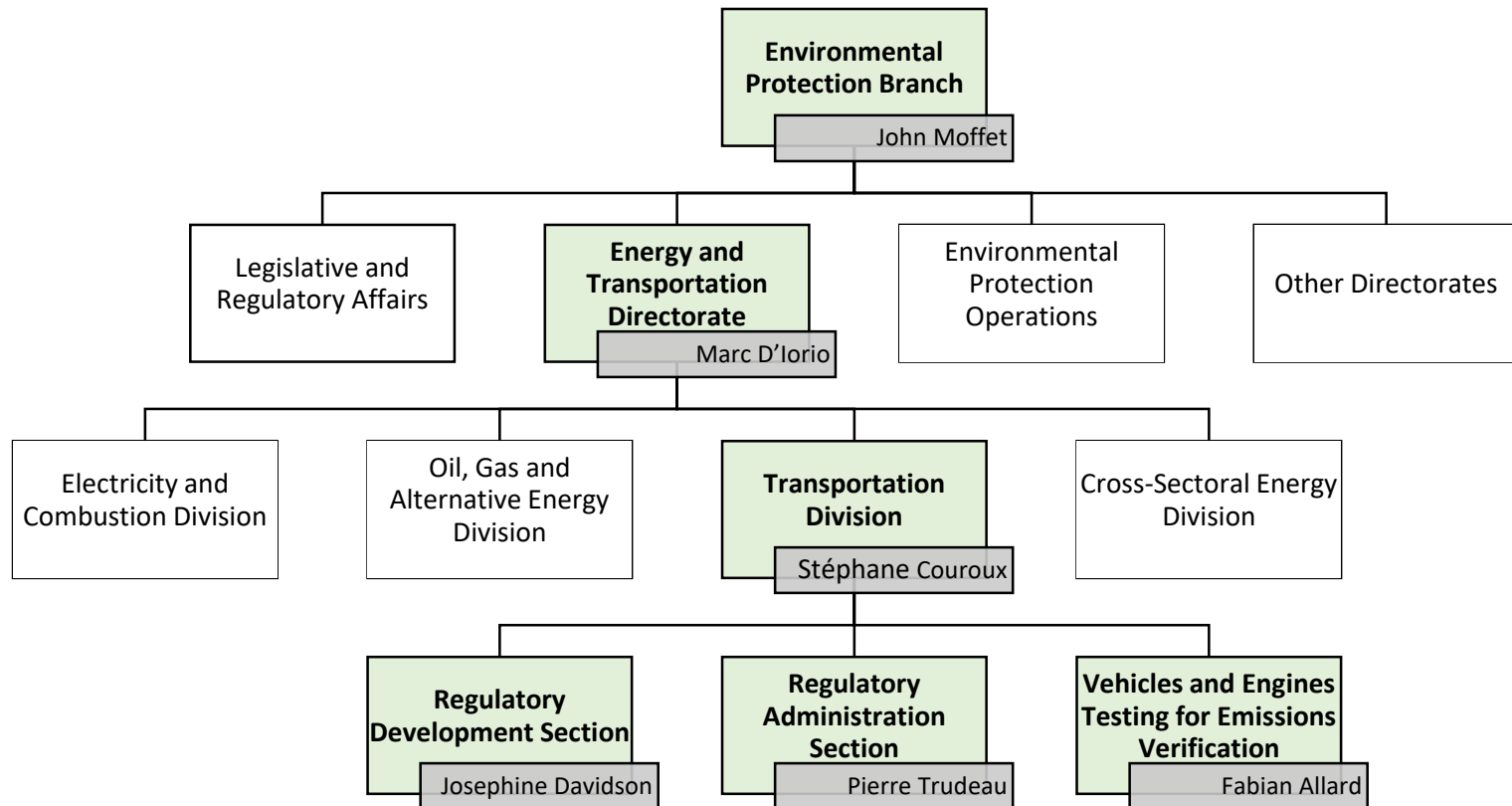
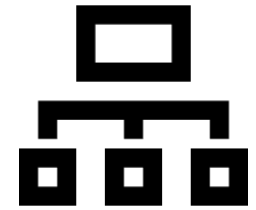
- The following information is intended for guidance only. It does not in anyway supersede or modify the requirements of the Canadian Environmental Protection Act, 1999 or the vehicle, engine and vessel emission regulations made under that Act. In the event of an inconsistency between this information and CEPA and/or the Regulations, CEPA and the Regulations shall prevail.
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Agenda Items



- ECCCC's Transportation Division
- Applicable & Proposed Regulations
- Regulatory Requirements & Obligations
- Evidence of Conformity
- Compliance Verification
- Examples of Compliance Issues
- Notice of Defect
- Enforcement

ECCC'S Transportation Division

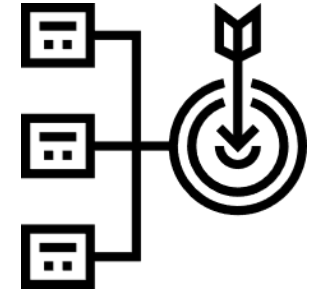


CEPA & Applicable Regulations



- Canadian Environmental Protection Act, 1999 (CEPA)
 - *“An Act respecting pollution prevention and the protection of the environment and human health in order to contribute to sustainable development”*
- The Act includes authority to regulate:
 - Emissions from on-road vehicles & engines
 - Emissions from off-road vehicles (incl. vessels) & engines
 - Emissions from marine spark-ignition engines

Application of Emissions Regulations



- Regulations apply to all persons and companies in the business of manufacturing, distributing or importing prescribed classes of vehicles, engines or vessels for sale and to persons who import such vehicles, engines or vessels for their own use
- Standards are performance-based (i.e. technology neutral) to provide manufacturers the flexibility of design and innovation
- Compliance with applicable emission regulations is a condition of a vehicle/engine's importation into Canada

Alignment of ECCC's Regulations with EPA



- General approach has been to align with U.S. federal standards
 - Incorporate by reference applicable U.S. technical emission standards and test procedures
- Products eligible for sale in the U.S. are generally eligible for sale in Canada
 - Must be EPA-certified & sold concurrently in the U.S. and Canada
 - Conforms to the emission standards or family emission limits referred to in the EPA certificate
- Includes provisions for vehicles or engines not EPA-certified and/or concurrently sold in the U.S and Canada (“Canada-Unique”)

Current Regulations



2004 (Air Pollutants)

- Light-duty vehicles
- Light-duty trucks
- Medium-duty passenger vehicles
- Heavy-duty vehicles
- Motorcycles

2006 (Air Pollutants)

- Scooters

2011 (GHG)

- Light-duty vehicles
- Light-duty trucks

2014 (GHG)

- Heavy-duty trucks

2015 (GHG+ AP)

- Amended to make them more stringent

On-Road
Vehicles and
Engines

ORVEER



2005 (Air Pollutants)

- Lawn and garden machines
- Light-duty industrial machines
- Light-duty logging machines

2018 (Air Pollutants)

- Amended to incorporate EPA phase 3 standards

Off-Road Small
Spark-Ignition
Engines

SSI



2006 (Air Pollutants)

- Mining machines
- Construction machines
- Farming machines
- Forestry machines
- Portable diesel generators

2012 (Air Pollutants)

- Amended to align with EPA phase 4

Off-road
Compression-
Ignition Engines

CI

2012 (Air Pollutants)

- Outboard and inboard engines
- Personal watercraft engines
- Snowmobiles
- Off-road motorcycles
- All-terrain vehicles

2015 (Air Pollutants)

- Vessels with a fuel line or fuel tank installed

Marine Spark-Ignition
Engines, Vessels &
Off-Road Recreational
Vehicles

MERVs



Proposed Regulations

- Proposed *Off-road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations*
 - Would maintain current air pollutant emission standards for off-road mobile diesel engines and introduce standards for large spark-ignition engines and stationary diesel engines in alignment with U.S. standards (CFR 1048 and CFR 60 Subpart IIII, respectively).
- The proposed Regulations were published in Canada Gazette, Part I on March 9, 2019, which was followed by a 75-day public consultation period
- The Regulations are planned to be finalized in Canada Gazette, Part II in Spring 2020 and would come into force six months later (late 2020)
- The current *Off-Road Compression-Ignition Engine Emission Regulations* would then be repealed

Overview of Regulatory Requirements



	Canadian Engine Manufacturer or Distributor of Canadian Engines	Importers of Engine (or machines) for the purpose of sale
National Emissions Mark	✓	Optional
Submit Import Declaration	N/A	✓
Provide End of model year Report	✓	✓
Provide Maintenance Instructions	✓	✓
Cause Notice of Defect to be given	✓	✓
Provide Evidence of Conformity (EoC) upon Request	✓	✓

Manufacturer Obligations



- Self-Certification: Demonstrate Compliance Through Certification Testing
 - Manufacturer of a regulated product is required to test in accordance with established test protocols in order to demonstrate and certify that its product meets the performance requirements under the applicable Regulations
- National Emissions Mark Authorization and supporting documents
 - Only required on vehicles or engines manufactured in Canada for sale in Canada – optional on imported products
 - A company authorized to apply the mark is issued an unique authorization number



Importer Obligations



- Must ensure imported product is certified compliant ¹
 - Vehicles or engines covered by an EPA Certificate of Conformity and concurrently sold in the U.S. and Canada:
 - Must have access to and be able to provide Evidence of Conformity when requested
 - Vehicles or engines not concurrently sold in the U.S. and Canada (“Canada-Unique”)
 - Must submit Evidence of Conformity **prior** to importation

¹ Non-Canadian compliant vehicles or engines can be temporarily imported into Canada solely for purposes of exhibition, demonstration, evaluation or testing

- Must submit a temporary importation declaration prior to importation (template available)
- Must maintain records of the use and disposition of the vehicle or engine as ECCC will ask for proof of disposal

Importer Obligations (cont'd)



- Reporting
 - Submit Importation Declarations
 - To ECCC using templates available (prior to importation) or “bulk”; **or**
 - Through the Canada Border Services Agencies (CBSA) (Single Window Initiative) prior to importation
 - Identifies the importer, the product, and how the importer can prove that the product is certified compliant
 - Please refer to CBSA Memorandum D-19-7-4 (Importation of Engines, Vehicles, Vessels and Machines)
 - Submit Annual Year End Reports (templates available)
 - Provide Evidence of Conformity, as requested
 - Maintain records
 - Issue Notice of Defects, when required (templates available)
 - Provide Maintenance Instructions, in English & French
-

Importation: Best Practices



- Ensure every product meets the requirements unless:
 - excluded as listed in the regulations
 - manufactured/imported prior to regulations
 - for export or in transit
 - designed exclusively for competition
 - designed for military combat or combat support
 - imported under certain exceptions (still requires a declaration)
 - temporary importation for exhibition, demonstration, evaluation or testing
 - products requiring further assembly
- Determine whether the product is covered by a U.S. EPA Certificate of Conformity and whether it is sold concurrently
- Determine whether fleet averaging provisions apply
 - Fleet average performance value should not exceed the fleet averaging requirements (to avoid deficit)
- Ensure that the product matches the Evidence of Conformity and performs as certified (due diligence)
 - Information on the emission control information label is correct and label is properly affixed
 - Adjustable parameters – may be allowed depending on certification – must comply with the applicable standards, regardless of the adjustment of these parameters
 - Crankcase - closed crankcase or emissions meet standards

Evidence of Conformity: Sold Concurrently



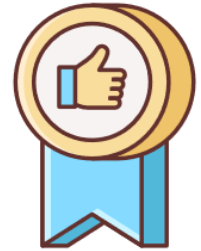
- Must be available if requested by ECCC
- A copy of each EPA Certificate of Conformity covering the vehicle or engine, and if applicable, any attached fuel line or attached fuel tank
- Proof of concurrent sale in Canada and in the U.S.
- A copy of all the records submitted to the EPA in support of each application for an EPA Certificate of Conformity and any amended application in respect of a vehicle, engine, fuel lines or fuel tanks
- Emission control information label

Evidence of Conformity: Canada-Unique



- **Prior** to importation
- ECCC may take up to 15 to 60 calendar days to review a submission
 - **Plan accordingly**
- What to Submit:
 - Valid EPA Certificate(s) of Conformity, if applicable
 - Information equivalent to what must be submitted to the EPA to obtain a certificate
 - Copy of the Emission Control Information label
 - Label requirements (wording) are different than CFR requirements. Refer to appropriate regulation.
 - Maintenance Instructions: English & French
- Submit to: ec.verifications-des-emissions-emissions-verification.ec@canada.ca
- Satisfactory to Minister letter

Evidence of Conformity: Best Practices



- Ensure Evidence of Conformity is for the appropriate model year
- Separate Evidence of Conformity is required for each engine family and model year
- Ensure relevant Evidence of Conformity documents are kept and maintained for the prescribed timeframe (varies by regulation)
- If importer cannot satisfy **ALL** Evidence of Conformity requirements (e.g. proof of concurrent sale), proceed with a Canada-Unique submission **prior** to importation
- Ensure Evidence of Conformity / test results come from a reputable source / laboratory
- Ensure Evidence of Conformity is complete.

Compliance Verification



ECCE's compliance verification program includes:

- Authorizing and monitoring use of the National Emissions Mark
- Monitoring data submissions for compliance
 - Overall emission-performance of Canadian fleets
- Reviewing and registering Notices of Defect
- Reviewing Evidence of Conformity
- Inspecting and testing sample vehicles and engines that are representative of products offered for sale in Canada
 - Confirmatory testing and data analysis
- Referring alleged violations to the Enforcement Branch
 - Range of possible responses from a warning to fines and/or imprisonment (see ECCE's Compliance and Enforcement Policy)

Confirmatory Verification & Testing



- Evidence of Conformity request [letter](#) example
- Engine Information & Testing Specification form
 - Testing fixtures
 - Driveshafts
 - Modified testing procedures, warm-up procedures
 - Engine parameters
- Service accumulation (break-in/run-in)
- Complete Evidence of Conformity to be submitted no later than **40 calendar days** from request
 - Include time for ECCC to review Evidence of Conformity and ask for additional information and clarification, if needed

Examples of Administrative Compliance Issues



- Products are imported without the required documentation to demonstrate compliance
 - documentation missing, incorrect, falsified or out of date
 - e.g. no importation declaration and/or annual report, emission label in a language other than English or for certification from a country other than Canada or the U.S.
- Importers do not verify if the products imported match the certification documents
 - e.g. different fuel tank or emission control components
 - The sale of a catalyzed engine does not prove concurrent sale for a similar non-catalyzed engine
- User specifications are inconsistent between user manual / label / certification documents
 - e.g. fuel to oil ratio for 2 stroke engines

Examples of Testing Compliance Issues



- Vehicles or engines are tested and do not meet the applicable emission standard:
 - Should the test results indicate a possible non-compliance, the regulatee may be given the opportunity to conduct a joint engineering analysis.
- Challenges found when assessing non-compliance include:
 - Company used testing procedures inconsistent with prescribed requirements
 - Vehicle or engine break down before being able to complete accumulation and testing (notably in off-road sectors)
 - Testing specifications, i.e. test fixture, warm-up procedure, etc., not communicated to ECCC prior to testing
- Troubleshooting the issue is up to the regulatee

Notice of Defect



- An emissions-related defect is a fault or failure that affects or is likely to affect the product's ability to conform to prescribed standards (tailpipe emissions, crankcase emissions, evaporative emissions)
- The following guiding principles may help to determine the existence of a defect - The issue:
 - originated at functioning of the design, manufacturing or assembly stage, or interferes with the vehicle or engine;
 - is present in a group of similar units;
 - could pose an undue pollution risk; and
 - is not caused by everyday wear and tear, a lack of proper maintenance, or negligence on the part of the owner/user
- The notice of defect is a process that must be used by a company in order to provide the necessary information pertaining to an emission-related defect, its consequences and proposed remedial action
- Canada's defect reporting provisions are different from the EPA/CARB (e.g. no equivalent to the emission defect information report which would normally precedes a recall)

Notices of Defect (cont'd)



Important considerations:

- A company must submit a notice of defect immediately upon determining/confirming the existence of a defect (companies are expected to monitor return/repair rates of regulated products)
- The notice must be sent to ECCC, to dealers/retailers and to each current owner
- The Minister of ECCC may order a company to notify by newsprint if the name and address of the current owner of the product cannot be determined
- The company may choose to employ additional means of contacting owners such as point-of-sale posters, press releases, web advisories, a notice inside promotional flyers, etc.

Enforcement



- Alleged violations are referred to the ECCC's Enforcement Branch
 - Part 10 of CEPA grants Enforcement officers the powers to carry out inspections
 - The Compliance and Enforcement Policy for the *Canadian Environmental Protection Act, 1999* sets out the range of possible responses to alleged violations
- The *Environmental Violations Administrative Monetary Penalties Regulations* provides the authority to issue Administrative Monetary Penalties to ensure compliance

Useful Web Links



- Regulatory Websites:
 - Canadian Environmental Protection Act, 1999, Division 5
 - <http://www.ec.gc.ca/lcpecepa/default.asp?lang=En&n=24374285-1&offset=8&toc=show#e>
 - On-Road Vehicles and Engines Emission Regulations
 - <http://www.ec.gc.ca/lcpecepa/eng/regulations/detailReg.cfm?intReg=65>
 - Off-Road Small Spark-Ignition Engines Emission Regulations
 - <http://www.ec.gc.ca/lcpecepa/eng/regulations/detailReg.cfm?intReg=81>
 - Marine Spark-Ignition Engine, Vessel and Off-Road Recreational Vehicle Emission Regulations
 - <http://www.ec.gc.ca/lcpecepa/eng/regulations/detailReg.cfm?intReg=109>
 - Proposed Off-road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations
 - <http://gazette.gc.ca/rp-pr/p1/2019/2019-03-09/html/reg3-eng.html>
- CBSA Memorandum D-19-7-4
 - <https://www.cbsa-asfc.gc.ca/publications/dm-md/d19/d19-7-4-eng.html>
- Compliance and Enforcement Policy
 - <http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=326F7BE8-0483-4995-8E0E-F09719D202B8>
- Environmental Violations Administrative Monetary Penalties Regulations
 - <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2017-109/index.html>

CONTACT INFORMATION



- Regulatory Administration Section

ec.infovehiculeetmoteur-vehicleandengineinfo.ec@canada.ca

- Vehicles & Engine Testing for Emissions Verification Section

ec.verifications-des-emissions-emissions-verification.ec@canada.ca

- Regulatory Development Section

ec.apregdevinfo-infodevregpa.ec@canada.ca