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Canadian Explosives Regulatory Regime Updates and Review of Key Issues

Canadian Explosives Industry Association
Fall 2023

Canada

Timelines and Next Steps

Package 1

Key Package 1 Milestones

- Public consultation in *Canada Gazette Part 1* May 27, 2023
- Re-consultation on 10 proposed changes September 2023
- Coming into force March 2024

Package 2

Key Package 2 Targets

- Pre-consultation summer 2023
- Fees consultation fall 2023
- *Canada Gazette Part 1* late spring 2024
- *Canada Gazette Part 2* spring 2025
- Coming into force staggered



Package 1: Enhance Safety and Security & Reduce Burden

Addressing safety and security risks

- Propellant powder: reducing personal unlicensed storage amounts
- Reactive targets: enhancing safety by reducing storage amounts, and prohibiting off-label use
- Novelty devices: creating a new category of lower-risk fireworks devices such as sparklers

Aligning with Other Government Departments

- Raising the minimum age of hazardous work to 18, to align with Labour Canada
- Addressing UN3375

Modernization

- Updating to reflect modern industry practices and removing outdated requirements
- Streamlining, clarifying, and removing duplication in transportation requirements
- Allowing hybrid firework shows

Reducing unnecessary burden

- Removing annual reporting requirements



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Package 1: *Canada Gazette Part I* Comments

Clean-up/omissions

- Non-sparking materials: constructed of/lined with non-sparking material *and* does not increase the likelihood of ignition
- Section 150 opening two boxes: to remove explosives or to add an explosive of the same product name
- Licence suspension/refusal recourse: adding a process for requesting Ministerial review
- F5 fireworks manufacturing: specify F5 novelty device manufacturing as Division 2
- Public Agents identification Number (PAIN): alternative to the PAL for government purchasing of black powder
- Novelty Device: updated definition
- Maximum quantity of reactive targets: raise to 6kgs to prevent need for re-packaging

Issues that were re-examined

- Unattended parking: updated video monitoring requirement, removed requirement for an access-controlled location, and limited overnight parking with electronic monitoring to tankers carrying UN 3375 and UN 0332
- Unlicensed storage for fireworks vendors: 2000kg reduced to 1000kg

Rejected issues related to:

- UN3375, age for novelty fireworks, necessary stops



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Package 2: Explore New Elements and Innovation

Innovation:

- Rocket motors: increasing personal importation amount, introduce advanced high power rocket motor definition
- Avalanche towers: clarifications and updates

Updating and clarifying Manufacturing, e.g.:

- MPUs: cleaning, acceptable distances
 - Client site: updated definition
 - Division 2: clarifying scope
- New Elements:
 - Underground manufacturing
 - Transportation permits
 - Formalizing shared and drop-ship magazine licences
 - Propellant powders sellers' vendor magazine licences
- Fees



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Package 2: Pre-consultation Comments

Specific comments were received on:

- Vulnerable place: definition
- Avalanche deployment boxes: access, terminology
- Client site: definition
- Shared licences: access to magazine
- Unauthorized entry signs: interpretation

Broad comments were received on:

- Underground manufacturing
- Transportation permits



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Underground Manufacturing

Proposed amendments would require licences for underground manufacturing to better align with risks, specifically the proposal would:

- Move underground activities currently mentioned as a Division 3 manufacturing activity to Division 1
 - pneumatically transferring explosives;
 - pumping, thickening or gassing either emulsion explosives or water gel explosives while charging boreholes; or
 - blending emulsion explosives or water gel explosives with ammonium nitrate or ammonium nitrate/fuel oil mixtures while charging boreholes.
- Broaden definition of vulnerable place to capture underground manufacturing
- Exempt underground manufacturing from Division 1 requirements related to thunderstorm safety



Underground Manufacturing

Implementation

- These proposed amendments affect only those specified **manufacturing activities**, and **would not affect use or storage** underground
 - Other regulators who inspect related to use, storage and OHS would still conduct their own inspections
- Bulk activity guidelines will be updated before changes come into effect
 - Includes updated licence application guidelines for new underground licensees and updates to bulk mobile process unit guidelines
 - Stakeholders will be sent proposed guidelines for comment before guidelines come into effect
- Underground manufacturing guidelines will mirror above ground regulations and guidelines
- Roll out of underground regulatory changes would take place in stages after the release of updated guidelines (2025 or later)



Transportation Permits: Overview

To increase safety and security regarding Part 9 transportation requirements, and ensure the security screening of drivers with access to high-hazard explosives, proposed amendments would implement a permit regime for the transportation of certain explosives.

- Require carriers to hold a 3-year permit for the transportation of certain explosives with exemptions for Law Enforcement Agencies, Fireworks Operating Certificate, magazine and manufacturing licence holders
- Introduce training requirements for transportation permit holders
- Require that carriers ensure drivers are trained to be competent on Part 9 requirements
- Require that shippers verify that carriers are transportation permit holders
- Amend Part 8 screening to include transportation so that drivers would require an approval letter or equivalent document to transport high-hazard explosives



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Transportation Permits: Scope

- In addition to the explosive product exemptions, the requirement to obtain a transportation permit WOULD NOT apply to:
 - Vehicles operated by law enforcement agencies
 - Vehicles operated by holders of FOCs:
 - Vehicles operated by employees of Division 1 factory licence (including MPUs and transport units)
 - Vehicles operated by employees of Division 2 manufacturing licence holders
 - Vehicles operated by magazine licence holders
 - Vehicles licensed outside of Canada



Transportation Permits: Screening

Approval letter requirements are covered in Part 8, and apply to:

- The individual who applies for the permit
- Every employee, director or contractor who:
 - has access to a high hazard explosive;
 - permits others to have access to a high hazard explosive; or
 - controls, directly or indirectly, a person who has access to a high hazard explosive or permits others to have access to such an explosive.
- List of employees
 - Permit applicant must submit and maintain a list of employees requiring approval letters and indicate whether each employee has applied for the letter and whether it has been received, or if they have an equivalent document.
- Preventing access
 - Holder of a licence, permit or certificate must prevent access from unscreened persons to high hazard explosives that are being transported by the holder.



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Transportation Permits: Application

An applicant for a transportation permit would complete, sign and send to the Chief Inspector of Explosives the application form provided by the Department of Natural Resources. The application would include:

- The name, address, telephone number and email address of both the applicant and a contact person, and
- A list of the vehicles that will be used to transport explosives, including vehicle descriptions and vehicle identification numbers (VIN),
- The list of vehicle descriptions and VINs of the vehicles used to transport explosives would be kept up-to-date and sent to the Chief Inspector of Explosives on an annual basis.

A transportation permit would be valid for 3 years.



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Transportation Permits: Training

- Every driver who could have access to explosives must be trained, by a person deemed competent, to carry out their duties related to transporting explosives in a safe, secure and lawful manner.
- The training would include:
 - The information that the driver needs to know to carry out their duties and the information necessary to ensure the safety and security of the public and of the explosives being transported
 - A review of the relevant sections of the *Explosives Act* and of these Regulations,
 - Precautions to be taken to minimize the likelihood of an ignition, and
 - Any of the carrier's policies and procedures that may affect the safe and secure transportation of explosives.
- A holder of a transportation permit must certify as trained any driver who could have access to high hazard explosives provided the following requirements are met:
 - The driver has completed the training in the section in Part 9 that outlines requirements for training. OR
 - The holder of the transportation permit has reasonable grounds to believe that the driver understands the hazards to which they could be exposed and that the driver is competent to carry out their duties in a manner that is safe, lawful and ensures the security of the explosives.



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Transportation Permits: Record Keeping

- Evidence of driver's certification as trained could be in the form of a training record or a document signed by the trainer or permit holder, would be given to the driver and include:
 - The driver's name
 - The operating procedures the driver is competent to carry out, and expiration date
- Training would be valid for 5 years, but interim training would be required on new or updated operating procedures or regulatory requirements
- Training records would be required for each driver and kept for 2 years past the date the driver's certification expires.



Transportation Permits: Shippers

Before a shipper hires a carrier to transport explosives, the shipper would be required to verify that the carrier has a valid transportation permit

- A shipper would be required to keep a record of each hire of a carrier for 2 years, including:
 - The number and expiry date of the carrier's valid permit, and
 - The date of transport



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Transportation Permits: Inspection

Inspections of transportation permit holders would take place as part of the inspection regime.

Inspectors would review company records to verify carrier meets all regulatory requirements related to permits, training and approval letters.

Inspectors would also review company records to verify that shippers are using transportation permit holders.

Inspectors may also conduct follow-up on incidents or complaints.



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Package 2: Modernizing Licensing and Fees

Why

- Inflation: Under previous law federal government departments could not automatically adjust fees to inflation- the law changed in 2019, to allow annual adjustments going forward, yet previous years of inflation eroded the real dollar value of current fees
- Complexity: Fees calculations are complex

How

- Costing: Analyzed the total cost of issuing permits, licences and certificates, and associated costs
- Pricing analysis: public/private benefit analysis, international benchmarking, industry analysis
- Drafting fee proposal: developed a fee proposal outlining analysis and updated fees for consultation

Next steps:

- Pre-consultation on proposed amendments and fees in late fall 2023
- Public consultation as part of package 2 in *Canada Gazette Part I* in fall 2024



Next Steps

- **Fees**- consultation late fall 2023
- **Package 1**- publication and coming into force spring 2024
 - Fact sheets and guidance to be updated with coming into force
- **Package 2**- pre-publication in *Canada Gazette* Part 1- fall 2024



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Thank You



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Annex: Details of Package 2



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Providing Transparency

- **Section 25- Authorization not required**
 - Proposed amendments would clarify what other related activities would be allowed without authorization.
 - For example, where the manufacture of a small amount is allowed without authorization at a university, law enforcement agency, or for a test at a commercial lab, the proposal would clarify that the small amounts of explosives could also be stored, if necessary.
- **Formalizing third-party magazine licences**
 - Shared licence
 - Allows for the storage of explosives by a party in the magazine(s) of another authorized licence holder
 - Drop-ship licence
 - Authorizes the acquisition of explosives for sale, for the purpose of explosives order fulfillment



Facilitating

Magazine Fire Safety Plan Requirements

Reduce administrative burden for magazine licence holders by:

- Replacing the requirement to submit fire safety plans to local fire departments, with a requirement to provide fire safety plans to local fire departments upon request

Rocket Motors

Facilitate rocket motor innovation by:

- Increasing the amount of model rocket motors that may be imported without a permit from 6 to 40
- Creating a new 'advanced high-power' rocket motor category to harmonize Canadian rules with foreign jurisdictions
 - Reclassify rockets from S.2 to new R.4 category
 - Keep existing S.2 safety and storage precautions and inherit safety measures from R.1, R.2 and R.3



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Facilitating (continued)

Fireworks Operating Certificates- Display Assistant

Proposed amendments would remove the requirement for Display Assistants to receive a Fireworks Operating Certificate from NRCan prior to working as a Display Assistant

- Display Assistants would still be required to successfully complete certified fireworks safety and legal awareness course
- Display Supervisors would continue to verify that Display Assistants meet training requirements

Avalanche Towers

To clarify requirements for avalanche towers, proposed amendments would add:

- The assembly of deployment boxes for use in remote avalanche towers to the list of Division 3 activities
- An exemption for the storage of explosives in remote avalanche towers



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Manufacturing

Proposed amendments to Part 5 of the *Explosives Regulations, 2013* include:

Division 1 Manufacturing:

- Clarify acceptable distance requirements for Mobile Processing Units (MPUs) not at mines or quarries
- Update definition of client site to permit manufacturing perforating guns at a point of use site
- Remove requirements for topography of sites to be included with Division 1 licence applications
- Remove requirement to clean MPUs if not used within 30 consecutive days to remove redundancy with Division 1 requirements
- Add flexibility to training requirements to allow delivery by any person deemed competent



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Manufacturing (cont'd)

Division 2 Manufacturing

Proposed amendments would clarify the types of activities and circumstances that would qualify as needing a Division 2 manufacturing licence:

- Clarify that manufacturing Type D ammunition falls under Division 2 manufacturing
- Clarify that a Division 2 licence can only be issued for the non-mechanical mixing of non-explosive components for the purpose of manufacturing industrial explosives at the site where they will be used
- Clarify that Division 2 licences for destroying explosives cannot be issued for types D, E, or I explosives
- Remove references to activities under Division 2 which have not been issued licences for over 10 years
 - Net throwing devices
 - Manufacturing for sale by person without a vendor magazine licence
 - Any other activity related to manufacture and storage



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