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Explosives Regulatory Division

CEAEC Update
November 9, 2023

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Update to Bulk Guidelines

ERD is completing revision 9 of its “G05-01 Guidelines for Bulk Explosives Facilities” document.

This is a significant re-write. Main changes include:

- Update to Purpose and Scope of the document (only for Div.1)
- Addition of regulatory references;
- Increase of performance-based language;
- Elimination of prescriptive language, unnecessary detail, generic information, and duplication.



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Update to Bulk Guidelines

Reply to CEAEC's comments of September 11, 2023:

- Section 3.2 - Division 1 licences need maintenance and decontamination facility on site (or be connected to a factory site with full washing / maintenance facilities).
- Section 4.8 - Silos with water/glycol jackets are not considered double-walled if they are designed, constructed and installed to conform to good engineering practices.
- Section 4.8.2 - When more than a heel of explosives is stored in tankers, the intent of subsection 63(4) is typically met when all points of access (e.g., manholes and discharge valves) are locked (not only with cam lock lug rings) when not attended, and the king pin is locked, or the unit is immobilized (e.g. with the air access locked).
- Section 4.7 - Generally, MPUs should not be loaded sooner or with more product than is required. Sometimes an MPU might have to return to a factory or a satellite site with more than a heel on board and sometimes it may have to park fully loaded (e.g., if the blast is cancelled).
- 4.5.4 & 4.6.7 ERD is looking into guidance for 5 cm raised curb along the wall, including a 5 cm sill across the door opening.



NEEQ for Emulsions

- The original policy on NEEQ for emulsions was issued April 13, 2018
 - Only UN0332 emulsions were considered
- The policy on UN3375 emulsions was sent out in February 2022
 - Included a revised policy on NEEQ, in line with the definition of ANEs under the UN Model Regulations
- In order to effectively licence explosive sites, it is important to ensure that the validation of the NEEQ for emulsions is indicated on the licence
 - Validation of NEEQ will be done through the authorization process, and will be referenced on the Notice of Authorization



NEEQ for Emulsions – UN0332

- Policy from April 13, 2018.
- Product must pass UN Test Series 8 or have an MBP ≥ 5.6 Mpa
 - Products that pass UN Test Series 8 are candidates for UN3375
- Product contains no perchlorates
- Product must be unsensitized (i.e. no artificial voids)
- Product is shown to have a calculated energy $\leq 75\%$ of TNT



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NEEQ for Emulsions – UN3375

- Policy from February 2022.
- Product must pass UN Test Series 8
 - Removed the option to pass MBP only, as Test Series 8 is required for classification as UN3375
- Emulsions cannot contain perchlorates
 - This is to align with the defined compositions for UN3375 material, where gels may contain perchlorates
- Product must be unsensitized (i.e. no artificial voids)
- Product is shown to have a calculated energy $\leq 75\%$ of TNT



NEEQ for Emulsions – Notice of Authorization

- Amendments to UN0332 products should be initiated to submit the relevant data in order to confirm a 75% NEEQ
- New applications for UN3375 material where 75% NEEQ is desired should also have the relevant data for NEEQ
- The language on the Notice of Authorization will indicate that the material is suitable for 75% NEEQ, as follows:
 - The explosives have been considered suitable to be stored, in bulk, with the NEEQ calculated as 75% of the gross mass of the explosive. The explosives have been considered suitable to be stored, in bulk, with the NEEQ calculated as 75% of the gross mass of the explosive.
- The NOA number will need to be identified on the licence



Licensing and Inspection (L&I) Fall Update



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L&I – Canada-West

Canada-West
(BC, AB, SK,
MB, YT, NT)



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L&I – Canada-East

Eastern Region
(ON, QC, NB,
NS, NL, PEI,
NU)

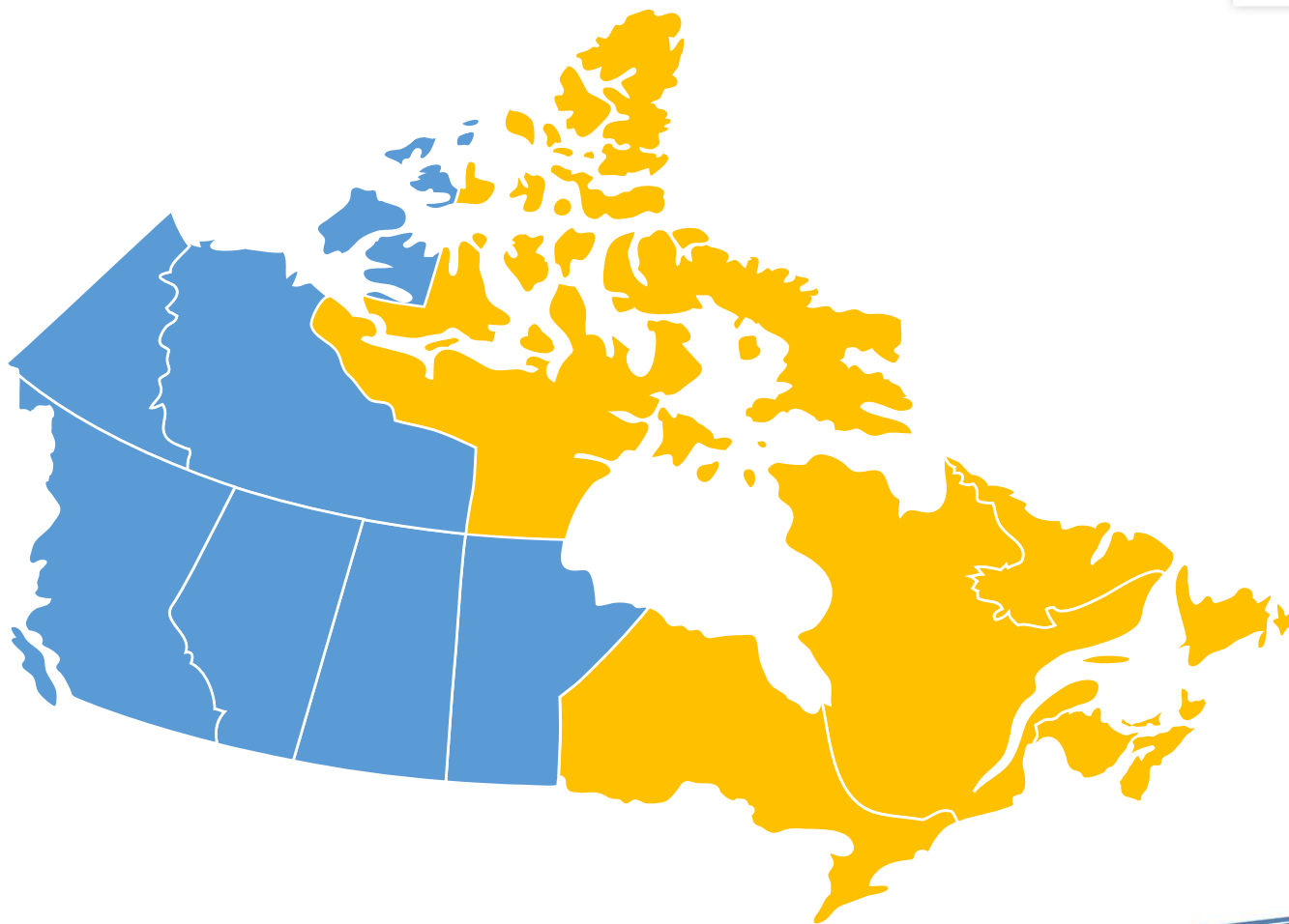


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2022/23 New Contact Us Page

General inquiries

Phone: 1-855-912-0012 (general information line)

Email: erdmms@nrcan.gc.ca

Regular business hours are from Monday to Friday, 8:00 a.m. to 4:00 p.m. (ET).

Urgent requests

Phone: 613-947-9111 (Security Operations Control Centre)

Call this number during or outside of regular business hours for time-sensitive or emergency situations.

Get support for an urgent incident such as:

- a theft, an attempted theft or the loss of an explosive
- a fire, a spill or an accidental explosion
- an injury or a death
- any accidental property damage

Request a special permission to:

- tow a vehicle transporting explosives
- use a flatbed vehicle to transport explosives
- pump explosives while in transport
- transport damaged or deteriorated explosives

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2023/24 Licensing and Inspection Reminders

75% NEEQ – Deadline 31-Mar-24

MPUs

- need to be licensed! Not just F05-MPU reviewed/re-opened in eLMS
- pre-loading the night before / parking with more than heel
- available for inspection

/Y

- main licence holder responsible for mag and inventory

Evasion of inspections

Frequency/time of year



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2023/24 Non-compliance Update

Inventory

QD

Surveillance

Security Screening/Key Control

Licence Limits

Barricades

Coordinates

Smoking

Magazines Left Unlocked

Storage/Manu Not Licensed

Sales to Unlicensed Buyers

Knowledge of Licence/Competent Person

Transport (not enclosed; Type I/E; etc.)

Destruction



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Thank You



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