

Title:  
**Blasting and Explosives Management**

## 1.0 INTRODUCTION

This Standard provides the necessary guidelines to support contractor compliance with NB Power best practices as well as defines applicable NB Power Health & Safety contractual requirements regarding the acquisition, transport, and safe use of explosive devices and materials.

## 2.0 SCOPE

Contracted Services where the Contractor requires the use of explosives in the performance of work.

## 3.0 REFERENCES

NB OHS General Regulation 91-191	PART XII EXPLOSIVES <ul style="list-style-type: none"> <li><a href="#">summary-of-changes-to-general-regulation-91-191-phase-3.pdf</a></li> <li><a href="https://ohsguide.worksafenb.ca/topic/explosives.html">ohsguide.worksafenb.ca/topic/explosives.html</a></li> </ul>
Federal Act	Explosives Act (Canada) <a href="https://natural-resources.canada.ca/minerals-mining/explosives-fireworks-ammunition/explosives/explosives-act-regulations">https://natural-resources.canada.ca/minerals-mining/explosives-fireworks-ammunition/explosives/explosives-act-regulations</a>
NB Power Transmission Blasting Requirements	<a href="#">NB Power Transmission Blasting Plan</a>

## 4.0 TERMS AND DEFINITIONS

Explosives	“Explosive” means a substance that is made, manufactured or used to produce an explosion or detonation and includes black powder, propellant powders, blasting agents, dynamite, detonating cord, slurry, water-gel, emulsions and detonators
Blasting Supervisor	“Blasting Supervisor” means a professional responsible for overseeing and coordinating blasting operations at a site, ensuring safety and compliance with applicable laws.
Blaster	“Blaster” means a person with valid certificate under the Apprenticeship and Occupational Certification Act or be conducting a specialized blasting operation
Blasting Operation	“Blasting Operation” means an operation using explosives which extends from the time explosives arrive at a place of employment to the time all explosives are used or removed from the place of employment and includes a specialized blasting operation.
Specialized Blasting Operation	“Specialized Blasting Operation” means blasting of any of the following types: (a) seismic; (b) perforation; (c) blasting in a confined space; (d) blasting underwater; (e) blasting to demolish an above-ground building, stack or similar structure; (f) blasting ice; (g) blasting in theatrical applications; and (h) blasting in or near an oil or gas well

## **5.0 ROLES AND RESPONSIBILITIES**

### **5.1. Contractor**

- The Contractor shall conform to all applicable laws, and NB Power requirements associated with blasting operations.
- Ensure blasting operations are conducted by certified blasters.
- Establish and maintain codes of practice for:
  - Misfired charges
  - Black powder use
  - Disposal of expired/damaged explosives
  - Specialized or unusual blasting operations, and
  - Investigate causes of misfires and implement corrective actions.
- The contractor shall provide NB Power with written notification regarding the proposed use, method statement, details of the explosives being used, timing, storage, and handling of such explosives.
- Ensure the blasting supervisor is sufficiently qualified for the type of work being performed.
- Shall await NB Power's approval before the start of the blasting operations
- Report any incident that occurs.

### **5.2. NB Power or its designated qualified person shall:**

- Inspect and ensure contractors are complying with all applicable laws and NB Power requirements associated with blasting operations.
- Review contractor blast plans and procedures prior to permitting work.
- Ensure the blasting supervisor / blaster is sufficiently qualified for the type of work being performed.

## **6.0 STANDARD**

### **6.1. General**

If a contractor requires the use of explosives in the performance of its work. The contractor shall provide NB Power with written notification regarding the proposed use, method statement, details of the explosives being used, timing, storage, and handling of such explosives. Moreover, the contractor shall await NB Power non-objection for such work before the start of the blasting operations and shall ensure that the blasting supervisor and blaster are sufficiently qualified for the type of work being performed

### **6.2. Blasting**

#### **6.2.1. Written Procedure**

The contractor must submit a written procedure for blasting to NB Power for review and approval 30 days prior to starting blasting operations. The procedure shall include, but not be limited to, the following items:

- Safety precautions to be taken for the protection of people, the work, and existing structures.
-

- Time schedule for blasting to limit interference with normal project work.
- Type and Usage of protective mats.
- Details of all permits and licenses, issuing authority, and validity period.
- Resume of proposed blasting supervisor and shot fired.
- Contractor provided emergency response plan I.e., Canutec

#### 6.2.2. Code of Practice:

The contractor shall provide code of practice for the following:

- Misfired charges
- Black powder use
- Disposal of expired/damaged explosives
- Drilling operations near loaded hole(s)
- Specialized or unusual blasting operations

#### 6.2.3. Notifications

**NB Power Blasting Supervisor** – Notified for visual monitoring of contract blasting operations **48 hrs. notice must be provided in advance.**

Submit to NB Power a detailed plan for blasting Fourteen (14) days for NB Power review & non-objection prior to starting rock excavation. Show pertinent data for each stage of blasting. Such data shall include, but not be limited to the:

- location, depth, and area of blast diameter.
- spacing, pattern, and inclination of blast holes.
- type, strength, amount, column load, and distribution of explosive to be used per hole, per delay, and per blast.
- sequence and pattern of delays, and the description and purpose of methods proposed, and name of shot fired. NOTE: NB Power may waive this detailed requirement in areas where a general pattern has been established.

The Contractor must notify NB Power in writing before moving explosives to the site.

### 6.3. Execution of Blasting Operations

The contractor shall comply with applicable laws, and NB Power requirements associated with its blasting operations from the time explosives arrive at the work site to the time all explosives are used or removed from the site, including specialized blasting operations.

Note: At a minimum, the contractor will attempt to notify NB Power 24 hours in advance of any operation.

Explosives shall be stored in a locked magazine according to standard practices, and regulatory requirements. Detonating caps shall not be stored with explosives. Explosives shall not be primed or fused until immediately before use.

The contractor shall perform blasting only with skilled, experienced operators, under the direction of a certified blaster, and with written approval from NB Power. The contractor shall perform blasting with explosives of such power and in such quantities and position that:

---

- Concrete and embankments structural integrity shall not be affected by blasting operations.
  - Masonry or structures already constructed shall not be damaged by blasting operations.
  - Whenever further blasting may damage rock, masonry, or structures, the contractor will cease blasting and excavate the remaining rock by boring and wedging or by other approved methods.
  - No method of blasting that is dangerous to the public, to fish, to wildlife, or natural features, or destructive to property shall be employed.
  - Use blasting methods such that, upon completion, excavation surfaces are sound and relatively smooth.
  - All blasting shall be carried out during daylight hours. All shot firing activity shall be suspended in the event of a thunderstorm.
  - When blasting, the contractor shall use extreme care and proper methods to prevent damage to persons or property. The contractor shall be responsible for and shall, at its expense, rectify any damage caused by its handling, transporting, storing, or use of explosives. Care shall be taken not to scatter rock over the right-of-way or adjacent property. Blasting mats shall be used as required to control fly rock. Any rock scattered by the blasting shall be cleaned, to the satisfaction of NB Power.
  - After a blast occurs, the certified blaster must thoroughly check the blast area for misfires and undetonated charges.
  - Before shot firing commences, the shot detonator shall give clear and adequate warning to all persons within, near, or approaching the danger zone. In addition, audible warnings shall be given.
  - The contractor shall remain 200m from power lines, phone lines, and existing pipelines and buildings. The acquisition and storage of explosives and detonators and all blasting work shall be in accordance with applicable laws. The contractor shall remain 500m from wells and structures ensuring that well testing, applicable seismic study and gas utility notifications protocols are documented as part of the contractors' blasting plan.
  - The contractor shall ensure transportation of explosives, detonators, and blasting agents must be adequately secured with appropriate signage in accordance with the Transportation of Dangerous Goods Act, and relevant Hazardous Materials/Dangerous Goods Regulations. All explosives transportation designated vehicles are to be in good working condition.
  - All shot holes shall be adequately identified using flagging or another suitable method. Loaded holes shall at no time be left unattended.
  - The contractor shall install adequate signage and barricades to warn and protect the public from the blasting operation.
  - The contractor shall ensure that day boxes are certified or engineered to protect individuals from injury.
  - The contractor shall ensure no smoking/open flames within 30 meters of stored explosives or 15 meters of handling areas.
  - The contractor shall ensure blasting explosives and detonators are stored 50 meters apart in separate locked day boxes if used the same day.
  - Any undetonated charges shall be reported to NB Power immediately to determine proper
-

disposal prior to commencement of regular construction operations.

- The contractor shall comply with the Safety procedures of the explosive manufacturer.

#### **6.4. Specialized Blasting Operations**

Including seismic, perforation, underwater, confined space, demolition, ice, theatrical, and oil/gas well blasting shall be planned and executed in accordance with applicable laws. The contractor shall prepare and submit for NB Powers review and non-objection a detailed planning package pertaining to all known and reasonably foreseeable risks associated with the proposed specialized blasting operation. The training, qualifications and/or competency verification of the proposed blaster shall be subject to NB Power review and non-objection.

#### **6.5. Blast Permits**

- Permits required for the blasting shall be obtained and paid for by the contractor.
- Copies of all permits shall be submitted to NB Power prior to blasting.
- The contractor shall conform to all applicable laws regarding permitting.
- The acquisition and storage of explosives and detonators and all blasting work shall be in accordance with this Standard, applicable laws and

### **7.0 TRAINING**

#### **Blaster:**

Must hold a valid certificate under the Apprenticeship and Occupational Certification Act or be conducting a specialized blasting operation Note: Acceptance of qualifications and/or competencies are at the discretion of NB Power, or designated representative.

### **8.0 APPENDIX**

N/A



Director of Total  
Health & Safety

### **DOCUMENT APPROVAL/REVISION RECORD**

Revision #	Date	Revision Summary	Author	Reviewed By	Approved By
New	2026-01-30	New	Andrew Munn	TH&S Dale Harris Dana Hebert	Roland Roy