

CONSOLIDATION OF EXPLOSIVES REGULATIONS

R.R.N.W.T. 1990,c.E-27

AS AMENDED BY

This consolidation is not an official statement of the law. It is an office consolidation prepared by the Workers' Compensation Board of the Northwest Territories and Nunavut, for convenience of reference only. The authoritative text of regulations can be ascertained from the *Revised Regulations of the Northwest Territories, 1990* and the monthly publication of Part II of the *Northwest Territories Gazette*.

EXPLOSIVES REGULATIONS

1. In these regulations,

"borehole" means a hole that is drilled for the purpose of being packed or loaded with an explosive; (*trou de mine*)

"detonator" means an explosive device designed and used to explode an explosive, and includes a blasting cap or electric cap; (*détonateur*)

"magazine" means a building or other structure used for the storage of explosives; (*poudrière*)

"permit holder" means a person holding a permit issued under the Act; (*titulaire de permis*)

"primer" means a cartridge containing explosives to which a detonator has been attached. (*cartouche-amorce*)

2. (1) An application for a permit must be in Form 1 of Schedule A.

(2) A permit must be in Form 2 of Schedule A.

3. No person shall use safety fuse, otherwise known as tape fuse, in the process of detonating explosives.

4. A person shall handle a container of explosives with care.

5. (1) No person shall smoke while handling or using an explosive or taking part in any blasting operation.

(2) No person shall place an explosive near an open flame or near any substance or thing likely to cause an explosion or fire.

6. A permit holder and any other person responsible for the care or use of explosives shall ensure that apparatus used in the process of exploding explosives

(a) is regularly inspected and kept in good operating condition; and

(b) is used in a manner that accords with the specifications of the manufacturer.

7. (1) No person shall make up primers in a magazine.

(2) No person shall make up more primers than are necessary for the charges of explosives intended to be detonated on any one occasion.

8. A person shall thaw or warm an explosive in accordance with the specifications of the manufacturer.

9. (1) No person shall use an explosive that appears to have deteriorated.

- (2) A permit holder shall supervise the destruction of any explosive that appears to have deteriorated, and shall ensure that the explosive is destroyed by a safe method.
- 10.** A person using an explosive from a magazine shall take the oldest explosive first.
- 11.** No person shall remove the paper covering of any cartridge of explosive.
- 12.** (1) A person manually loading a borehole with explosives shall
- (a) use a tamping rod made of a suitable non-sparking material;
 - and
 - (b) carefully tamp the explosive using steady pressure.
- (2) No person shall ram an explosive in a borehole.
- 13.** Before detonating an explosive, a permit holder shall
- (a) sound an audible warning at a reasonable time before the detonation;
 - (b) ensure that all avenues of approach to the site are guarded;
 - (c) ensure that all workers and other persons near the site of the explosion have reached a place of safety; and
 - (d) shout "fire" immediately before detonating the explosive.
- 14.** Where a borehole loaded by pneumatic means with an explosive consisting of ammonium nitrate and fuel oil is to be detonated by means of electricity, no person shall prime the borehole until the borehole has been loaded with the explosive.
- 15.** (1) Where an explosive has been primed and placed in position for detonation, the permit holder shall ensure that
- (a) no person removes the explosive from its position; and
 - (b) the explosive is detonated.
- (2) Notwithstanding subsection (1), water soluble prill or slurry explosives may be washed out of a borehole.
- 16.** Where a group of charges of explosives has been prepared for detonation, the permit holder shall explode the group of charges at the same time.
- 17.** No person shall detonate or prepare to detonate an explosive by means of electricity during an electrical storm.
- 18.** A permit holder shall ensure that
- (a) a double pole safety switch is fitted on the live side of any electrical firing device if electric current is to be drawn from a power or light circuit;
 - (b) the safety switch is so designed and placed within a receptacle that the door of the receptacle may be closed and locked only when the safety switch is in the "OFF" position;
 - (c) the safety switch receptacle referred to in paragraph (b) is kept locked; and
 - (d) no person except the permit holder has access to the switch.
- 19.** (1) Before an explosive that is to be detonated by means of electricity is placed in position for detonation, the permit holder shall inspect the electrical firing

device to ensure that the lead wires are disconnected and the wires are short-circuited.

- (2) After an explosive that is to be detonated by means of electricity is placed in position for detonation, the permit holder shall, after ensuring that all persons have reached a place of safety, test the circuit of the wires attached to the explosive with a galvanometer.
- (3) After the electrical circuit referred to in subsection (2) is tested, the permit holder shall connect the lead wires referred to in subsection (1) to the electrical firing device.
- (4) After an explosive has been detonated by means of an electrical firing device, the permit holder shall disconnect the lead wires from the device and short-circuit the wires.

20. Where an explosive charge is detonated or initiated by means of electricity, no person shall approach the site of the explosion until the permit holder has disconnected the lead wires from the electrical firing device and short-circuited the wires.

21. Where no explosion is heard after an attempt to detonate or initiate explosives by means of electricity, and testing indicates a faulty electrical circuit, the circuit may be repaired immediately after the permit holder has determined that the blasting switch is locked in the open position and the lead wires are short-circuited.

22. (1) After an explosive is detonated, the permit holder shall immediately make an inspection of the site of the explosion, and shall not permit any person to

- (a) return to the site until the inspection is complete; and
- (b) drill at the site until the permit holder has ensured that no explosive remains unexploded

(2) After an explosive is detonated, no person other than the permit holder shall leave his or her place of refuge and return to the site of the explosion until permitted to do so by the permit holder in accordance with subsection (1).

23. The permit holder shall detonate an explosive that has misfired as soon as possible after the misfiring.

24. (1) In this section, "bootleg" means a part of a borehole that remains after a charge has been exploded in the borehole and that contains no explosives.

(2) No person shall drill within 2 m of any borehole that contains explosives.

(3) No person shall drill within 15 cm of a bootleg.

25. Where a borehole is sprung or the bottom of the borehole is enlarged, the permit holder shall ensure that the borehole is not reloaded with explosives until the borehole has cooled.

26. Where explosives are detonated near any site congested by structures or people, the permit holder shall, to prevent injury to the people or damage to the structures, take such precautions as are necessary, including limiting charges, using protective mats and guarding all avenues of approach.

27. (1) Where explosives are used in connection with geophysical operations, no person other than the permit holder or his or her helper shall be closer than 100 m from the shot point when the explosives are detonated.

(2) The permit holder, his or her helper and the shooting truck shall not be closer to a shot point when the explosives are being detonated than the distance indicated in Table 1 in Schedule B.

(3) The power switch of a radio transmitter in a shooting truck must be maintained in the "OFF" position where

- (a) charges of explosives are being prepared for detonation;
- (b) a person, other than the permit holder or his or her helper, is within a radius of 100 m from the shot point; or
- (c) the permit holder, or his or her helper, is closer than the distance set out in Table 1 in Schedule B.

28. (1) Where explosives are to be detonated or initiated by means of electricity near a transmission mast for any transmitter of radio, television, microwave or other electro-magnetic transmissions, the permit holder shall ensure that no charge is detonated closer to the base of the transmission mast than the distance set out in Table 2 in Schedule B.

(2) A permit holder may detonate explosives closer to a transmission mast than the distance permitted in the table in subsection (1) if the explosives are detonated by a means other than standard electric blasting caps, and if the permit holder ensures that the blasting operation is conducted safely.

SCHEDULE A

FORM 1

section 2(1))

APPLICATION FOR PERMIT

- 1. Name of Applicant:
- 2. Date of Birth:
- 3. Address:
- 4. Occupation:
- 5. Experience in handling explosives:

Period of Employment

Name of Employer

Type of blasting work
done by applicant

.....

.....

- 6. If present employment requires the handling of explosives, give details:
.....
.....
.....

On the strength of the foregoing I apply for a permit.

Dated at..... on, 19.....

.....
(signature of the applicant)

I certify that, to my knowledge, the applicant named above has had at least six months experience as an assistant to a permit holder or other person authorized by law to explode explosives and that in my judgment the character, knowledge and experience of the applicant should make him or her a competent person for handling and using explosives.

Dated at on, 19.....

.....
(signature of employer, permit holder or former employer)

EXPLOSIVES PERMIT

No. , 19.....

I certify that
of
is authorized to handle and use explosives in the Northwest Territories (subject to
the restrictions or limitations shown on the reverse side).

.....
(permit holder) (inspector or deputy inspector)

- NOTE:** A. Where this permit is issued by a deputy inspector, it must contain a statement that unless limited to a shorter period the permit is valid for 90 days only.
- B. This permit may identify limitations and conditions that an inspector or deputy inspector, as the case may be, considers fit under the circumstances.

SCHEDULE B

TABLE 1

(Subsection 27(2))

Weight of Explosive Charge	Depth in Metres from the Top of Explosive Charge									
	Up to 2	3	5	7	10	13	16	20	23	Over 23
Up to ½ kg	35	25	20	13	13	13	13	13	13	13
Up to 1 kg	70	35	30	25	25	25	20	20	20	20
Up to 2 kg	70	70	70	35	35	30	25	25	25	25
Up to 4 kg	90	90	90	70	70	70	35	35	25	25
Over 4 kg	100	100	100	100	70	70	70	70	70	35

Minimum Distance from Shot Point in Metres

TABLE 2

(Subsection 28(1))

Transmitter Power in Watts		Minimum Distance from Transmitter in Metres
5	-	25
25	-	50
50	-	100
100	-	250
250	-	500
500	-	1,000
1,000	-	2,500
2,500	-	5,000
5,000	-	10,000
10,000	-	25,000
25,000	-	50,000
over		50,000