

# Blasting Logs Compliance Game Plan



## The 5 things you need to know to avoid OHS blasting logs violations.

Operations involving blasting and the handling of explosives are commonly used in mining, construction, road building, avalanche control, seismic, oil-and-gas and other industries. Because blasting work is so dangerous, employers must ensure that only blasters with certified skills and knowledge necessary to handle explosives safely are allowed to carry it out. Employers must also ensure that all aspects of a blasting operation are properly planned and carried out in compliance with OHS regulations. Those responsibilities include the maintaining of blasting logs. However, OHS blasting log requirements vary by jurisdiction. Here are the 5 key things you need to know to create a game plan to keep your blasting logs compliant regardless of where in Canada you operate. Go to the OHS Insider website for a blasting log template that you can adapt.

### 1. Sites Where Blasting Logs Must Be Kept

While general blasting rules apply anywhere that explosives are stored, handled and used, in some jurisdictions blast logs are required only at certain kinds of sites:

Any Site Where Blasting Is Done	Mines	Oil & Gas	Construction	None
Alberta, BC, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Yukon	Ontario, Saskatchewan	Federal	Quebec	Northwest Territories, Nunavut, Prince Edward Island

### 2. Who's Responsible for Maintaining Blasting Logs

Under OHS laws, the person in charge of the blasting operation typically referred to as the 'blaster' or 'blaster in charge' is responsible for completing and signing the blasting log for each blast they oversee. Upon completing the log, the blaster must provide a copy to the employer as soon as reasonably possible.

### **3. What Information Blasting Logs Must List**

Blasting logs must list important details about each blast, how it was carried out and details of the inspection carried out after the blast, including:

- The date and time of the blast;
- The blast location;
- The blaster's name and signature; and
- The type and amount of explosives used.

In addition to this basic information, some jurisdictions require the blasting logs to list:

- The employer's name and address (NS);
- The blaster's certification number (NS);
- The names of any assistants or other workers who handled the explosives (BC, NB);
- The number of detonators used (AB, BC);
- The type of detonators used (NB, NS);
- The type and quantity of explosives removed from and returned to the magazine (AB);
- How the explosion was initiated (BC, NS);
- The number of bore holes loaded with explosives (AB, NB, NS);
- The depth and placement of charges in each hole (NB, NS);
- For each bore hole: the identifier number, diameter, spacing, stemming, type, quantity and brand of explosive loaded into it (NS);
- A diagram of the blasting pattern and firing sequence (NB);
- A sketch of the loading pattern (NS);
- The number and location of any misfires (AB, NB, NS);
- The precautions taken to control fly rock, air blast and ground vibrations (NB, NS);
- The reasons for any delay in blasting (NB, NS);
- The weather conditions during the blast (NB, NS).

Nova Scotia has the most extensive rules, requiring that in addition to all of the above items that the blasting log also lists:

- The distance from the nearest house, residence, shop, church, school or other structure occupied in whole or in part by people;
- The distance from the nearest structure other than one occupied in whole or in part by people;
- The period numbers of the detonators used in the blast;
- The resistance in the electric blasting circuit, recorded in ohms;
- The type of warning signal used;
- Whether blasting mats were used;
- Whether warning signs were posted on all public roads near the blasting area, leading to the blasting area and leading from the blasting area;
- Whether all roads and approaches were guarded or barricaded; and
- Whether there was any injury to persons or damage to property resulting from the blast.

### **4. How Long Blasting Logs Must Be Retained**

The employer is responsible for retaining the completed blasting logs and making

them available for inspection by OHS officials and perhaps the workplace JHSC. In addition, several jurisdictions specify how long employers must retain copies of blasting logs:

- 3 years: New Brunswick and Quebec;
- 5 years: BC, Newfoundland and Yukon.

In BC, blasters are also required to keep personal copies of all the blasts they've performed over the past 5 years.

## **5. Blaster's Obligation to Report Blasting Incidents**

In addition to keeping blasting logs, blasters must provide a written report of any blasting incident that occurs. **Compliance Strategy:** Require blasters to fill out a written incident report form that lists:

- The blaster's name and signature;
- A description of the incident;
- The names of all supervisors and other blasters involved in the incident;
- The names and addresses of all witnesses;
- The names, addresses and injuries of all the victims;
- A description of any property damage caused by the blast;
- A description of how the blast was initiated, if applicable; and
- A description of the weather conditions at the time of the incident.

Blasters should also immediately report any actual, attempted or suspected theft, loss or unauthorized removal or use of explosives.