



SAFETY BULLETIN



Safety Bulletin Number: **0000014**

Issued April 28, 2022 by the Occupational Health and Safety from the Department of Labour, Skills and Immigration

Blasting Incidents – Preventing Flying Material

Legal information

Issued pursuant the Section 65-1 of the *Blasting Safety Regulations*, made under the *Occupational Health and Safety Act*,

Summary

Explosives are used throughout Nova Scotia in the construction, quarrying, mining, oil and gas, and demolition industries.

Flying material incidents can result in fatalities or severe damage to property. It is not acceptable for flying material to be thrown beyond the predetermined, controlled, clearance zone established by the blaster. Flying material can be extremely hazardous to persons and property. Employers and blasters are reminded that they must take all reasonable steps to prevent flying material from leaving the clearance zone.



Figure 1 – Flying material damage to a site trailer and a parked truck from two separate blasting incidents.



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Employers and blasters must take sufficient precautions to control flying material resulting from a blast. Some important factors employers and blasters must consider include:

- **Blast Design** – Ensure there is sufficient burden and collar to minimize the amount of flying material.
- **Training** – Ensure all persons working in the blasting area are properly trained and qualified.
- **Drill Hole Conditions** – Document the condition of each drill hole and communicate this information to the blaster in a detailed drill log.
- **Stemming** – Ensure that a sufficient amount of stemming is used and that the stemming is made from a suitable material.
- **Blasting Mats** – Use blasting mats of appropriate size and strength to minimize the amount of flying material.
- **Removing Persons and Property** – Remove persons and property from any area where flying material may create a hazard.
- **Blast Shelters** – Provide shelter sufficient to protect persons and property from flying material.

The trending of blasting incidents indicates a lack of attention to adequate levels of protection to prevent dangerous flying material. Flying material resulting from blasting activity is not acceptable and the employer and blaster are to ensure that all appropriate controls are in place to prevent flying material from leaving the clearance zone.

All Blasting Incidents must be reported to the Occupational Health and Safety Division within 24 hours of the incident.

Contact for bulletin queries

Safety Branch

Labour, Skills and Immigration

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