

Incident Brief: North Bay Quarry Flyrock Incident — Bruman Construction (May 28, 2014)

Matter

Flyrock projected beyond blast area at North Bay Quarry, endangering nearby residential property and a worker

Incident Date

May 28, 2014

Location

North Bay Quarry
1141 Carmichael Drive
North Bay, Ontario, Canada

Operator / Contractor

Bruman Construction

Incident Type

Flyrock escape from controlled blasting operation

Summary

On May 28, 2014, a blast conducted at the **North Bay Quarry**, operated by **Bruman Construction**, resulted in flyrock being projected outside the intended blast area.

The flyrock:

- entered a neighboring residential property; and
- traveled near the location where a Bruman Construction employee was standing.

The incident created both a **public safety hazard** and an **occupational safety exposure**, demonstrating the risk of flyrock extending beyond planned blast boundaries.

Facts

Blast Event

During a quarry blast:

- rock fragments were ejected beyond the designated blast area;
- flyrock crossed the quarry boundary;
- material entered adjacent residential property.

The flyrock also traveled close to an employee of the blasting operation, creating a near-miss workplace incident.

Impact Area

The affected areas included:

1. Neighboring Residential Property

Flyrock entered property outside the quarry operation, creating a risk to:

- residents;
- structures;
- vehicles;

- personal property.

The available summary does not identify whether property damage occurred.

2. Employee Exposure

A Bruman Construction employee was positioned near the area where flyrock traveled.

The event represented a serious safety concern because flyrock can cause:

- fatal injuries;
- penetrating trauma;
- severe equipment damage.

No injury is reported in the available incident summary.

Safety Significance

This incident demonstrates that flyrock hazards are not limited to the active quarry face.

Even when blasting occurs within an operating quarry, flyrock can affect:

- adjacent residences;
- workers;
- roads;
- neighboring businesses.

The event highlights the importance of:

- accurate blast design;
 - controlled access zones;
 - adequate clearance distances;
 - worker positioning;
 - blast area security.
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Potential Investigation Issues

A regulatory investigation would typically examine:

Blast Design

Including:

- hole depth;
 - burden;
 - spacing;
 - stemming length;
 - explosive loading;
 - initiation sequence.
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Site Conditions

Including:

- geological structure;
 - fractured rock;
 - weak zones;
 - unexpected confinement conditions.
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Blast Clearance Procedures

Investigators would review:

- established exclusion zone;
 - worker locations;
 - communication procedures;
 - warning systems;
 - whether nearby residences were adequately protected.
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Legal and Regulatory Considerations

No publicly available court decision or civil judgment has been identified from the incident summary.

Potential legal issues arising from such an event could include:

Negligence

Whether the blasting contractor failed to exercise reasonable care in:

- designing the blast;
 - establishing safe distances;
 - protecting third parties.
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Occupiers' / Workplace Safety Obligations

Because an employee was near the flyrock path, workplace safety regulators could examine:

- worker positioning;
 - blast clearance enforcement;
 - supervisor controls.
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Property Damage / Trespass

If flyrock damaged neighboring property, affected owners could potentially pursue claims involving:

- property damage;
 - negligence;
 - nuisance;
 - trespass.
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Relationship to Other Flyrock Cases

Incident	Location	Flyrock Impact
North Bay Quarry (2014)	Ontario	Flyrock entered residential property and approached worker
Pakenham Quarry (2009)	Ontario	Worker struck; vehicles damaged

Miller Braeside Quarry (2005–2007)	Ontario	Flyrock reportedly reached residences
City Sand Quarry	Newfoundland	Flyrock damaged homes despite setback
Virginia highway incidents (2013)	Virginia	Flyrock reached public highway

Key Finding

The North Bay Quarry incident demonstrates that **flyrock can escape a quarry's intended blast zone and affect both neighboring residents and quarry personnel**. The incident underscores that safe blasting requires protection of the entire potential flyrock zone, not merely the immediate excavation area.

Limitation: The available information identifies the date, location, operator, and general circumstances but does not provide the official investigation report, regulatory findings, flyrock distance, damage assessment, or enforcement outcome.