

# Legal Brief

## British Columbia Road Construction Flyrock Incident — Occupied Cookhouse Strike

November 30, 2018

### I. Matter

**Incident:** Flyrock from a road construction blasting operation traveled approximately 500 metres and penetrated the roof of an occupied cookhouse.

**Date of Incident:** November 30, 2018

**Location:** Interior coastal woodland region of British Columbia, Canada.

**Nature of Matter:** Construction blasting incident involving uncontrolled flyrock migration beyond the intended blast area and impact to an occupied structure.

---

### II. Overview

On November 30, 2018, a blasting operation conducted in connection with road construction activities in British Columbia resulted in rock fragments being projected approximately 500 metres from the blast site. The flyrock traveled beyond the anticipated controlled area and struck an occupied cookhouse, penetrating the roof of the structure.

The incident raises significant occupational health and safety, regulatory compliance, negligence, and liability considerations because the blast created a foreseeable risk of serious harm to persons located outside the immediate blasting area.

Although no information is presently available regarding injuries, property damage beyond the roof penetration, enforcement actions, or civil proceedings, the event represents a high-consequence blasting failure involving an occupied workplace structure.

---

# III. Material Facts

## A. Blasting Operations

The blasting activity was conducted as part of a road-building project in a forested area of British Columbia.

The operation involved:

- excavation and development of road access;
- drilling and blasting of rock formations;
- use of explosives to fragment and remove rock.

During the blast, fragments of rock were ejected beyond the expected blast perimeter.

---

## B. Flyrock Migration

The reported flyrock travel distance was approximately:

**500 metres**

The distance indicates that the blast effects extended significantly beyond the immediate work area.

The flyrock was not contained within the intended danger zone and reached an occupied structure.

---

## C. Impact to Occupied Cookhouse

The flyrock:

- struck an occupied cookhouse;
- penetrated the roof;
- created a direct hazard to individuals inside the structure.

Available information does not establish:

- whether any occupants suffered physical injury;
- the number of persons present;

- the size or mass of the rock fragment;
  - the extent of structural damage;
  - whether emergency response or evacuation measures were required.
- 

## **IV. Potential Legal Issues**

### **Issue 1: Compliance With Occupational Health and Safety Requirements**

A primary legal issue is whether the blasting operation complied with applicable occupational health and safety obligations.

Investigators would likely examine whether the employer and blasting personnel:

- conducted an adequate hazard assessment;
- established an appropriate blast exclusion zone;
- identified occupied structures within the potential flyrock area;
- implemented effective warning and communication procedures;
- ensured workers were protected before initiation of the blast.

Under British Columbia occupational health and safety principles, employers have obligations to identify hazards and implement controls reasonably capable of preventing workplace injury.

---

## **V. Potential Negligence Analysis**

A civil negligence claim would generally require consideration of:

### **1. Duty of Care**

The blasting contractor, employer, and responsible parties likely owed a duty to:

- workers;
- occupants of nearby facilities;
- persons who could reasonably be affected by blasting operations.

## 2. Standard of Care

The relevant question would be whether the blasting operation met the standard expected of a reasonably competent blasting contractor.

Factors considered could include:

- blast design calculations;
- explosive loading practices;
- stemming requirements;
- geological assessment;
- burden and spacing design;
- initiation sequence;
- blast monitoring;
- exclusion-zone determination.

## 3. Breach

A breach could potentially be alleged if the blast design or safety controls failed to reasonably account for:

- the possibility of flyrock projection;
- nearby occupied structures;
- geological conditions affecting containment;
- foreseeable blast hazards.

## 4. Causation and Damage

If injury or property damage occurred, legal analysis would focus on whether inadequate blasting controls caused the flyrock escape and resulting loss.

---

# VI. Potential Regulatory Investigation Issues

A regulatory investigation would likely review:

## Blast Design

Including:

- drilling pattern;
- burden and spacing;
- explosive quantities;
- stemming depth and materials;
- initiation timing;
- confinement of explosive energy.

## **Site Conditions**

Including:

- rock structure;
- fractures and discontinuities;
- unexpected geological conditions;
- terrain characteristics;
- proximity of structures.

## **Safety Controls**

Including:

- blast clearance distances;
  - exclusion-zone calculations;
  - barricading;
  - warning systems;
  - personnel accountability;
  - communication procedures.
- 

# **VII. Possible Parties of Interest**

Depending on the facts established by an investigation, potentially responsible parties could include:

- the blasting contractor;
- the road construction contractor;
- project owners or operators;
- supervisors responsible for blast planning;
- individuals responsible for approving or initiating the blast.

Responsibility would depend on contractual arrangements, regulatory duties, and evidence regarding decision-making and control over the operation.

---

## VIII. Potential Defences

Parties involved in the blasting operation might argue that:

- the blast was designed according to accepted industry practices;
- the flyrock resulted from unforeseeable geological conditions;
- reasonable precautions were taken;
- the event occurred despite compliance with applicable standards.

The strength of such defences would depend on evidence regarding blast planning, site conditions, and whether foreseeable risks were adequately controlled.

---

## IX. Legal Significance

This incident is legally significant because it involves three factors commonly associated with severe blasting liability:

1. **Uncontrolled flyrock travel**
2. **A substantial travel distance of approximately 500 metres**
3. **Impact to an occupied structure**

Flyrock is recognized as one of the most serious hazards associated with blasting because individual rock fragments can travel unpredictable distances and cause fatal injuries or major property damage.

---

## X. Conclusion

The November 30, 2018 British Columbia road construction blasting incident involved a serious loss of blast containment when flyrock traveled approximately 500 metres and penetrated the roof of an occupied cookhouse.

Based on the available information, the incident raises potential issues concerning blast design, hazard assessment, exclusion-zone adequacy, workplace safety compliance, and negligence liability.

A complete legal assessment would require additional documentation, including:

- the blasting contractor's records;
- blast plan and design calculations;
- regulatory investigation reports;
- worker and witness statements;
- photographs and damage assessments;
- enforcement decisions;
- any civil claims or court proceedings.

At present, the available facts establish a significant blasting safety incident but do not establish legal fault or liability against any specific party.