

Legal Brief

WorkSafe Victoria Quarry Flyrock Incident — Damage to Adjoining Property

September 7, 2020

I. Matter

Incident: Flyrock from quarry blasting traveled several hundred metres and damaged buildings located on an adjoining property.

Date of Incident: September 7, 2020

Location: Victoria, Australia

Regulatory Body Referenced: WorkSafe Victoria

Nature of Matter: Quarry blasting incident involving off-site flyrock migration resulting in property damage beyond the quarry boundary.

II. Overview

On September 7, 2020, WorkSafe Victoria identified a quarry blasting incident in which flyrock from a blast traveled several hundred metres and damaged buildings located on an adjoining property.

The incident involved the uncontrolled projection of rock fragments beyond the quarry's operational area and into a neighbouring property. The event raised concerns regarding blast design, risk management, separation distances, and the effectiveness of controls intended to prevent off-site impacts from blasting activities.

The available information does not identify the quarry operator, blasting contractor, extent of damage, whether any persons were present in the affected buildings, regulatory enforcement outcomes, or whether civil proceedings occurred.

III. Material Facts

A. Quarry Blasting Activity

The incident occurred during a quarry blasting operation.

Quarry blasting involves the controlled use of explosives to fracture and remove rock for extraction purposes. Because explosive energy can produce high-velocity rock fragments, blasting operations require careful planning and control.

During the September 7, 2020 event, flyrock was generated and traveled beyond the intended blast area.

B. Flyrock Travel

The reported flyrock travel distance was:

Several hundred metres

The distance indicates that the blast effects extended beyond the quarry boundary and reached neighbouring property.

The available summary does not provide:

- the exact travel distance;
 - the size or weight of the flyrock fragments;
 - explosive quantities;
 - blast design parameters;
 - calculated exclusion-zone distance.
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C. Property Damage

The flyrock damaged buildings located on an adjoining property.

The available information does not specify:

- the type of buildings affected;
- the severity of damage;
- whether the buildings were occupied;

- whether any persons were injured;
 - the financial value of the damage.
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IV. Potential Legal Issues

Issue 1: Adequacy of Blast Risk Controls

A central legal issue would be whether the quarry operator and blasting personnel implemented adequate measures to prevent foreseeable flyrock from leaving the quarry site.

An investigation would likely consider whether:

- the blast was properly designed;
 - the danger zone was accurately assessed;
 - nearby properties were identified as potential exposure areas;
 - appropriate exclusion and warning measures were implemented.
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V. Potential Negligence Analysis

1. Duty of Care

A quarry operator conducting blasting operations may owe duties to:

- employees;
- contractors;
- neighbouring landowners;
- occupants of nearby structures;
- members of the public.

Because flyrock can travel beyond the immediate blast area, neighbouring properties may represent foreseeable areas of risk.

2. Standard of Care

The expected standard of care would likely be assessed against accepted quarry blasting practices.

Relevant factors may include:

- blast design calculations;
 - burden and spacing;
 - drilling accuracy;
 - explosive loading practices;
 - stemming quality and depth;
 - initiation sequence;
 - geological conditions;
 - previous blast results;
 - monitoring and review procedures.
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3. Potential Breach

A breach could potentially arise if the investigation determined that the operator failed to adequately control foreseeable risks, including:

- inadequate flyrock prediction;
 - insufficient blast exclusion distances;
 - improper blast loading;
 - inadequate stemming or confinement;
 - failure to consider neighbouring structures.
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4. Causation and Damages

A civil claim arising from the incident would generally examine whether the quarry blasting operation caused the flyrock release and resulting property damage.

Potential damages could include:

- building repairs;
 - replacement costs;
 - business interruption losses;
 - loss of property use;
 - other consequential losses.
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VI. Regulatory Considerations

A regulatory review by WorkSafe Victoria or other authorities would likely examine compliance with applicable workplace safety and blasting requirements.

Areas of investigation could include:

Blast Design and Execution

Including:

- blast plans;
- explosive quantities;
- hole layout;
- stemming practices;
- initiation systems;
- geological assessments.

Risk Assessment

Including:

- identification of adjoining properties;
- assessment of flyrock hazards;
- determination of exclusion zones;
- consideration of previous blasting history.

Operational Controls

Including:

- blast clearance procedures;
- communication systems;
- warning methods;
- supervision;
- competency of blasting personnel.

VII. Potential Parties of Interest

Depending on the evidence, potentially responsible parties could include:

- the quarry owner or operator;
- the blasting contractor;
- the shotfirer or blasting supervisor;
- personnel responsible for blast planning and approval.

Responsibility would depend on contractual arrangements, regulatory duties, and control over the blasting operation.

VIII. Potential Defences

Possible responses by responsible parties could include:

- the blast was designed and conducted according to accepted industry practice;
- unexpected geological conditions contributed to flyrock;
- reasonable safety precautions were implemented;
- the event occurred despite compliance with applicable requirements.

The strength of any defence would depend on technical evidence and regulatory findings.

IX. Legal Significance

This incident is significant because it demonstrates that quarry blasting hazards can extend beyond the quarry boundary and affect neighbouring property.

Key legal and safety concerns include:

1. **Off-site migration of flyrock**
2. **Damage to third-party property**
3. **Failure of blast containment controls**

Flyrock incidents are considered among the most serious blasting hazards because individual fragments may travel unpredictable distances and cause severe injury, fatalities, or substantial property damage.

X. Conclusion

The September 7, 2020 WorkSafe Victoria-referenced quarry blasting incident involved flyrock traveling several hundred metres and damaging buildings on an adjoining property.

The incident raises potential legal questions regarding blast design, hazard assessment, public protection measures, regulatory compliance, and civil liability.

A complete legal evaluation would require additional information, including:

- quarry and contractor identities;
- investigation findings;
- blast records;
- technical assessments;
- photographs and damage reports;
- enforcement decisions;
- any insurance claims or litigation records.

Based on the available information, the event represents a significant off-site flyrock incident involving damage to neighbouring property and highlights the importance of effective blast planning and containment controls.