

Legal Brief

Rhode Island Quarry Flyrock Incident — Vehicle Occupant Injuries and Property Damage

May 25, 2018

I. Matter

Incident: Quarry blasting explosion resulting in flyrock damage to nearby buildings and injuries to two occupants of a town-owned pickup truck on a nearby road.

Date of Incident: May 25, 2018

Location: Rhode Island quarry, United States

Nature of Matter: Quarry blasting incident involving off-site flyrock migration, third-party property damage, and personal injury to members of the public.

II. Overview

On May 25, 2018, a blasting operation at a Rhode Island quarry resulted in an explosion that projected flyrock beyond the quarry property.

The flyrock caused damage to nearby buildings and struck a town-owned pickup truck parked on a nearby road, injuring two occupants.

The incident involved members of the public outside the immediate quarry operation area and raised significant concerns regarding blast containment, public protection measures, exclusion-zone adequacy, and compliance with applicable blasting safety requirements.

The available information is based on local media reporting and does not identify the quarry operator, blasting contractor, regulatory investigation findings, enforcement actions, injuries sustained, or any civil litigation arising from the incident.

III. Material Facts

A. Quarry Blasting Activity

The incident occurred during blasting operations at a Rhode Island quarry.

Quarry blasting involves the controlled use of explosives to fracture rock. Proper blasting procedures are intended to limit the release of explosive energy and prevent:

- flyrock projection;
- excessive airblast;
- ground vibration;
- damage to surrounding property and persons.

During the May 25, 2018 event, the blast produced flyrock that traveled outside the quarry's intended control area.

B. Flyrock and Off-Site Impacts

The blast resulted in:

- flyrock reaching areas outside the quarry;
- damage to nearby buildings;
- impact to a public roadway area.

The available information does not specify:

- the distance traveled by the flyrock;
 - the size or weight of the fragments;
 - the quantity of explosives used;
 - the blast design parameters;
 - the established danger zone.
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C. Injuries to Vehicle Occupants

Two individuals were injured while inside a town-owned pickup truck parked on a nearby road.

The available information does not identify:

- the severity or type of injuries;
- whether the injuries resulted from direct flyrock impact, broken glass, or other blast effects;
- whether emergency treatment was required.

The involvement of a public roadway and third-party vehicle occupants is significant because it indicates that the blast hazard extended beyond the quarry workforce and affected members of the public.

IV. Potential Legal Issues

Issue 1: Failure to Protect the Public From Blast Hazards

A primary legal issue would be whether the quarry operator and blasting personnel adequately protected persons and property outside the quarry boundary.

An investigation would likely examine whether:

- the blast danger zone was properly calculated;
 - nearby roads and structures were identified;
 - traffic controls or road closures were implemented;
 - warnings were provided;
 - adequate precautions were taken before detonation.
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V. Potential Negligence Analysis

1. Duty of Care

A quarry operator conducting blasting activities generally owes a duty of care to:

- workers;
- contractors;
- neighbouring property owners;
- motorists;
- members of the public.

Because flyrock can travel significant distances, public areas near blasting operations represent foreseeable risk zones.

2. Standard of Care

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

Relevant factors may include:

- blast design;
 - explosive loading calculations;
 - burden and spacing;
 - stemming practices;
 - drilling accuracy;
 - initiation sequence;
 - geological conditions;
 - blast monitoring;
 - clearance distances.
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3. Potential Breach

A breach could potentially be alleged if evidence showed that reasonable measures were not taken to prevent off-site flyrock.

Potential contributing factors could include:

- inadequate blast design;
 - insufficient containment of explosive energy;
 - failure to establish an appropriate exclusion zone;
 - inadequate roadway protection;
 - insufficient warnings or public notification.
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4. Causation and Damages

A civil claim would likely examine whether the quarry blast directly caused:

- injuries to the two vehicle occupants;

- damage to nearby buildings;
- related financial losses.

Potential damages could include:

- medical expenses;
 - personal injury compensation;
 - vehicle damage;
 - building repair costs;
 - other property losses.
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VI. Regulatory Considerations

A regulatory investigation would likely examine compliance with applicable mining, blasting, and public safety requirements.

Areas of review could include:

Blast Design and Execution

Including:

- blast plans;
- explosive quantities;
- drill pattern;
- stemming;
- initiation system;
- geological conditions.

Public Safety Controls

Including:

- blast warning procedures;
- road access restrictions;
- traffic controls;
- security zones;
- communication with nearby residents and authorities.

Incident Investigation

Including:

- flyrock trajectory analysis;
 - damage assessment;
 - worker and witness interviews;
 - corrective actions following the event.
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VII. Potential Parties of Interest

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

- the quarry owner or operator;
- the blasting contractor;
- the licensed blasting professional;
- supervisors responsible for blast planning and execution.

Potential claims may also involve governmental entities or insurers depending on ownership of damaged property and the town vehicle.

VIII. Potential Defences

Possible defences could include:

- the blast was designed and conducted according to accepted industry practices;
- an unexpected geological condition contributed to the flyrock;
- appropriate warnings and safety measures were implemented;
- the event occurred despite reasonable precautions.

The strength of any defence would depend on technical evidence, regulatory findings, and the circumstances surrounding the blast.

IX. Legal Significance

The Rhode Island quarry incident is significant because it involved:

1. **Flyrock leaving an active quarry operation**
2. **Damage to nearby structures**
3. **Injury to members of the public**
4. **Exposure of roadway users to blasting hazards**

Unlike incidents limited to quarry property, this event involved third-party injuries and property damage, increasing potential civil liability and regulatory consequences.

X. Conclusion

The May 25, 2018 Rhode Island quarry blasting incident involved an explosion that projected flyrock beyond the quarry boundary, damaged nearby buildings, and injured two occupants of a town-owned pickup truck on a nearby road.

The incident raises potential legal issues concerning:

- blast design and containment;
- adequacy of exclusion zones;
- protection of public roadways;
- regulatory compliance;
- personal injury and property damage liability.

A complete legal assessment would require additional information, including:

- quarry and blasting contractor identities;
- official investigation reports;
- blast records;
- injury reports;
- property damage assessments;
- regulatory enforcement actions;
- any civil claims or settlements.

Based on the available facts, the incident represents a serious quarry blasting failure involving off-site flyrock, public exposure, and resulting injuries and property damage.