## How can I help reduce the effects of blasting on my family and home?

- Learn more about blasting and its effects from this and similar material on the subject.
- Remember the blasting schedule and heed the warning signals to avoid surprises.
- Do not hesitate to ask questions or express your concern. The Fire Marshal's Office can provide contact names and phone numbers for blasters conducting blasting operations in your area.
- Please contact the Fire Marshal's Office in your area if you have a complaint about a blasting operation .
- Finally, please follow any instructions or signs posted around the construction project.

We hope we have answered most of your questions and helped you feel more comfortable with the blasting activity taking place in your neighborhood. Again, should you have any questions or concerns, do not hesitate to contact us, the blasting company, or the Fire Marshal's Office.

Seismic Surveys, Inc.
P O Box 1185
Frederick, Maryland 21702

**Contacts:**

**SEISMIC SURVEYS, INC.**
Phone: 301-663-6630
Fax: 301-663-6647

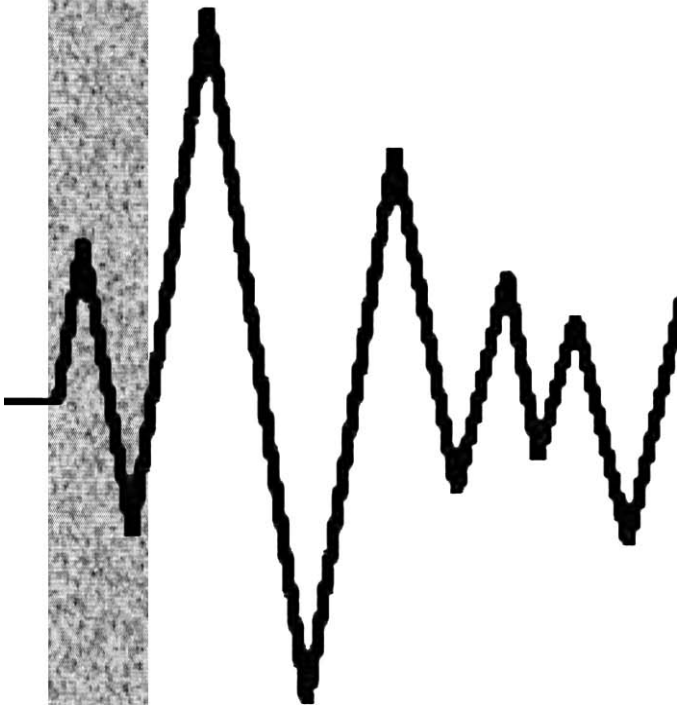
**Blasting Contractor:**
**Firm:** _____
**Phone:** _____

**Fire Marshal's Office:**
**Phone:** _____

SEISMIC SURVEYS INC.

# Vibration Consulting Geologists

# Why is blasting necessary and how is it controlled?



## Why is blasting necessary?

Blasting of rock is the most cost-effective and time conserving method for rock excavation, mining, or quarry operations. By improving the efficiency of the operation, the life of a construction project is shortened and the inconvenience to you is minimized.

## Will my house and my well be safe from blasting damage?

Over fifty years of research has been conducted in order to answer this question. Results obtained are used by federal, state and local governments to regulate ground vibration and sound. The blaster will design the blasts so that vibrations produced are well below the safe and regulatory limits recommended by government agencies. Blast vibrations can be controlled to prevent damage to adjacent structures, both above and below ground.

Blasting is a highly specialized and regulated occupation. It requires years of training and knowledge of the application of explosives and detonating accessories, as well as safety of the blasters, the general public and their property. The Office of the Fire Marshal enforces blasting regulations in most states.

**Community Outreach**

## How are vibration and airblast measured and controlled?

During a blast, seismographs are used to measure the ground motion and noise from the blast to confirm for the blaster and homeowner that the vibration and airblast are within the safe limits. Digitized seismograph recordings allow the blaster to maintain the most effective and safe blasting designs, while minimizing any inconvenience to you. Also, as a courtesy of the blasting company, the owners of the closest buildings to a blast are often given an opportunity to have an inspection before blasting starts. Pre-blast inspections provide detailed descriptions of the existing conditions of your house and usually do not take more than two hours to perform.

**Vibration and Airblast Monitoring**

## What will the blast feel or sound like?

Good blast design can control the level of vibrations and airblast, but not stop them. Therefore, you should not be surprised if you feel or hear a blast. The vibration you may notice from a blast is typically comparable to the sound and vibration a home experiences through normal use (door slam, etc.). The suddenness of an unexpected blast may make the vibrations seem more severe than they really are.

Weather conditions, such as high humidity or the presence of cloud cover, can cause the airblast from a blast to seem more severe than it would on a day when the humidity is low and there is a lack of cloud cover.

**Pre-Blast Survey**