# Blasting

## 7 steps to take when you're affected by blasting...

- 1. Organize a group. Talk to other people in your community who are affected or concerned by the blasting. Groups can apply real pressure on the mine and regulators (e.g. Coal River Mountain Watch). Do not let the mine or the regulators split your group.
- 2. Recruit a lawyer, preferrably one who has handled blasting damage claims for citizens.
- 3. Don't think that the DEP or OSMRE are your friends. The WVDEP is an office of the governor if the governor is a "friend of coal," so is the DEP. The head of the OSMRE is a former coal industry employee.
- 5. Document blasts and blasting damage (see below).
- 6. Go public attract media attention to your damages.
- 7. Connect with other groups in your region and elsewhere in the coalfields.
- 8. Don't give up. Be persistent in protecting your rights.

## How to Document Blasting Damage

- 1. Get a professional pre-blast survey before mining begins. If blasting has already started, get a pre-blast survey as soon as possible. This serves as a reference for subsequent damage and as evidence in court.
- 2. Get a professional damage survey done as soon as possible if damage has already begun.
- 3. Try to be home to witness as many blasts as possible. Radio scanners can help determine when and where the mine will be blasting.
- 4. Keep a log of the date, time and severity of every blast you witness. Describe the sounds of the blasts and the extent of shaking in your blast log.
- 5. Inspect your house carefully after blasts. Document new damage immediately. File a complaint with the DEP, OSMRE, and notify your lawyer if you have one.
- 6. Tips for inspecting your house:
  - Date and mark off the ends of all cracks and crack extensions. Note time of damaging blast, if known.
  - Take photographs. Keep extra copies and negatives of all photos. If cracks are too

fine to show up in photos, draw a line following the shape of the crack. Put something in photos (ruler, hand, person, etc.) to give a sense of scale.

Check for hairline cracks. New damage to the inside of your house is likely to occur as hairline cracks. These often occur around doorways, windows, corners, or ceilings.

Note doors and windows that do not open or close properly. This indicates the house has shifted.

Inspect plumbing.

Document damage in your basement. Note cracks in foundation walls.

Inspect exposed wood beams for cracks and splintering.

Check for gas leaks after severe blasts.

Inspect house exterior. Note new cracks in brick or stone and signs of unusual "settling."

#### **Pre-Blast Surveys**

- 1. **Get a pre-blast survey, even if blasting has already started.** Pre-blast surveys (even ones conducted after blasting starts) provide comparison data that can be used to back up damage claims. Coal companies are required to do pre-blast surveys for residents within 7/10 mile of where blasting will occur and within 1/2 mile of the mine permit boundary, free of charge. If they did not offer you one prior to mining, request one and file a complaint with the DEP.
- 2. **Damage often occurs beyond the half-mile and 7/10 mile limits claimed by SMCRA.** Get a pre-blast survey even if you live outside these limits. Damage from low-frequency vibration is actually more likely beyond the half-mile limit.
- 3. DEP inspectors most likely will not use your pre-blast survey when investigating your blasting complaint. Instead, DEP inspectors rely on blast logs written and stored by the mine operator. The pre-blast survey's true value is its use in court cases.
- 4. Hire your own contractor to do the pre-blast survey, if you can. Do not trust the mine operator to provide you with a complete or accurate pre-blast survey.
- 5. Cover all structures and every aspect of them in the pre-blast survey, including things such as an inventory of objects on shelves that might be shaken off. Document all cracks, including length, and the condition of doors and windows.

## Problems with Seismographs

1. Blasts within regulatory limits are not difficult to achieve, and seismograph data can back up mine operator claims that blasts were within limits. *Significant damage can be caused by blasts that are well within the regulatory limits.* Many problems are not

- caused by mine operators violating the limits, but by the fact that the limits are largely meaningless.
- 2. Seismographs should be placed outside and adjacent to a structure. Seismographs will sometimes be placed in the basement of houses. Seismographs placed in basements will read ground level or below-surface vibrations, not structure response.
- 3. Mine operators often stall installation of seismographs until after they have changed their blast designs to ensure they are within the limits. Study mine blasting records and compare blasts during monitoring with blasts prior to monitoring this should reveal if designs have changed to ensure compliance.
- 3. Results of seismographs can be skewed through different analysis methods, different compliance methods, picking and choosing which parameters to report, strategic placement of spoil piles, and other actions available to the mine operator.
- 4. Peak particle velocity levels can vary significantly from one spot to another. Mine operators will usually try to locate seismographs away from "hot spots." The DEP will then use this data and apply it to the whole property, despite the existence of areas with higher values.

### In Case of a Blasting Emergency

- 1. Quickly note the time of the blast on your calendar.
- 2. Check gas lines.
- 3. Check for damage.
- 4. Decide where, how and to whom you want to complain. If you decide to report it to the DEP and OSMRE, tell them the details and insist on prompt action. Take careful notes of this conversation and follow up with a letter that describes how you remember the conversation, particularly any promises made by the DEP or OSMRE.
- 5. Notify the police if necessary, regarding public safety hazards or trespass and destruction of property caused by the blast.
- 6. Get a copy of the blast log as soon as possible.
- 7. Keep track of documentation by your neighbors. Comparing notes can help you identify "hot spots" where blasts are especially damaging and often overlooked by DEP inspectors.
- 8. Coordinate your local group's response to the blast.

#### Contact Info

WVDEP Office of Explosives and Blasting Dave Vande Linde, Chief (304) 926-0464 / 601 57th St., SE, Charleston, WV 25304
OSMRE Charleston Field Office - (304) 347-7158 Roger Calhoun, Director 1027 Virginia St. E / Charleston, WV 25301

**Complaints should also be filed with your local DEP field office.** See the "Citizens' Complaint Process" handout.

Adapted from *The People's Guide to Blasting: How to Protect Your Home, Family and the Environment* by Freda Harris and Will Collette, September 1999.