# RULEMAKING ON MINE OPENING BLASTING

# COMMENT/RESPONSE DOCUMENT

This document presents comments submitted in regard to the Environmental Quality Board's proposed rulemaking on Mine Opening Blasting and the Department's responses to those comments. The Environmental Quality Board approved publication of the proposed amendments at its meeting on May 17, 2006. The proposed rulemaking was published in the *Pa. Bulletin* on September 2, 2006. See 36 Pa. Bull. 5608 (September 2, 2006). Public comments were accepted from September 2, 2006 to October 2, 2006 and the comment period officially closed on October 2, 2006.

## List of Commentators

- Pennsylvania Coal Association 212 North Third Street Suite 102 Harrisburg, PA 17101
- Independent Regulatory Review Commission 333 Market Street, 14th Floor Harrisburg, PA 17101

## Comment

Does the Department have the statutory authority to regulate all blasting in connection with the construction of a coal mine opening as surface mining blasting including requiring all mine opening blasting to be performed by a blaster licensed under Chapter 210? Commentators No. 1 and 2.

## Response

Both the Surface Mining Conservation and Reclamation Act (SMCRA) and the Noncoal Surface Mining and Reclamation Act (NCSMCRA) apply to the construction of an opening to a mine from the surface to the coal seam or mineral deposit to be mined. The definition of "surface mining activity" in SMCRA and the definition of "surface mining" in NCSMCRA clearly include the construction of mine openings within the activities covered by the statutes.

The SMCRA regulates all surface mining activity. *See* §§ 1396.1 (relating to purpose of act) and 1396.4b(a) (relating to general rulemaking; health and safety). Surface mining activity is defined broadly to include "all surface activity connected with surface or underground mining, including, but not limited to, exploration, site preparation, *entry, tunnel, drift, slope, shaft and borehole drilling and construction and activities related thereto; but it does not include those mining operations carried out beneath the surface by means of shafts, tunnels or other underground mine openings."* § 1396.3 (*emphasis added*).

By expressly listing construction of underground mine openings (tunnel, drift, shaft and slope) as a regulated activity, excluding only the actual mining operations carried out beneath the surface by means of the mine opening, the General Assembly has stated the intention to treat the construction of the entire mine opening as a regulated surface mining activity. Therefore, all of the blasting, not just the first two rounds, related to the construction of the mine opening is a surface mining activity regulated by the SMCRA and its implementing regulations.

The General Assembly had two purposes in adopting the SMCRA's 1980 amendments. They wished to obtain primacy, and preserve existing Pennsylvania law to the maximum extent possible. *See*, Act of October 10, 1980, P.L. 835, No. 155, § 17. The Department has always construed these dual purposes to mean, except where necessary to obtain or preserve primacy, the Department should continue to interpret Pennsylvania law in a manner that advances one of the fundamental goals of the SMCRA, *i.e.* protecting the public's health, safety and welfare from the adverse affects of surface mining activity. For example, since at least the 1990s, the Department has applied the water supply restoration provisions of Section 4.2(f) of the SMCRA to all activities associated with the construction of the entire mine opening because the activities are included in the definition of surface mining activity. Requiring all mine opening construction blasting to comply with the SMCRA's requirements for the use of explosives is consistent with the General Assembly's stated purposes for adopting the 1980 amendments to the SMCRA and consistent with the Department's previous application of the law with respect to water supply replacement.

Both SMCRA and NCSMCRA include provisions providing for the safety of the workers. Both acts specifically include safety in the purposes of the Acts. One of the purposes of this final rulemaking is to eliminate the confusion caused by the overlapping jurisdiction of the SMCRA and the Commonwealth's mine safety laws. These mine safety laws apply to work in underground mines, including the construction of the opening to the surface, solely for the purpose of protecting the miners. There is nothing in the Commonwealth's mine safety laws expressing a legislative intent for these laws to have exclusive jurisdiction over the construction of mine openings.

The construction of mine openings, including the use of explosives, from the surface to the coal seam is a surface mining activity subject to the SMCRA. The SMCRA expressly directs the Board to promulgate regulations addressing the certification of blasters. *See*, § 1396.4b(b) (relating to General rulemaking: health and safety).

## Comment

Will the proposed regulations increase operator's costs and reduce their flexibility in conducting mine opening blasting? Commentators No. 1 and 2.

## Response

This rule making does not impose any additional costs on the regulated community. The existing regulations require all blasting in connection with the construction of a mine opening, from the surface to the coal seam or mineral to be mined, to comply with the applicable surface mining explosives regulations. The final-form rulemaking amends the surface mining explosives regulations to eliminate any ambiguity that the regulations apply to mine opening blasting and to give the operator greater flexibility in scheduling mine opening blasting, and the requirements for precautions to be taken when blasting is in proximity to a public road.

## Comment

This rulemaking establishes regulations that exceed federal standards without complying with the requirements of Executive Order 1996-1. Commentator No. 1.

## Response

The Department disagrees. The regulation is consistent with Executive Order 1996-1. The Department has received complaints about mine opening blasting. The compelling Pennsylvania interest is that blasting is an ultra-hazardous activity and unregulated blasting presents a risk of injury or death and property damage from flyrock; can be a nuisance to nearby inhabitants, especially if blasting occurs at night; and can generate ground vibration and airblasts that damage nearby structures.

2. §§ 77.564(b), 87.127(a), and 88.135(a).

## Comment

The term "blast" as used in these sections is unclear and should be defined or cross-referenced. Commentator No. 2.

### Response

The Department agrees. The term "blast" has been defined as "a detonation of explosives." The term "blasting" has been defined as "the detonation of explosives."

## Comment

What criteria and process will be used to determine if unscheduled blasting is necessary to maintain the mine opening's stability? Commentator No. 2.

## Response

Blasting activity in connection with the construction of a mine opening is reviewed and approved as part of the mining permit. The vehicle for this review and approval is the blast plan. *See e.g.* § 87.64 (relating to blasting plan). It is the operator's obligation to establish that blasting after sunset is necessary to maintain the mine opening's stability. A risk of instability in a mine opening under construction exists if that opening passes through sandstone or shale strata because these rocks deteriorate when exposed to air and water. If this situation exists, blasting on an as needed basis is necessary to enable the expeditious grouting of the mine opening with a ring of cement, sealing off the exposure to air and water.

## Comment

The regulation should indicate what information, including the blaster's strict liability, the building owner and lessee must be given before giving written consent to less stringent vibration limits. Commentator No. 2

## Response

The Department disagrees. The regulations provide vibration limits that, if adhered to, ensure that damage will not occur to buildings or other structures. *See e.g.* § 77.564(f) and (i) (relating to surface blasting requirements). The Department views this written consent as a civil agreement between the permittee and the owner of the building, and if applicable, the lessee. Each party involved is responsible for ensuring that their interests are met. Nonetheless, the Department cannot evaluate the appropriateness of a request for alternative vibration limits unless the consent is clear and specific.

## Comment

The Department should also consider developing a standard consent form. Commentator No. 2.

## Response

The Department does not believe that it is appropriate to use the regulations to develop forms. If necessary, this issue will be addressed through technical guidance. Presently, there is no need for such technical guidance. The Department has been granting waivers of vibration limits for some surface mining blasting since 1991. The written consents supporting these waivers have been clear, specific and uncomplicated. Therefore, at this time, the Department does not believe a standard form is needed.

## Comment

Does consent to less stringent vibration limitations negate insurance coverage? Commentator No. 2

#### Response

The Department is not in a position and does not have the authority to obtain and then analyze a homeowner's insurance policy to determine whether a civil agreement between a mine operator and a homeowner will affect the homeowner's insurance coverage.

#### Comment

Who can the owner, or if applicable, the lessee contact if they have questions concerning the information submitted by the operator? Commentator No. 2.

#### Response

Department staff is always available to explain the regulatory requirements and process. However, the owner, and if applicable the lessee, should seek private counsel for assistance in determining whether to accept the operator's request for a consent to alternative vibration limits.

3. §§ 77.564(c) and 87.127(b)

## Comment

The term "vibration limits" should be rephrased to be "ground or air vibration limits" to be consistent with the explanation in the Preamble. Commentator No. 2.

#### Response

Agreed. The term "vibration limits" does not provide as much clarity as specifying ground vibration and airblast when referring to the vibration effects resulting from blasting.

## Comment

Why is it no longer necessary to consider excessive noise as the basis for further restrictions on blasting? Commentator No. 2.

## Response

The term "noise" is a misnomer. The effect of blasting is an increase of air pressure above ambient levels which is called "airblast." Noise relates to human hearing. Airblast levels at low frequencies (below 20 Hz), also referred to as concussions, are not audible by persons but may adversely affect buildings or other structures. To avoid confusion and to ensure consistency, the terms noise and sound pressure have been either deleted or replaced with the term "airblast".

4. §§ 87.127(f)(1) and 88.135(f)(1).

## Comment

The operator's request to use alternative measures and the Department's approval should be in writing. Commentator No. 2

## Response

The operator's request to use alternative measures and the Department's response are in writing. A request to use alternative measures must be part of the blast plan. *See e.g.* § 87.64 (relating to blasting plan). The Department's decision to approve, deny or modify a proposed blast plan is a permitting decision, which must be in writing.

## Comment

Are local governments or residents to be given notice and the opportunity to participate in this decision? Commentator No. 2

## Response

Since the blast plan is part of the mining permit, local governments and residents will have the same opportunity to participate in the decision on a request for alternative measures as they are given for the other aspects of the permit application.