## 351.330 Requirements governing blasting operations.

- (1) Blasting of explosives for use in the neighborhood of any public highway, stream of water, dwelling house, public building, school, church, commercial or institutional building, pipeline, or utility shall be done in accordance with the provisions of this section, and rules and regulations promulgated by the department.
- (2) Where necessary in a blasting operation, the department may require that the operator submit a blasting plan to the department for approval.
- (3) In all blasting operations, except as hereinafter otherwise provided, the maximum peak particle velocity of the ground motion in any direction shall not exceed two (2) inches per second at the immediate location of any dwelling house, public building, school, church, commercial or institutional building, and the particle velocity at such location immediately after a period of one (1) second following the peak particle velocity produced by any charge shall not continuously exceed one-half (1/2) inch per second.
- (4) Blasting operations without instrumentation will be considered as being within the limits set forth in this subsection if such blasting operations are conducted in accordance with rules and regulations of the department establishing the maximum amount of explosives to be used in a single charge and in a single subcharge within specified distances from any location provided by subsection (1) of this section. No more than 40,000 pounds of explosives may be used in any charge except with the approval of the commissioner. Regulations promulgated by the department pursuant to this subsection shall be in such terms that compliance therewith will assure compliance with the provisions of subsection (3) of this section.
- (5) No two (2) consecutive subcharges containing the maximum permitted by the department pursuant to this subsection shall have a detonation time separated by less than eight (8) milliseconds, except that if the amount of explosive used in any subcharge is less than maximum permitted by the department pursuant to subsection (4) of this section, the time delay between detonation times may be decreased in the same ratio.
- (6) Any blasting operation may be conducted without reference to any maximum amount or period provided by or pursuant to subsection (4) of this section if the operator of such blasting operation demonstrates by instrumentation that maximum particle velocity of the ground motion in any direction does not exceed the limits provided in subsection (3) of this section.
- (7) Instruments for determining particle velocity as set forth in this subsection shall be limited to such specific types of devices as shall have been expressly approved by the department and the commissioner or his duly authorized agent may enter upon any premises for the purpose of conducting or supervising any necessary instrumentations provided by KRS 351.315 to 351.375.
- (8) When blasting operations are contemplated which would result in ground vibrations that would have a particle velocity in any direction in excess of two (2) inches per second at the immediate location of any dwelling house, public building, school, church, commercial or institutional building, blasting operations may proceed after receiving written consent from the property

- owner or owners affected.
- (9) When blasting operations, other than those conducted at a fixed site as a part of any industry or business operated at such site, are to be conducted within the vicinity of a pipeline or public utility, the blaster or person in charge of the blasting operations shall take due precautionary measures for the protection of the pipeline or utility, and shall give adequate notice to the owner or his agent that such blasting operations are intended. The blaster shall be subject to regulations promulgated by the department concerning such a blasting operation.
- (10) Blasting operations near streams shall be prohibited in all cases where the effect of the blasting is liable to change the course or channel of any stream without first obtaining a permit from the department which has been approved by the Division of Water in the Energy and Environment Cabinet.
- (11) Blasting operations shall not be conducted within eight hundred (800) feet of any public highway, unless due precautionary measures are taken to safeguard the public.
- (12) Mudcapping in blasting operations shall be permitted only where it would endanger the safety of the workers to drill the rock or material to be blasted. If mudcapping is necessary, no more than ten (10) pounds of explosives shall be used for each charge.
- (13) When the use of detonating cord would cause severe air blast the department may cause all trunk lines to be covered by five (5) to six (6) inches of loose earth.
- (14) In blasting operations, flying rocks shall not be allowed to fall greater than one-half (1/2) the distance between the blast and a dwelling house, public building, school, church, or commercial or institutional building. Protective material shall be used to insure this limit.
- (15) When a blast is about to be fired, ample warning shall be given to allow all persons to retreat to a safe place, and care shall be taken to ascertain that all persons are in the clear. Each operator shall follow a definite plan of warning signals that can be clearly seen or heard by anyone in the blasting area. The operator shall inform all employees at the operation as to the established procedure.
- (16) No person shall use explosives in such manner that safety to persons or property is threatened.
- (17) The two (2)-inch-per-second maximum peak particle velocity as specified in subsections (3) and (8) of this section shall be construed as the threshold below which blasting damage is unlikely to occur. However, the department shall have the authority to promulgate regulations requiring more restrictive levels of maximum peak particle velocity when necessary to maintain consistency with federal statutes or regulations.

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**History:** Amended 2010 Ky. Acts ch. 24, sec. 1902, effective July 15, 2010. -- Amended 1978 Ky. Acts ch. 337, sec. 1, effective June 17, 1978. -- Amended 1976 Ky. Acts ch. 143, sec. 4. -- Created 1972 Ky. Acts ch. 280, sec. 3.