



Ohio Administrative Code

Rule 1501:13-9-10 Training, examination, and certification of blasters.

Effective: June 28, 2018

(A) General.

(1) All surface blasting operations in coal and industrial minerals mines, including surface blasting operations incident to underground mining and blasting operations on coal exploration operations, shall be conducted by a certified blaster who has obtained certification pursuant to the requirements of this rule.

(2) The chief may enter into agreements with other state agencies, boards, or institutions to administer any or all of the training, examination, and certification requirements of this rule. However, the final authority to accept or reject applicants for certification or recertification and the final authority to suspend or revoke a blaster's certification shall remain with the chief.

(3) The chief may grant reciprocity to any blaster who holds a valid certification or license issued under any state or federal blaster certification or license program approved by the U.S. department of the interior's office of surface mining reclamation and enforcement. However, to obtain certification under this rule, the blaster must apply for and pass an examination on Ohio blasting regulations pertaining to coal and industrial minerals mines, and meet any other requirement deemed necessary by the chief.

(4) The chief may issue a limited type of certification to blasters who conduct small-scale blasting on industrial minerals mining permits issued under Chapter 1514. of the Revised Code, but only when the blasting operations meet all of the following conditions:

(a) The primary purpose is to split natural stone deposits into rectangular blocks, or "dimension stone," for use in buildings, landscaping projects, break walls, or similar purposes;

(b) Detonating cord is the primary explosive charge in all blastholes; small-diameter cartridges, if used, occupy no more than twenty per cent of the blasthole length;



(c) The blastholes do not exceed three inches in diameter, are spaced no greater than thirty-six inches apart in a single row for each fracture plane desired, and are connected on the surface with detonating cord and no delays between the holes; and

(d) The weight of explosives per hole does not exceed five pounds, and the total weight of explosives per blast does not exceed two hundred pounds.

(B) Training. The chief shall inform certified blasters of changes in blasting rules and certification procedures, and shall ensure that courses are available to train persons responsible for the use of explosives in mining operations. The courses shall provide training and discuss practical applications of:

(1) Explosives, including:

(a) Selection of the type of explosive to be used;

(b) Determination of the properties of explosives which will produce desired results at an acceptable level of risk; and

(c) Handling, transportation, and storage.

(2) Blast designs, including:

(a) Geologic and topographic considerations;

(b) Design of a blast hole, with critical dimensions;

(c) Pattern design, field layout, and timing of blast holes; and

(d) Field applications.

(3) Loading blast holes, including priming and boosting;



- (4) Initiation systems and blasting machines;
- (5) Ground vibration, airblast, flyrock, and fumes, including:
 - (a) Monitoring techniques; and
 - (b) Methods to control adverse effects.
- (6) Secondary blasting applications;
- (7) All federal and state rules applicable to the use of explosives in coal and non-coal surface mines;
- (8) Blast records;
- (9) Blast Schedules;
- (10) Preblasting surveys, including:
 - (a) Availability;
 - (b) Coverage; and
 - (c) Considerations in blast design.
- (11) Blast plan requirements;
- (12) Certification and training;
- (13) Signs, warning signals, and site control; and
- (14) Recognizing, preventing and mitigating potential hazards, including:



- (a) Lightning;
 - (b) Stray currents;
 - (c) Radio waves;
 - (d) Misfires; and
 - (e) Toxic gases, including carbon monoxide and nitrogen oxides.
- (C) Requirements for certification and examination.

To become a certified blaster a person must have:

- (1) Received a minimum of forty hours of training covering all the topics set forth in paragraph (B) of this rule in a course taught under the supervision of the chief, or in a course, or series of courses, deemed equivalent by the chief. For a person seeking only a limited certification pursuant to paragraph (A)(4) of this rule, the chief may waive some of the required training hours and topics, such that the course or series of courses are relevant to the limited blasting conditions listed under paragraph (A)(4) of this rule;
 - (2) Worked on a blasting crew for at least two years in mining, excavation, or an equivalent working environment;
 - (3) Received direction and on-the-job training from a blaster certified or licensed in any state;
 - (4) Exhibited a pattern of conduct consistent with the acceptance of responsibility for blasting operations; and
 - (5) Passed a written examination covering, at a minimum, the topics set forth in paragraph (B) of this rule.
- (a) A person seeking certification may take the examination after receiving the training required



under paragraph (C)(1) of this rule and completing at least one of the two years of blasting crew work experience required under paragraph (C)(2) of this rule. However, upon passing the examination a person shall not be certified until he or she has completed all of the two-year blasting crew work experience requirement.

(b) A person seeking only a limited certification pursuant to paragraph (A)(4) of this rule shall pass a written examination covering only the topics in paragraph (B) of this rule that are relevant to the limited blasting conditions listed under paragraph (A)(4) of this rule.

(D) Certification and recertification.

(1) The chief, or an agency, board or institution authorized by the chief pursuant to paragraph (A)(2) of this rule, shall certify for three years those persons examined and found to be competent and to have the necessary experience to accept responsibility for surface blasting operations in mines. Each person approved for certification shall receive a certificate suitable for office display and a wallet-size identification card. The certificate and identification card shall include, at a minimum, the type of certification, the person's name, certification number and date of expiration, and the name and signature of the chief or of the official of the authorized agency, board or institution granting the certification.

(2) To be recertified without a lapse in certification, a blaster certified under this rule must have:

(a) Applied for recertification no more than ninety days prior to the expiration date of the blaster's current certificate; and

(b) Received a minimum of twenty-four hours of continuing education by attending blasting-related courses, seminars or conferences approved by the chief or an authorized representative, with at least eight hours obtained from an organization or person other than the blaster's employer or its parent company or explosives supplier. A blaster holding only a limited certification pursuant to paragraph (A)(4) of this rule is exempt from meeting the twenty-four-hour continuing education requirement of this paragraph, but must receive a minimum of eight hours of blasting-related training approved by the chief or an authorized representative of the chief.



(3) If a blaster certified under this rule fails to apply for recertification on, or before, the expiration date of his or her certificate, the blaster's certification shall expire, and the blaster shall have thirty days thereafter to apply for recertification without being subject to re-examination under paragraph (C) of this rule.

(E) Conditions of certification.

(1) The certificate or wallet-size identification card issued pursuant to paragraph (D)(1) of this rule, or a copy of the certificate notarized to be a true and exact copy, shall be carried by a blaster, or shall be on file at the mine permit area, during blasting operations.

(2) Upon request by an authorized representative of the chief or other regulatory authority having jurisdiction over the use of explosives, a blaster shall immediately exhibit his or her certificate or wallet-size identification card to the authorized representative.

(3) A blaster's certification shall not be assigned or transferred.

(4) A blaster shall not delegate his or her responsibility to any individual who is not a certified blaster.

(5) A certified blaster shall take every reasonable precaution to protect his or her certificate and wallet-size identification card from loss, theft, or unauthorized duplication. Any such occurrence shall be reported immediately to the chief.

(F) Suspension and revocation.

(1) Following written notice and opportunity for a hearing, the chief may, and upon a finding of willful conduct shall, suspend or revoke the certification of a blaster during the term of the certification, or take other necessary action for any of the following reasons:

(a) Noncompliance with any order of the chief, any order issued by a regulatory authority having jurisdiction over the use of explosives, or any order issued by a court of law, relative to the use of explosives;



- (b) Violation of any provision of state or federal explosives laws or regulations, a blasting-related permit condition, or any condition of certification;
 - (c) Unlawful use in the work place of, or current addiction to, alcohol, narcotics, or other dangerous drugs;
 - (d) Providing false information or a misrepresentation on any application for certification or recertification;
 - (e) Falsification of blast records; or
 - (f) Conducting a blast where flyrock was cast beyond the permit boundary of any mine.
- (2) If advance notice and opportunity for a hearing cannot be provided, an opportunity for a hearing shall be provided as soon as practical following suspension, revocation, or other adverse action.
- (3) Upon notice of a suspension or revocation, the blaster shall immediately surrender the suspended or revoked certificate and wallet-size identification card and all copies thereof to the chief and may work on a blasting crew only under the direct supervision of a certified blaster.
- (4) To repossess a suspended certificate the blaster must:
- (a) Exhibit a pattern of conduct consistent with the acceptance of responsibility for blasting operations;
 - (b) Pass the written examination administered under paragraph (C) of this rule; and
 - (c) Meet any other requirements imposed by the chief under the terms of the suspension.