

# Rules of **Department of Public Safety**

## Division 40—Division of Fire Safety Chapter 7—Blasting

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### Title 11—DEPARTMENT OF PUBLIC SAFETY

Division 40—Division of Fire Safety Chapter 7—Blasting

11 CSR 40-7.010 Blasting—Licensing, Registration, Notification, Requirements, and Penalties

PURPOSE: This rule explains the licensing and registration processes for explosive users and blasters and the standards for the use of commercial explosives in regulated activities.

- (1) The following definitions shall be used in interpreting this rule:
- (A) "Blaster," a person qualified to be in charge of and responsible for the loading and firing of an explosive or explosive material;
  - (B) "Blast," detonation of explosives;
- (C) "Blasting," the use of explosives in mining or construction;
- (D) "Blast site," the area where explosives are handled during loading of a bore hole, including fifty feet (50') in all directions from the perimeter formed by loaded holes. A minimum of thirty feet (30') may replace the fifty- (50-) foot requirement if the perimeter of loaded holes is marked and separated from non-blast site areas by a barrier. The fifty- (50-) foot or thirty- (30-) foot distance requirements, as applicable, shall apply in all directions along the full depth of the bore hole:
- (E) "Board," the State Blasting Safety Board created in section 319.324, RSMo;
- (F) "Bore hole," a hole made with a drill, auger, or other tool in which explosives are placed in preparation for detonation;
- (G) "Burden," the distance from an explosive charge to the nearest free or open face at the time of detonation;
- (H) "Business day," any day of the week except Saturday, Sunday, or a federal or state holiday;
- (I) "Deck," charge of explosives separated from other charges by stemming;
- (J) "Delay period," the time delay provided by blasting caps which permits firing of bore holes in sequence;
- (K) "Detonation," the action of converting the chemicals in an explosive charge to gases at a high pressure by means of a self-propagating shock wave passing through the charge;
- (L) "Detonator," any device containing initiating or primary explosive that is used for initiating detonation of another explosive material. A detonator may not contain more than ten (10) grams of total explosives by weight, excluding ignition or delay charges. The term includes, but is not limited

to, electric blasting caps of instantaneous and delay types, blasting caps for use with safety fuse, detonating cord delay connectors, and nonelectric instantaneous and delay blasting caps which use detonating cord, nonelectric shock tube, or any other replacement for electric leg wires;

- (M) "Division," the Missouri Division of Fire Safety;
- (N) "Direct supervision," to mean the supervisor (blaster) is physically present on the same job site as the person loading or firing the explosives;
- (O) "Explosives," any chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion, including, but not limited to, dynamite, black powder, pellet powder, initiating explosives, detonators, millisecond connectors, safety fuses, squibs, detonating cord, igniter cord, and igniters; includes explosive materials such as any blasting agent, emulsion explosive, water gel, or detonator. Explosive materials determined to be within the coverage of sections 319.300 to 319.345, RSMo shall include all such materials listed in Chapter 40 of Title 18 of the United States Code, as amended, as issued at least annually by the Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives;
- (P) "Firing," causing explosives to be detonated by the use of a fuse, electric detonator, or nonelectric shock tube;
- (Q) "Fire protection official," an authorized representative of a municipal fire department, fire protection district, or volunteer fire protection association for the area where blasting occurs;
- (R) "Fugitive from justice," any person who has fled from the jurisdiction of any court of record to avoid prosecution for any crime or to avoid giving testimony in any criminal proceeding. The term shall also include any person who has been convicted of any crime and has fled to avoid case disposition;
- (S) "Initiation system," components of an explosive charge that cause the charge to detonate, such as primers, electric detonators, and detonating charge;
- (T) "Loading," placing of explosives in a hole in preparation for detonation;
- (U) "Local government," a city, county, fire protection district, volunteer fire protection association, or other political subdivision of the state;
- (V) "Person using explosives," any individual, proprietorship, partnership, firm, corporation, company, or joint venture that is required to hold authority to receive or use explosives under statutes or regulations administered by the U.S. Department of Jus-

tice, Bureau of Alcohol, Tobacco, Firearms and Explosives and who employs licensed blasters;

- (W) "Scaled distance," a value determined by dividing the linear distance, in feet, from the blast to a specified location, by the square root of the maximum weight of explosives, in pounds, to be detonated in any eight- (8-) millisecond period;
- (X) "Seismograph," an instrument that measures ground vibration and acoustic effects;
- (Y) "Stemming," inert material that is placed above explosives that have been placed in a blast hole in preparation for detonation or vertically between columnar decks of explosives that have been placed in a hole in preparation for detonation; and
- (Z) "Uncontrolled structure," any dwelling, public building, school, church, commercial building, or institutional building that is not owned or leased by the person using explosives, or otherwise under the direct contractual responsibility of the person using explosives.
- (2) The following fees shall apply for the licensing of blasters, registration of persons using explosives, explosives use reporting, and testing:
- (A) Individual Blaster's License: one hundred dollars (\$100) for a three- (3-) year license:
- (B) Registration fee for a person using explosives (one- (1-) time fee): two hundred dollars (\$200);
- (C) Annual explosive use fee: five hundred dollars (\$500) plus five dollars (\$5) per ton of explosives or explosive materials used within the state.
- 1. When the total pounds of explosive materials used results in a portion of a ton, the tonnage reported shall be rounded to the nearest ton.
- 2. Per ton fees shall not include any items defined by statute as "detonators"; and
- (D) Testing/retesting fee: twenty-five dollars (\$25) per individual test.

#### (3) Blaster Licensing.

- (A) Any individual, except as exempted by statute, who conducts blasting or is in charge of or responsible for the loading and firing of any explosive material in the state shall be licensed by the division as a blaster.
- 1. Any individual, proprietorship, partnership, firm, corporation, company, or joint venture defined as a "person using explosives" shall not be required to hold license as a blaster; however, any blasting conducted on behalf of a person using explosives shall be conducted by a licensed blaster.



- (B) Exemptions. The requirement for obtaining a blaster's license shall not apply to:
- 1. Individuals employed by universities, colleges, or trade schools when the use of explosives is confined to instruction or research;
- 2. Individuals using explosive materials in the forms prescribed by the official *U.S. Pharmacopoeia* or the *National Formulary* and used in medicines and medicinal agents;
- 3. Individuals conducting training or emergency operations of any federal, state, or local government including all departments, agencies, and divisions thereof, provided they are acting in their official capacity and in the proper performance of their duties or functions:
- 4. Individuals that are members of the armed forces or any military unit of Missouri or the United States who are using explosives while on official training exercises or who are on active duty;
- Individuals using pyrotechnics, commonly known as fireworks, including signaling devices such as flares, fuses, and torpedoes:
- 6. Individuals using small arms ammunition and components thereof which are subject to the Gun Control Act of 1968, 18 U.S.C., Section 44, and regulations promulgated thereunder;
- 7. Any individual performing duties in underground mines regulated by 30 CFR Part 48, Subpart A, 30 CFR Part 57, or performing duties in coal mining regulated by 30 CFR Part 75, and 30 CFR Part 77 of the *Code of Federal Regulations*, as amended, or using explosives within an industrial furnace;
- 8. Any individual having a valid blaster's license or certificate issued under the provisions of any requirement of the U.S. government in which the requirements for obtaining the license or certificate meet or exceed the requirements of sections 319.300 to 319.345, RSMo;
- 9. Individuals using agricultural fertilizers when used for agricultural or horticultural purposes;
- 10. Individuals handling explosives while in the act of transporting them from one (1) location to another;
- 11. Individuals assisting or training under the direct supervision of a licensed blaster:
- 12. Individuals handling explosives while engaged in the process of explosives manufacturing;
- 13. Employees, agents, or contractors of rural electric cooperatives organized or operating under Chapter 394, RSMo; and
  - 14. Individuals discharging historic

- firearms and cannon or reproductions of historic firearms and cannon. (319.321, RSMo)
- (C) All applicants for a blaster's license shall meet all the following requirements:
- 1. Be at least twenty-one (21) years of age;
- 2. Not have willfully violated any provisions of sections 319.300 to 319.345, RSMo;
- 3. Not have knowingly withheld information or have not made any false or fictitious statement intended or likely to deceive in connection with the application;
- 4. Have familiarity and understanding of relevant federal and state laws relating to explosive materials;
- 5. Not have been convicted in any court of, or pleaded guilty to, a felony;
  - 6. Not be a fugitive from justice;
- 7. Not be an unlawful user of any controlled substance in violation of Chapter 195, RSMo;
- 8. Not have been adjudicated as mentally defective; and
- Not advocate or knowingly belong to any organization or group that advocates violent action.
- (D) An applicant for a blaster's license shall also meet one (1) of the following licensing criteria, to be eligible to apply to the division for a license:
- 1. Licensing by reciprocity. Within the three (3) years prior to applying for a license, the individual must have held a valid license or certification from a source identified by the division as meeting or exceeding the provisions for licensing within the state of Missouri. (319.306.12, RSMo)
- 2. Licensing by equivalency. An individual employed as a blaster on or before December 31, 2000, who, within the two (2) years prior to applying for a license, has accumulated one thousand (1,000) hours of training or education and experience employed or contracted by a person using explosives, must produce an affidavit signed by that person using explosives validating the training or education and experience.
- A. A license granted pursuant to this provision shall only be valid for blasting conducted for the person using explosives submitting the affidavit.
- B. An individual granted a license that then leaves the employment of or no longer contracts with the person submitting the affidavit shall surrender their license and then shall be subject to the licensing requirements as a new blaster.
- 3. New blaster. An individual must have accumulated one thousand (1,000) hours of documented experience, as approved by the division, directly relating to the use of explosives within the two (2) years immediately

- prior to applying for a license, completed an approved course of instruction and then successfully passed an approved licensing examination.
- (E) All applicants shall submit the following to the division when applying for a license:
- 1. A completed "Application for Licensed Blaster";
- 2. A copy of a valid state driver's license or state ID card as proof of applicant's age and identity;
- 3. An approved criminal background check conducted within the applicant's state of residence:
- 4. Copy of U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives permit/license verifying compliance with applicable federal laws relating to possession, sales, storage, or use of explosives;
- 5. Two (2) passport-type photographs; and
- 6. A check, money order, or bank draft in the amount of one hundred dollars (\$100) (U.S.) payable to the Missouri Division of Fire Safety.
- (F) All applicants applying as a new blaster must also submit all the following to the division when applying for a license:
- 1. Documentation of having successfully completed a training course approved by the division; and
- 2. Documentation affirming required approved training and experience related to the use of explosives.
- (G) A blaster's license issued by the division shall expire three (3) years from the date of issuance.
- 1. To be eligible for renewal of a blaster's license, the individual seeking relicensure must submit all of the following to the division no less than thirty (30) days before the date of current license expiration:
- A. A completed "Application for Licensed Blaster";
- B. A copy of a valid state driver's license or state ID card;
- C. Documentation of having successfully completed a total of eight (8) hours of approved continuing education training related to the use of explosives. Four (4) hours of which must have occurred within the twelve (12) months immediately before the date of license expiration;
- D. An approved current criminal background check conducted within the applicant's state of residence;
- E. Copy of U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives permit/license verifying compliance with applicable federal laws relating to possession, sales, storage, or use of explosives, if

applicable;

- F. Two (2) passport-type photographs;
- G. A check, money order, or bank draft in the amount of one hundred dollars (\$100) (U.S.) payable to the Missouri Division of Fire Safety.
- 2. Any individual whose license has been expired for a period of three (3) years or less shall be required to submit documentation of successfully passing an approved examination and completion of eight (8) hours of approved training prior to being eligible to apply for renewal of a license.
- 3. Any individual whose license has been expired for a period of more than three (3) years shall be required to submit documentation of successfully passing an approved examination and completion of twenty (20) hours of approved training prior to being eligible to apply for a blaster's license
  - (H) Blasters Training Courses.
- 1. The division shall review and approve training courses that fulfill the training requirement of qualifying for a blaster's license and fulfill the training requirement for renewal of a blaster's license.
- 2. Any person applying to the division for approval of a course of instruction that meets the blasters' training requirement shall submit the following:
- A. A completed "Application for Blaster Training Course Approval";
- B. A description and copy of instructional materials to be used in the course;
- C. An outline of the subject matter to be taught, including course objectives and the minimum hours of instruction on each topic;
- D. A description of the qualifications of the instructor or instructors; and
- E. Copies of the tests, quizzes, activities, and/or projects included in the course.
- 3. To be approved by the division, a blaster's training course shall contain at least twenty (20) hours of instruction to prepare attendees for obtaining a blaster's license the first time, or eight (8) hours of instruction to prepare attendees for obtaining a license renewal.
- 4. The division shall review the application regarding the knowledge and experience of proposed instructors, the total hours of training, and the adequacy of proposed training in subject matter.
- If the division determines that training proposed by the applicant is adequate, a letter of approval shall be issued to the applicant.
- 6. Course approval shall be effective for a period of three (3) years, after which the materials required in paragraph (3)(H)2. above must be submitted again.

- 7. If at any time the division determines that an approved training course no longer meets the standards of this section, the letter of approval may be revoked with written notice.
- 8. The division or any person providing a course of instruction may charge an appropriate fee to recover the cost of conducting such instruction.
- 9. The division shall maintain a current list of persons who provide approved training and shall make this list available by any reasonable means to professional and trade associations, labor organizations, universities, vocational schools, and others upon request.
- 10. Any person providing training in an approved course shall submit a list of individuals that attended any such course to the division within ten (10) business days after completion of the course.
- 11. The division or its authorized agent shall offer annually at least two (2) courses of instruction that fulfill the training requirement of qualifying for a blaster's license and two (2) courses that fulfill the training requirement for renewal of a blaster's license.
  - (I) Testing for Licensure.
- 1. The division shall approve and administer a standard examination or examinations for the purpose of qualifying an individual to obtain a blaster's license.
- A. All examinations shall remain the property of the division and in the possession of the division.
- 2. Individuals applying to test as a blaster must submit a completed "Application for Licensed Blaster Examination" and the appropriate testing fee.
- 3. Applications must be received by the division no less than twenty (20) business days prior to the scheduled exam date. Pre-registration is required for all examinations.
- 4. The division will score all exams and applicants will be notified by letter accordingly within thirty (30) days of the exam.
- 5. Notification will indicate only pass/fail status.
- 6. A passing score shall be a score of seventy-five percent (75%) or above on the exam.
- 7. An applicant shall not be eligible to retest until after receiving notification of failure
- 8. Should an applicant fail the exam a second time, he or she must retake an approved training course before being allowed to retest for a license.
- 9. If an applicant has not taken a retest within six (6) months of original test date, he or she must take an approved course again to be eligible to test.

- (4) Persons Using Explosives.
- (A) Any person using explosives in Missouri shall register with the division prior to first using explosives in Missouri.
- (B) Upon initial registration, the person using explosives shall submit to the division:
- 1. The name of the person, company, or organization;
- 2. The address of the person, company, or organization;
- 3. The telephone and facsimile number of the person, company, or organization;
  - 4. The email address;
- 5. The name of the principal individual having responsibility for supervision of the use of explosives;
- 6. Copy of U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives permit/license verifying compliance with applicable federal laws relating to possession, sales, storage, or use of explosives, if applicable; and
- 7. A fee of two hundred dollars (\$200) (U.S.).
- (C) For persons using explosives at multiple locations under the operational control of one (1) parent company or organization, only one (1) registration fee for the parent company or organization shall be required.
- (5) Each registered person using explosives in Missouri shall, by January 31 of each year after registering, file an annual report with the division for the preceding calendar year.
- (A) The initial annual report shall only include that portion of the preceding calendar year after the date the person became subject to the requirement to register.
  - (B) The report shall include:
- 1. Any change or addition to the information required in this section;
- 2. The name and address of the distributors from which explosives were purchased;
- 3. The total number of pounds of explosives purchased for use in Missouri; and
- 4. The total number of pounds actually used in Missouri during the period covered by the report.
- (C) Persons required to report annually shall maintain records sufficient to prove the accuracy of the information reported.
- (D) The person using explosives shall submit with the report, an explosive use fee of five hundred dollars (\$500) plus five dollars (\$5) per ton of explosives or explosive materials used within the state.
- (E) Any initial increase of the explosive use fee promulgated by rule shall be only on those explosives used from July 1 of the calendar year preceding the annual report required in section (5) above unless the report is an initial report pursuant to subsection



(5)(A).

- 1. If the report of total pounds used results in a portion of a ton, the cumulative total of the fee shall be rounded to the nearest ton.
- 2. In the event that less than one (1) ton of explosives has been used in the reporting period, the five hundred dollar (\$500) annual fee shall be submitted with the annual report to the division.
- (F) The division may audit the records of any person using explosives required to report annually to determine the accuracy of the number of pounds of explosives reported.
- (G) In connection with such audit, the division may also require any distributor of explosives to provide a statement of sales during the year to persons required to report.

#### (6) Notification of Blasting Operations.

- (A) Any person using or intending to use explosives within Missouri shall notify the division in writing or by telephone at least two (2) business days in advance of first using explosives at a site where blasting has not been previously conducted.
- (B) If blasting will be conducted at an ongoing project, such as a long-term construction project, or at a permanent site, the person shall only be required to make one (1) notice to the division in advance of the first use of explosives.
- (C) The notice required by this section shall state the name, address, and telephone number of the person using explosives, the name of the individual responsible for supervision of blasting, the date or approximate period over which blasting will be conducted, the location of blasting by street address, route, or other description, and the nature of the project or reason for blasting.
- (D) This section shall not apply to any blasting required by a contract with any agency of the state of Missouri, any federal agency, or any political subdivision.
- (7) Exemptions. Sections (4) through (6) above shall not apply to:
- (A) Any individual, proprietorship, partnership, firm, corporation, company, or joint venture defined as a "person using explosives" that does not employ blasters required to be licensed by the division;
- (B) Universities, colleges, or trade schools when confined to the purpose of instruction or research;
- (C) The use of explosive materials in the forms prescribed by the official *U.S. Pharmacopoeia* or the *National Formulary* and used in medicines and medicinal agents;
- (D) The training or emergency operations of any federal, state, or local government

- including all departments, agencies, and divisions thereof, provided they are acting in their official capacity and in the proper performance of their duties or functions;
- (E) The use of explosives by the military or any agency of the United States;
- (F) The use of pyrotechnics, commonly known as fireworks, including signaling devices such as flares, fuses, and torpedoes;
- (G) The use of small arms ammunition and components thereof which are subject to the Gun Control Act of 1968, 18 U.S.C., Section 44, and regulations promulgated thereunder. Any small arms ammunition and components thereof exempted by the Gun Control Act of 1968 and regulations promulgated thereunder are also exempted from the provisions of sections 319.300 to 319.345, RSMo;
- (H) Any person performing duties using explosives within an industrial furnace;
- (I) The use of agricultural fertilizers when used for agricultural or horticultural purposes:
- (J) The use of explosives for lawful demolition of structures;
- (K) The use of explosives by employees, agents, or contractors of rural electric cooperatives organized or operating under Chapter 394, RSMo; and
- (L) Individuals discharging historic firearms and cannon or reproductions of historic firearms and cannon.

#### (8) Local Jurisdictions.

- (A) Any person using explosives that will conduct blasting within the jurisdiction of a municipality shall notify the appropriate representative of the municipality in writing or by telephone at least two (2) business days in advance of blasting at that location.
- 1. An appropriate representative shall be deemed to be the city's public works department, code enforcement official, or an official at the main office maintained by the municipality.
- 2. In any area where blasting will be conducted, whether in a municipality or in an unincorporated area, the person using explosives also shall notify the appropriate fire protection official for the jurisdiction where blasting will occur, which may be a city fire department, fire protection district, or volunteer fire protection association.
  - 3. The notice shall state:
- A. The name, address, and telephone number of the person using explosives;
- B. The name of the individual responsible for supervision of blasting;
- C. The date or approximate period over which blasting will be conducted;
- D. The location of blasting by street address, route, or other description; and

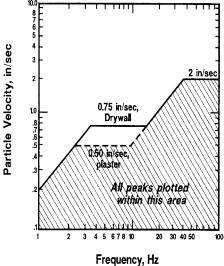
- E. The nature of the project or reason for blasting.
- 4. If blasting will be conducted at an ongoing project, such as a long-term construction project, or at a permanent site, such as a surface mine, the person shall only be required to make one (1) notice to the municipality or appropriate fire protection official in advance of the first use of explosives.
- 5. Any such ongoing projects or permanent sites in existence at the time of the effective date of sections 319.300 to 319.345, RSMo shall not be required to provide notice as described in this subsection.
- 6. Any person using explosives, which will conduct blasting within the jurisdiction of a municipality, shall notify the owner or occupant of any residence or business located within a scaled distance of fifty-five (55) from the site of blasting prior to the start of blasting at any new location.
- A. One (1) notification delivered by mail, by telephone, through the printed notification posted prominently on the premises or the property of the owner or occupant of the residence or business, or delivered in person to any such owner or occupant meets the requirements of this subsection.
- B. A municipality may provide the name, last known address, and telephone number of the owners or occupants of any residence or business that may be located within the scaled distance of fifty-five (55) from the site of blasting to the person using explosives upon that person's request.
- (B) Any municipality or county may by ordinance or order—
- 1. Require that a permit be obtained in addition to the notice required by this section, with such application for permit being due no more than ten (10) days prior to the first use of explosives;
- 2. Require that the application for the permit contain specific information about the type of explosives to be used and their storage location at the site where used:
- 3. Require the applicant to demonstrate an acceptable plan for signage or other means of informing the public of blasting in proximity to public streets or highways and any request for temporary closing of streets or routing of traffic;
- 4. Specify the times of day blasting may be conducted, which shall not be less than eight (8) consecutive hours on any day of the week except the ordinance or order may prohibit blasting on Sunday unless approved by the municipality or county upon application by the person using explosives;
- 5. Require that the applicant submit proof that the person using explosives is registered with the division and that blasting will

be conducted by a licensed blaster;

- 6. Require that the applicant submit proof of commercial general liability insurance in an acceptable amount, which shall be no less than one (1) million dollars and no more than five (5) million dollars;
- 7. Require that the applicant make at least three (3) documented attempts to contact the owner of any uncontrolled structures within a scaled distance of thirty-five (35) from the blast site in order to conduct a preblast survey of such structures. A preblast survey is not required if the owner of any such structure does not give permission for a survey to be conducted:
- 8. Enact any other provision necessary to carry out the provisions of the ordinance or order, including the conditions under which the permit may be suspended or revoked or appropriate fines may be imposed for failure to obtain a permit or violations of the permit; and
- 9. A permit for blasting under a municipal or county ordinance or order and complying with this section shall be granted by the municipality or county upon satisfying the requirements of the ordinance or order and upon the applicant's payment of a reasonable fee to cover the administration of the permit system.
- (C) Any authorized representative of a municipality, county, or an appropriate fire protection official may-
- 1. Require any person using explosives to show proof that he or she is registered with the division and blasting is being conducted by an individual that is licensed under the provisions of section 319.306, RSMo;
- 2. Request and be allowed access to the site of blasting by the person using explosives and shall be allowed to observe blasting from a safe location as designated by the blaster;
- 3. Examine records of blasting required to be maintained by sections 319.309 and 319.315, RSMo:
- 4. However, no municipality, county, or fire protection official shall require a person using explosives or a blaster to surrender such records, or a copy of such records, to the municipality or fire protection official except as necessary under an investigation of the blaster's violation of a municipal or county permit; and
- 5. Report suspected violations of sections 319.300 to 319.345, RSMo to the divi-
- (D) Except in any county included in section 319.342, RSMo or quarries operating within a county meeting the requirements of section 319.343, RSMo, no existing or future ordinance or order shall-
  - 1. Preempt, exceed, amend, or conflict

- with the provisions of sections 319.309 to 319.342, RSMo or any rule promulgated pursuant to section 319.327, RSMo; or
- 2. Preempt, amend, exceed, or conflict with the provisions of any statute, regulation, or policy established by-
- A. The United States Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives:
- B. Chapter 40 of Title 18 of the United States Code, as amended;
- C. The United States Department of Transportation;
- D. The federal Mine Safety and Health Administration: or
- E. The federal Occupational Safety and Health Administration.
- (E) The requirements for notification and provisions of local ordinances shall not apply to any blasting required by a construction contract with any agency of the state of Missouri, any federal agency, or any political subdivision.
- (F) Nothing in these rules shall preempt the rights and remedies afforded by the general assembly or common law to persons damaged by blasting.
- (G) Nothing in this section shall be construed to exempt any person using explosives from the requirements of registering with and reporting explosives used to the division and paying the associated fees.
- (9) It shall be the duty of each licensed blaster and each person using explosives to assure that the requirements of this section
- (A) Any person using explosives in the state of Missouri shall calculate the scaled distance to the nearest uncontrolled structure. If more than one (1) uncontrolled structure is the same approximate distance from the blast site, then the person using explosives may select one (1) representative structure for calculation of scaled distance.
- (B) In any instance when the calculated scaled distance value is fifty-five (55) or less, any person using explosives shall use at least one (1) seismograph calibrated to the manufacturer's standard for use to record the ground vibration and acoustic levels that occur from the use of such explosives or explosive materials.
- (C) When measuring ground vibration and acoustic levels, the seismograph shall be placed in the proximity of the nearest uncontrolled structure or, at the option of the person using explosives, closer to the blast site. If more than one (1) uncontrolled structure is the same approximate distance from the blast site, then the person using explosives may select one (1) representative structure for placement of the seismograph.

- (D) Any person using explosives who is voluntarily using a seismograph calibrated to the manufacturer's standard for use for all blasting is exempt from the requirements of this section.
- (E) Seismograph recordings of the ground vibration and acoustic levels created by the use of explosives, when required as above, shall be retained for at least three (3) years. Such recordings shall be made available to the division within twenty-four (24) hours of a request by any representative of the divi-
- (F) Each seismograph recording and the accompanying records shall include the-
- 1. Maximum ground vibration and acoustics levels recorded;
- 2. Specific geographic information system data (GIS) of the location of the seismograph equipment, its distance from the detonation of the explosives, the date of the recording, and the time of the recording;
- 3. Name of the individual responsible for operation of the seismograph equipment and performing an analysis of each recording;
- 4. Type of seismograph instrument, its sensitivity and calibration signal, or certification date of the last calibration.
- (G) Any person using explosives in the state of Missouri in which monitoring with a seismograph is required shall limit acoustic values from blasting to one hundred thirtythree decibels (133 dB) using a two hertz (2 Hz) flat response measuring system based on the Office of Surface Mining regulation 30 CFR 816.67(b)(1)(i).
- (H) Any person using explosives in the state of Missouri in which monitoring with a seismograph is required shall comply with ground vibration limits based on the U.S. Bureau of Mines Report of Investigations 8507, Appendix B:





- (I) In lieu of the ground vibration limit established above, the person using explosives may submit a written request to the division to use an alternate compliance method. Such written request shall be supported by sufficient technical information, which may include, but not be limited to, documented approval of such method by other federal, state, or local political subdivisions which regulate the use of explosives. Upon submittal by the person using explosives of a request to use an alternate compliance method, the State Blasting Safety Board shall issue a written determination as to whether the technical information submitted provides sufficient justification for the alternate method to be used as a method of demonstrating compliance with the provisions of this section.
- (J) A record of use of explosives shall be made and retained for at least three (3) years.
- 1. Licensed blasters shall create the record required in this section and provide such record to the person using explosives, who shall be responsible for maintaining records required in this section.
- 2. The record shall be completed on a form provided or approved by the division and completed by the end of the business day following the day in which the explosives were detonated.
- 3. Such records shall be made available to the division, upon request, within twenty four (24) hours of the request.
  - 4. Each record shall include the-
- A. Name of the person using the explosives;
- B. Location, geographic information system data (GIS), date, and time of the detonation;
- C. Name of the licensed blaster responsible for use of the explosives;
  - D. Type of material blasted;
- E. Number of bore holes, burden, and spacing;
  - F. Diameter and depth of bore holes;
  - G. Type of explosives used;
- H. Weight of explosives used per bore hole and total weight of explosives used;
- I. Maximum weight of explosives detonated within any eight- (8-) millisecond period:
- J. Maximum number of bore holes or decks detonated within any eight- (8-) millisecond period;
- K. Initiation system, including number of circuits and the timer interval, if a sequential timer is used;
  - L. Type and length of stemming;
- M. Type of detonator and delay periods used, in milliseconds;
  - N. Sketch of delay pattern, including

decking;

- O. Distance and scaled distance to the nearest uncontrolled structure; and
- P. Location of the nearest uncontrolled structure, using the best available information.
- 5. If the type of blasting being recorded by a seismograph does not involve bore holes, then the record required in paragraph (9)(J)4. shall contain the—
- A. Name of the person using the explosives;
- B. Location, geographic information system data (GIS), date, and time of the detonation:
- C. Name of the licensed blaster responsible for use of the explosives;
  - D. Type of material blasted;
  - E. Type of explosives used:
- F. Weight of explosives used per shot and total weight of explosives used;
- G. Maximum weight of explosives detonated within any eight- (8-) millisecond period;
- H. Initiation system, including number of circuits and the timer interval, if a sequential timer is used;
- I. Type of detonator and delay periods used, in milliseconds;
  - J. Sketch of delay pattern;
- K. Distance and scaled distance, if required under the provisions of section 319.309, RSMo, to the nearest uncontrolled structure: and
- L. Location of the nearest uncontrolled structure, using the best available information.
- (10) Violations and Penalties.
- (A) The division shall follow the procedure outlined below for violations of any of the provisions of section (9):
- 1. A written notification of violation will be issued to a licensed blaster and the explosive user for which the blaster is employed for a violation of a provision of section (9).
- A. Any notice of violation of any provision of sections 319.300 to 319.345, RSMo shall be in writing and shall state the section or sections violated and the circumstance of the violation, including date, place, person involved, and the act or omission constituting the violation.
- B. The notice shall also inform the person receiving the notice of the right to request a hearing before the State Blasting Safety Board for any violation, except for the violation of failure to hold a blasting license as required by section 319.306, RSMo for which no appeal may be made.
  - 2. The state fire marshal shall consider

the seriousness of each violation and implement the action considered appropriate.

- (B) A blaster's license issued under the provisions of this section may be suspended or revoked by the division upon substantial proof that the individual holding the license has—
- 1. Knowingly failed to monitor the use of explosives as provided in section 319.309, RSMo;
- Negligently or habitually exceeded the limits established under section 319.312, RSMo:
- 3. Knowingly or habitually failed to create a record of blasts as required by section 319.315, RSMo;
- 4. Had a change in material fact relating to their qualifications for holding a blaster's license as required by these rules;
- 5. Failed to advise the division of any change of material fact relating to his or her qualifications for holding a blaster's license; or
- 6. Knowingly made a material misrepresentation of any information by any means of false pretense, deception, fraud, misrepresentation, or cheating for the purpose of obtaining training or otherwise meeting the qualifications of obtaining a license.
- (C) The division shall provide any notice of suspension or revocation in writing, sent by certified mail to the last known address of the holder of the license.
- 1. The notice may also be verbal, but this does not eliminate the requirement for written notice.
- 2. Upon receipt of a verbal or written notice of suspension or revocation from the division, the individual holding the license shall immediately surrender all copies of the license to a representative of the division and shall immediately cease all blasting activity.
- (D) The individual holding the license may appeal any suspension or revocation to the State Blasting Safety Board established under section 319.324, RSMo within forty-five (45) days of the date written notice was received.
- 1. The division shall immediately notify the chairman of the board that an appeal has been received and a hearing before the board shall be held.
- 2. The board shall consider and make a decision on any appeal received by the division within thirty (30) days of the date the appeal is received by the division.
- 3. The board shall make a decision on the appeal by majority vote of the board and shall immediately notify the licensee of its decision in writing.
- 4. The written statement of the board's decision shall be prepared by the division or its designee and shall be approved by the



chairman of the board.

5. The approved statement of the board's decision shall be sent by certified mail to the last known address of the holder of the license.

AUTHORITY: section 319.306, RSMo 2016.\* Emergency rule filed April 1, 2008, effective July 1, 2008, expired Jan. 1, 2009. Original rule filed April 2, 2008, effective Jan. 1, 2009. Amended: Filed Oct. 16, 2019, effective April 30, 2020. \*\*

\*Original authority: 319.306, RSMo 2007, amended 2010.

<sup>\*\*</sup>Pursuant to Executive Order 21-09, 11 CSR 40-7.010, subsection (3)(G) was suspended from April 16, 2020 through December 31, 2021.