

STATE OF WISCONSIN

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Governor Scott Walker Secretary Dave Ross

EXPLOSIVES, FIREWORKS, MINES, PITS AND QUARRIES CODE ADVISORY COMMITTEE MEETING

Room 121C, 1400 East Washington Avenue, Madison Contact: Dale Kleven (608) 261-4472 December 7, 2016

The following agenda describes the issues that the Committee plans to consider at the meeting. At the time of the meeting, items may be removed from the agenda. Please consult the resulting meeting minutes for a description of the recommendations of the Committee.

AGENDA

9:00 A.M.

CALL TO ORDER - ROLL CALL

- A. Adoption of Agenda (1)
- B. Approval of Minutes of November 15, 2016 (2-3)
- C. Department Update
- D. Review and Discussion of Proposed Rule Language for SPS 307 Relating to Explosives and Fireworks and SPS 308 Relating to Mines, Pits, and Quarries (4-22)
 - 1) Consider Approval of Draft Rule Language
- E. Public Comments
- F. Adjournment

SPS 307 AND 308 – EXPLOSIVES, FIREWORKS, MINES, PITS AND QUARRIES CODE ADVISORY COMMITTEE

MEETING MINUTES November 15, 2016

PRESENT: John Ahlgrimm, Brian Endres, Steve Hubing, Brad Lawver, Thomas Poad, Anthony

Tomashek

STAFF: Dale Kleven, Administrative Rules Coordinator; David Vriezen, Engineering Program

Management Consultant; Nifty Lynn Dio, Bureau Assistant; and other Department staff

Anthony Tomashek, Chair, called the meeting to order at 9:00 a.m. A quorum of six (6) members was present.

ADOPTION OF AGENDA

MOTION: Brian Endres moved, seconded by Steve Hubing, to adopt the agenda as published.

Motion carried unanimously.

APPROVAL OF MINUTES OF SEPTEMBER 28, 2016

Amendments to the Minutes

Correct 308 AND 308 to 307 AND 308 on header

MOTION: Steve Hubing moved, seconded by Brian Endres, to approve the minutes of September

28, 2016 as amended. Motion carried unanimously.

LEGISLATIVE AND ADMINISTRATIVE RULE MATTERS – DISCUSSION AND CONSIDERATION

MOTION: Brian Endres moved, seconded by Thomas Poad, to adopt by reference NFPA 495,

Explosive Materials Code, 2013. Motion carried unanimously.

MOTION: Steve Hubing moved, seconded by Brad Lawver, to request DSPS staff to draft language

in SPS 307 that exempts non-commercial enterprises/hobbyists from the safety inspection fee and provides a minimum inspection interval of every three years for non-commercial

enterprises/hobbyists. Motion carried unanimously.

MOTION: Brian Endres moved, seconded by John Ahlgrimm, to add the provisions from 2002

Comm 7.08(1) and associated note to Subchapter 1 of chapter SPS 307. Motion carried

unanimously.

MOTION: Anthony Tomashek moved, seconded by Brian Endres, to request DSPS staff draft

language in SPS 307.31(2) to clarify blaster requirements and notifications in

municipalities and townships. Motion carried unanimously.

MOTION: Brian Endres moved, seconded by Thomas Poad, to request DSPS staff draft language to

better define 'unreasonable annoyance' by incorporating the standards in chapter SPS

307.44. Motion carried unanimously.

MOTION: John Ahlgrimm moved, seconded by Brian Endres, to request DSPS staff draft language

to modify SPS 307.44(4)d to reflect 'a blaster shall report to the department any fly rock

event, airblast or ground vibration readings that are in exceedance of the limits

established in SPS 307.44 or the blast level chart in figure 7.44'. Motion carried unanimously.

MOTION: John Ahlgrimm moved, seconded by Brian Endres, to request DSPS staff remove the

note under SPS 307.44(4)d. Motion carried unanimously.

ADJOURNMENT

MOTION: Brian Endres moved, seconded by Steve Hubing, to adjourn the meeting. Motion carried unanimously.

The meeting adjourned at 1:21 p.m.



State of Wisconsin Department of Safety & Professional Services

AGENDA REQUEST FORM

1) Name and Title of Person Submitting the Request:			2) Date When Request Submitted:	
Dala Vlanon			13/2/14	
Dale Kleven Administrative Ru	les Coordina	ator	12/2/16 Items will be considered late if submitted after 12:00 p.m. on the deadline date:	
			8 business days before the meeting	
3) Name of Board, Committee, Council, Sections:				
Explosives, Fireworks, Mines, Pits and Quarries Code Advisory Committee				
4) Meeting Date:				
, ,			and Discussion of Proposed Rule Language for SPS 307 Relating to	
12/7/16	□ No Explosives		and Fireworks and SPS 308 Relating to Mines, Pits, and Quarries	
7) Place Item in:	8) Is an appearance before scheduled?		e a Board being	9) Name of Case Advisor(s), if required:
Open session		Scrieduled?		
Closed Session		☐ Yes (Fill out Board A	Yes (Fill out Board Appearance Request)	
Both No		<u>, , , , , , , , , , , , , , , , , , , </u>		
10) Describe the issue and action that should be addressed:				
, 200020				
Section SPS 307.03 of the proposed rule language is an alternative for the Committee's consideration. The language is similar to that				
used by the ATF to determine if a hobbyist is required to obtain a manufacturer's license. Attached for the Committee's reference is a				
letter from ATF that includes hobbyist fireworks questions and answers. The first Q & A relates to obtaining a manufacturer's license.				
11) Authorization				
Dale Kleven December 7, 2016				
Signature of person making this request				Date
Suita and the person making time request				
Supervisor (if required)				Date
Executive Director signature (indicates approval to add post agenda deadline item to agenda) Date				
Directions for including supporting documents:				
This form should be attached to any documents submitted to the agenda.				
 Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. If necessary, Provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting. 				

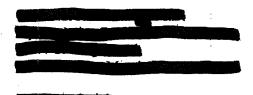


U.S. Department of Justice

Bureau of Alcohol, Tobacco, Firearms and Explosives

MAR 2 2 2007

Washington, DC 20226 www.atf.gov 902030:GLB 07-0147 5400



This letter is in response to your inquiries to and December 11, 2006, meeting with the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). You asked that we clarify how the Federal explosives regulations on transporting, manufacturing, and using explosive materials apply to fireworks "hobbyists." We sincerely apologize for the delay in our response.

ATF and personnel from the Department of Transportation met with officials of the on December 11, 2006, to discuss issues involving pyrotechnic materials manufactured by individuals and then transported to the conference. We have enclosed a series of questions and answers to clarify some of these issues.

We sincerely appreciate your efforts to facilitate safety when it comes to the use, transportation, and storage of pyrotechnic explosive materials. We look forward to continuing this dialog with and encourage members with specific questions or scenarios to e-mail the Explosives Industry Programs Branch directly at eipb@atf.gov.

We trust the foregoing has been responsive to your question. Please feel free to contact us with any further questions you may have.

Sincerely yours,

Gary L. Bangs Chief, Explosives Industry

Programs Branch

Enclosure

Hobbyist Fireworks Questions and Answers

- Q1: I manufacture fireworks for my own personal use. I do not intend to sell or distribute the fireworks, nor sell a service in which the fireworks are used. I will be using the fireworks at the premises where I manufactured them. Do I need a manufacturer's license or any permit from ATF?
- A: No. A manufacturer's license is needed only by persons engaged in the business of manufacturing fireworks for sale, distribution, or for a commercial use. A permit would be required if you were going to transport or cause to be transported the explosive materials. A permit would also be required if any materials you receive for use in manufacturing your fireworks are defined as explosive materials, such as black powder, flash powder, etc.

However, this does not exempt an individual from stricter State/local requirements. One must also abide by all storage requirements listed in 27 CFR, Part 555, Subpart K – Storage, including the table of distances requirements for fireworks process buildings. Under the law any person must store explosives in accordance with Part 555 regulations.

- Q2: I have manufactured fireworks for my own personal use. I do not intend to sell or distribute the fireworks, nor sell a service in which the fireworks are used. However, I will be transporting the display firework to a location different than where I manufactured it. Do I need a Federal explosives license or permit?
- A: A Federal explosives license or permit is required when persons transport explosive materials or cause explosive materials to be transported, even for one's own personal use. However, section 845(a)(1) provides an exception for common and contract carriers or other transportation entities regulated for safety and security by the Departments of Transportation and Homeland Security. While these entities are exempted, they are generally hired and controlled by either a licensee or permittee, causing the explosives to be transported. If you fall into this exempted category you would not need a permit from ATF for the transportation activities.

Please note, a limited (Type 60) permit only allows for the intrastate transportation of explosive materials. Persons may not use a Type 60 permit to transport explosive materials across State lines.

- Q3: I have a user permit (not a limited permit), but I was told that I need a manufacturer's license to make and transport fireworks to an event location for my own personal use. Is this correct?
- A: That is incorrect. Any Federal explosives license <u>or</u> a user permit would allow you to manufacture fireworks for your own personal use and then transport them to an event location. A limited permit would only allow the *intrastate* transportation of the explosive materials.

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- Q4: The Federal regulation 27 CFR 55.26 in my year 2000 "orange book" states that "no person, other than a licensee or permittee, shall transport, ship, cause to be transported, or receive in interstate or foreign commerce any explosive materials." I have manufactured fireworks for my own, non-business use to shoot at a different location in the State where I reside. I believe I am not transporting explosive materials in interstate or foreign commerce. Therefore, I do not need a license or permit. Is this correct?
- A: That is incorrect. The Federal law and regulations were amended in 2003 by the Safe Explosives Act. The law, as stated under 18 U.S.C. 842(a)(3), now provides that "no person other than a licensee or permittee knowingly may transport, ship, cause to be transported, or receive any explosive materials." There is no requirement that the explosives move in interstate or foreign commerce. However, as stated previously, section 845(a)(1) provides an exception for common and contract carriers or other transportation entities regulated for safety and security by the Departments of Transportation and Homeland Security.

The "Orange Book" is being updated and will be available for all explosives licensees and permittees in the near future.

- Q5: I do not have a license or permit. I would like to manufacture fireworks for my own personal use, but give them to a licensee or a user permittee to transport the fireworks for me to the event location. I will pick up the fireworks at the event location for my personal use. Is this acceptable, or am I causing it to be transported, which requires a license or permit?
- A: You would not need a Federal explosives license or permit to have a licensee or permittee transport the materials to the event location on your behalf. However, no person other than a licensee or permittee may receive any explosive materials. Therefore, the licensee or permittee would not be able to provide (distribute) the materials back to you at the event.

That licensee or user permittee may transfer the display fireworks to a "club" at the event site, if the club has a license or permit. Additionally, if you are a club member in good standing, you may possess explosives at the show site if specifically authorized to do so by the club on behalf of the club. Persons prohibited under 18 U.S.C. 842 may not possess explosives under any circumstances, and the club must not allow possession by any members that the club knows or has reasonable cause to believe is prohibited from possessing explosives.

- Q6: Would it be possible for the club to make all of its members employee possessors? This would allow the members to make and transport explosives under the club license without each member needing to obtain their own license or permit.
- A: The members must be bona fide employees of the organization. Employees are generally on the payroll of the employer, the employer withholds Federal and/or State taxes, the employer withholds Social Security from pay, and the employees generally receive benefits, such as

health insurance or worker's compensation coverage. Only actual employees may be reported as employee possessors and undergo a background check.

Licensees or permittees who report persons as employee possessors knowing that the persons are not bona fide employees, would violate 18 U.S.C. 842(a)(2). This provision of law prohibits the making of any false statement intended or likely to deceive for the purpose of obtaining a license or permit.

- Q7: If my hobby only involves small fireworks, items similar in size as defined by ATF as consumer fireworks, am I exempt from any ATF requirements?
- A: No. The exemption under 27 CFR 555.141(a)(7) is only for consumer fireworks as defined under 27 CFR 555.11. Since your products would not be labeled and packaged as required by the Consumer Product Safety Commission and regulated by that agency, none of your hobbyist pyrotechnics would be exempt. This also means no person prohibited from possessing explosives materials may handle or possess these types of items.
- Q8: Some of the products I manufacture for my own personal noncommercial use are rocket motors. Do the same answers to these questions apply whether I am manufacturing fireworks or rocket motors?
- A: Yes, generally the same answers pertaining to hobby fireworks enthusiasts apply to model rocketry enthusiasts. However, certain completed single use hobby rocket motors are exempted under 27 CFR 555.141. If this is your situation, you would not need a permit to transport or receive those specific items.

Chapter SPS 307 EXPLOSIVES AND FIREWORKS

Subchapter I — General Requirements

SPS 307.01 Purpose.

- (1) EXPLOSIVES. Pursuant to s. 101.15 (2) (e), Stats., the purpose of this chapter is to establish standards for the use of explosive materials.
- (2) FIREWORKS. Pursuant to s. 167.10 (6m), Stats., the purpose of this chapter is to establish licensing procedures for the manufacture of fireworks.

SPS 307.02 Scope.

- (1) EXPLOSIVES. The provisions of this chapter establish uniform limits on permissible levels of blasting resultants relating to the use of explosive materials.
 - **Note:** See ch. SPS 305 for rules pertaining to the licensing of blasters. See ch. SPS 314 for rules pertaining to general safety and fire prevention related to the storage, handling of explosive materials. See chs. SPS 361 to 366 for rules pertaining to the design and construction of buildings related to the storage of explosive materials.
- **(2)** FIREWORKS. The provisions of this chapter establish licensing and inspection standards relating to the manufacture of fireworks.
 - Note: See s. 167.10, Stats., and ch. SPS 314 for requirements pertaining to the manufacture, sale, storage and handling of fireworks.
- **SPS 307.03** Fees. (a) Fees Except as provided in par. (b), fees for safety inspections and petitions for variance shall be submitted as specified in ch. SPS 302.
 - **(b)** A fee is not required to be submitted for a safety inspection of a premise on which the manufacture of fireworks takes place, if all of the following apply:
 - **1.** All of the fireworks manufactured on the premise are for the personal use of the manufacturer.
 - 2. None of the fireworks manufactured on the premise are intended for sale or distribution.
 - 3. The manufacturer does not sell a service in which the fireworks manufactured on the premise are used.
- **SPS 307.06 Petition for variance.** The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. SPS 303. The petition for variance shall include, where applicable, a position statement from the fire department having jurisdiction.
 - **Note:** Chapter SPS 303 requires the submittal of a petition for variance form (SBD-9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter SPS 303 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

SPS 307.10 Penalties.

- (1) EXPLOSIVES. Penalties for violation of any provision in this chapter relating to explosives shall be assessed in accordance with s. 101.02 (12) and (13), Stats.
 - Note: Section 101.02 (13) (a), Stats., indicates penalties will be assessed against any employer, employee, owner or other person who fails or refuses to perform any duty lawfully enjoined, within the time prescribed by the department, for which no penalty has been specifically provided, or who fails, neglects or refuses to comply with any lawful order made by the department, or any judgment or decree made by any court in connection with ss. 101.01 to 101.599, Stats. For each such violation, failure or refusal, such employee, owner or other person must forfeit and pay into the state treasury a sum not less than \$10 nor more than \$100 for each violation.
 - **Note:** Section 101.02 (12), Stats., indicates that every day during which any person, persons, corporation or any officer, agent or employee thereof, fails to observe and comply with an order of the department will constitute a separate and distinct violation of such order.
- (2) FIREWORKS. Pursuant to s. 167.10 (9) (g), Stats., a person who violates any provision of this chapter relating to fireworks may be fined not more than \$10,000 or imprisoned not more than 10 years or both.

SPS 307.15 Appeal of local order. Any person affected by a local order which may be in conflict with a rule of the department may petition the department for a hearing on the grounds that the local order is unreasonable and in conflict with the rule of the department.

Note: Section 101.01 (8), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of alderpersons, board of trustees or the village board, of any village or city, or the board of health of any municipality, or an order or direction of any official of such municipality, upon any matter over which the department has jurisdiction.

Subchapter II — Definitions and Standards

SPS 307.20 Definitions. In this chapter:

- (1) "Airblast" means an airborne shock wave resulting from the detonation of explosives.
- (2) "Barrier" means a material object that separates, keeps apart, or demarcates in a conspicuous manner such as cones, a warning sign, or tape.
- (3) "Blast area" means the area of a blast within the influence of flying rock, missiles, gases, and concussion as determined by the blaster in charge.
- (4) "Blast site" means the area where explosive material is handled during loading of blastholes, including 50 feet in all directions from the perimeter formed by the loaded holes. A minimum of 30 feet may replace the 50-foot requirement if the perimeter of loaded holes is marked and separated from non-blast site areas by a barrier. The 50-foot or 30-foot distance requirements, as applicable, apply in all directions along the full depth of the blasthole. In underground mines, at least 15 feet of a solid rib, pillar, or broken rock may be substituted for the 50 foot distance.
- **(5)** "Blaster" means any individual holding a valid blaster's license issued by the department.
- **(6)** "Blaster in charge" means that qualified person in charge of, and responsible for, the loading and firing of a blast.
- (7) "Blasting" means any method of loosening, moving or shattering masses of solid matter by use of an explosive.
- (8) "Blasting operation" means any operation, enterprise or activity involving the use of blasting.
- (9) "Blasting resultants" means the physical manifestations of forces released by blasting, including but not limited to projectile matter, vibration and concussion, which might cause injury, damage or unreasonable annoyance to persons or property located outside the controlled blasting site area.
- (10) "Controlled blasting site area" means the area that surrounds a blast site and that meets one of the following conditions:
 - (a) Is owned by the operator.
 - (b) With respect to which, because of property ownership, an employment relationship or an agreement with the property owner, the operator can take reasonably adequate measures to exclude or to assure the safety of persons and property.
- (11) "Department" means the department of safety and professional services.
- (12) "Explosive" means any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion unless the compound, mixture or device is otherwise classified by the department by rule.
- (13) "Explosive materials" means explosives, blasting agents and detonators. The term includes, but is not limited to, dynamite and other high explosives, slurries, emulsions, water gels, blasting agents, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord and igniters.
- (14) "Fireworks" has the meaning given in s. 167.10 (1) (intro.), Stats., and includes a device listed under s. 167.10 (1) (e), (f) or (i) to (n), Stats.

Note: Section 167.10 (6m) (a), Stats., states that a person must have a fireworks manufacturing license in order to manufacture fireworks or a device listed under s. 167.10 (1) (e), (f) or (i) to (n), Stats.

Note: Under s. 167.10 (1) (intro.), Stats., "fireworks" means anything manufactured, processed or packaged for exploding, emitting sparks or combustion which does not have another common use. Section 167.10 (1) (e), (f) and (i) to (n), Stats., reads as follows:

Section 167.10 (1) (e) A cap containing not more than one-quarter grain of explosive mixture, if the cap is used or possessed or sold for use in a device which prevents direct bodily contact with a cap when it is in place for explosion.

- (f) A toy snake which contains no mercury.
- (i) A sparkler on a wire or wood stick not exceeding 36 inches in length that is designed to produce audible or visible effects or to produce audible and visible effects.
- (j) A device designed to spray out paper confetti or streamers and which contains less than one-quarter grain of explosive mixture.
- (k) A fuseless device that is designed to produce audible or visible effects or audible and visible effects, and that contains less than one-quarter grain of explosive mixture.
- (L) A device that is designed primarily to burn pyrotechnic smoke-producing mixtures, at a controlled rate, and that produces audible or visible effects, or audible and visible effects.
- (m) A cylindrical fountain that consists of one or more tubes and that is classified by the federal department of transportation as a Division 1.4 explosive, as defined in 49 CFR 173.50.
- (n) A cone fountain that is classified by the federal department of transportation as a Division 1.4 explosive, as defined in 49 CFR 173.50.
- (15) "Flyrock" means rock that is propelled through the air from a blast.
- (15g) "GPS" means Global Positioning System.
- (15r) "Global Positioning System" means a system of satellites established by the United States Navigational Satellite System that determines latitude and longitude of a particular ground location or elevation.
- (16) "Ground vibration" means a shaking of the ground caused by the elastic wave emanating from a blast.
- (17) "Inhabited building" means a building regularly occupied in whole or in part as a habitation for human beings, or any church, schoolhouse, railroad station, store or other structure where people are accustomed to assemble, except any building or structure occupied in connection with the manufacture, transportation, storage or use of explosive materials.
- (17m) "Municipality" means a city, village, or town.
- (18) "Operator" means the person who is responsible for the operation at a mine, pit, quarry, or construction site where blasting activity occurs.
- (19) "Particle velocity" means any measure of ground vibration describing the velocity at which a particle of ground vibrates when excited by a seismic wave.
- **(20)** "Person" means any individual, corporation, company, association, firm, partnership, society or joint stock company.
- (21) "Unreasonable annoyance" means an excessive, repeated noise, action, or other disturbance <u>caused by use</u> of explosive materials that is not <u>justified by reason</u> in compliance with the standards under this chapter.
- **SPS 307.21** Adoption of standards. NFPA 495, Explosive Materials Code, 2006 2013, subject to the modifications specified in this chapter, is hereby incorporated by reference into this chapter.
 - Note: A copy of NFPA 495, Explosive Materials Code is on file in the offices of the department and the legislative reference bureau. Copies of NFPA 495, Explosive Materials Code may be purchased from the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA, 02269 9101 02169-7471.

Subchapter III — Use of Blasting Materials

SPS 307.30 General. The use of explosive materials for blasting shall be executed in accordance with NFPA 495 chapter 10.

SPS 307.31 Changes, additions or omissions to NFPA 495.

- (1) Changes, additions or omissions to NFPA 495 chapter 10 are specified in this subchapter and are rules of the department and are not requirements of the NFPA 495 standard.
- (2) These are department rules in addition to the requirements in NFPA 495 section 10.1.3 4:
 - (a) Blaster requirements. When blasting operations are conducted in communities a municipality, the shots shall be designed and initiated by a properly licensed Class 5, 6, or 7 blaster.

Note: See ch. SPS 305 for blaster license requirements and classifications.

- **(b)** *Notifications*. <u>1.</u> Any person conducting blasting operations in a <u>community municipality</u> shall notify the department, the <u>local fire department and the local law enforcement agency</u> of the date and location of the blasting operation. Notification to the department shall be made on forms provided by the department.
 - 2. Any person conducting blasting operations in a municipality shall notify the local fire department and local law enforcement agency of the location of the blasting operation; the first date on which blasting is scheduled to occur; and, if requested by the local fire department or local law enforcement agency or required by municipal ordinance, subsequent dates on which blasting is scheduled to occur.

Note: Copies of the A notice of blasting in a community (form SBD 7336) are form is available from the department's Division of Industry Services at P.O. Box 2658 7302, Madison, WI 53701-2658 53707-7302; by email at dsps@wisconsin.gov; or at by telephone at (608) 261-8500 266-2112, or (877) 617-1565, or 411 (Telecommunications Relay); or at the Division's Web site division's website at http://dsps.wi.gov/programs/industry-services.

- (3) These are department rules in addition to the requirements in NFPA 495 section 10.2:
 - (a) Explosive materials used in underground blasting shall be fume class 1; however, fume class 2 and fume class 3 may be used if adequate ventilation has been provided as determined by the blaster in charge.

Note: Fume class 1 explosives produce less than 0.16 cubic feet of poisonous gases per $1-1/4 \times 8$ " cartridge when detonated in the Bichel Gauge.

- (b) All blast holes in open work shall be stemmed to the collar or to a point which will confine the charge.
- (4) These are department rules in addition to the requirements in NFPA 495 chapter 10:
 - (a) Required log. A blasting log shall be required for each blast fired.
 - **(b)** *Filing and availability.* All blasting logs shall be kept on file by the blaster for a minimum period of 3 years, and shall be made available to the department upon request.
 - (c) Information. Each blasting log shall contain at least all of the following information:
 - **1.** Name, signature and license number of the blaster in charge of the blast.
 - **2.** Specific blast location, including <u>GPS location or latitude and longitude coordinates</u>, address, <u>and</u> bench and station number if applicable.
 - **3.** Type of blasting operation.
 - **4.** Date and time of the blast.
 - **5.** Weather conditions at the time of the blast.
 - **6.** Diagram of the blast layout and the delay pattern.
 - 7. Number of holes.
 - **8.** Hole depth and diameter.
 - 9. Spacing.
 - 10. Burden.
 - **11.** Maximum holes per delay.
 - 12. Maximum pounds of explosives per delay.
 - 13. Depth of top stemming used.
 - **14.** Number, type and length of stemming used between decks.
 - **15.** Total pounds and type of explosives used.
 - **16.** Distance to nearest inhabited building not owned by the operator.
 - **17.** Type of initiation used.
 - 18. Seismographic and airblast records, which shall include all of the following:
 - **a.** Type of instrument and last laboratory calibration date.
 - **b.** Exact location of instrument and the date, time, and distance from the blast.
 - **c.** Name of the person and firm taking the reading.
 - **d.** Trigger levels for ground and air vibrations.
 - e. The vibration and airblast levels recorded.

Subchapter IV — Blasting Resultants

SPS 307.40 Regulation of blasting resultants. Pursuant to s. 101.15 (2) (e), Stats., the purpose of this subchapter is to provide for the establishment of uniform limits on permissible levels of blasting resultants to reasonably assure that blasting resultants do not cause injury, damage or unreasonable annoyance to persons or property outside any controlled blasting site area.

SPS 307.41 Preblasting notification.

(1) PREBLASTING SURVEY. At least 24 hours prior to initial blasting at a blast site, the blaster in charge shall make a reasonable effort to notify in writing or verbally all residents or owners of affected dwellings or other structures, as determined under sub. (2), that a blasting operation is to begin. The blaster in charge shall offer to perform a preblasting survey for the residents or owners. If a resident or owner requests a copy of the preblasting survey, the blaster in charge shall provide a copy for not more than the actual cost of the copy within 48 hours of the request.

Note: A preblasting survey provides a baseline record of the pre-existing condition of a structure against which the effects of blasting can be assessed, and it should include the interior and exterior of the buildings.

(2) AFFECTED BUILDINGS. Affected dwellings or other structures shall be determined based on the scaled-distance equation, W = (D/Ds)2. Using a scaled-distance factor Ds of 55, affected dwellings or other structures shall be those located within the distance D of the controlled blasting site area for the weight per delay W of explosives to be used.

Note: An example calculation to determine D is as follows: For 4 pounds of explosives, D = Ds(W)1/2 = 55 (4)1/2 = 110 feet.

- **SPS 307.42 Blasting schedules.** All surface blasting shall be conducted between sunrise and sunset, unless one of the following conditions applies:
- (1) More restrictive time periods are specified by the department.
- **(2)** The blasting is approved by the department based on a showing by the operator that the public will not be adversely affected by noise and other impacts.
- **SPS 307.43 Instrumentation.** All seismographs used to determine compliance with this subchapter shall meet the following minimum specifications:
- (1) Seismic frequency range: 2 to 200 Hz (±3 Hz).
- (2) Acoustic frequency range: 2 to 200 Hz (±1 Hz).

Note: Due to an error in CR 06-120, dB was changed to Hz in sub. (2).

- **(3)** Velocity range: 0.02 to 4.0 inches/second.
- (4) Sound range: 110 to 140 dB linear.
- **(5)** Transducers: Three mutually perpendicular axes.
- **(6)** Recording: Provide time-history of waveform.
- (7) Calibration: Be laboratory calibrated as often as necessary, but at least once every 12 months according to manufacturer's recommendations.

SPS 307.44 Control of adverse effects.

- (1) GENERAL REQUIREMENTS. Blasting shall be conducted so as to prevent injury and unreasonable annoyance to persons and damage to public or private property outside the controlled blasting site area.
- (2) FLYROCK. Flyrock traveling in the air or along the ground shall meet all of the following conditions:
 - (a) Remain within the controlled blasting site area.
 - (b) Not be cast more than one-half the distance to the nearest inhabited building within or outside of the controlled blasting site area.
- (3) AIRBLAST.
 - (a) An airblast may not exceed 133 peak dB at the location of any dwelling, public building or place of employment outside the controlled blasting site area.

- (b) The blaster shall conduct monitoring of every blast to determine compliance with the airblast limit. The measuring system used shall have a lower-end flat frequency response of not more than 2 Hz and an upper-end flat frequency response of at least 200 Hz.
- **(4)** GROUND VIBRATION.

(a)

- 1. The maximum ground vibration at the location of any dwelling, public building or place of employment outside the controlled blasting site area shall be established in accordance with the blasting-level chart of par. (b).
- **2.** All structures in the vicinity of the controlled blasting site area, not listed in subd. 1., such as water towers, pipelines and other utilities, tunnels, dams, impoundments and underground mines, shall be protected from damage by establishment by the blaster of a maximum allowable limit on the ground vibration. The blaster shall establish the limit after consulting with the owner of the structure.
- **(b)** The blaster shall use the ground vibration limits specified in Figure 7.44 to determine the maximum allowable ground vibration. Ground vibration shall be measured as the particle velocity. Particle velocity shall be recorded in 3 mutually perpendicular directions.
- (c) The blaster shall make and keep a seismograph record including both particle velocity and vibration frequency levels for each blast. The method of analysis shall be subject to discretionary review by the department.
- (d) For quarry operations, the blaster shall report any ground vibration levels to the department that are above 0.75 inch per second with frequencies less than 40 Hz.
- (5) REPORTING ADVERSE EFFECTS. The blaster shall report to the department any flyrock, airblast, or ground vibration that does not meet the requirements under this section.

Note: Local municipalities may have more restrictive regulations than the department.

Subchapter V — Fireworks

SPS 307.50 Licensing of fireworks manufacturers.

- (1) LICENSE REQUIRED. No person may manufacture fireworks unless that person holds a license issued by the department in accordance with ch. SPS 305.
- **(2)** POSTING. A fireworks manufacturer license shall be posted at each plant where fireworks are to be manufactured.

SPS 307.51 Inspections.

- (1) GENERAL. The authorized inspectors of the department may enter and inspect at reasonable times the premises on which each person licensed under this chapter manufactures fireworks.
- (2) INITIAL INSPECTIONS. Upon receipt of an application for a fireworks manufacturing license, the department or the department's designated deputy shall inspect the premises for which the application is made.
- **(3)** PERIODIC INSPECTIONS. The department or the department's designated deputy shall inspect a fireworks manufacturing plant at least once a year every 3 years.
- **(4)** FEDERAL INSPECTION ACCEPTANCE. Where an inspection of a fireworks manufacturing plant has been conducted by the federal bureau of alcohol, tobacco, firearms and explosives, the department may accept a federal inspection report in lieu of the department inspection.

Chapter SPS 308 MINES, PITS AND QUARRIES

Subchapter I — Administration and Enforcement

SPS 308.01 Purpose. Pursuant to s. 101.15 (2) (e), Stats., the purpose of this chapter is to establish rules to effect the safety of mines, quarries and related activities.

SPS 308.02 Scope.

- (1) COVERED. This chapter covers openings or excavations in the earth for the purpose of extracting minerals or other materials and the equipment related to processing or manufacturing of ores, aggregates, cements, lime, clay and silica sands in a mine, pit or quarry.
 - **Note:** The department of natural of resources has administrative rules concerning metallic mineral exploration, metallic mineral prospecting, mineral mining and mine reclamation.
- (2) NOT COVERED. This chapter does not cover openings or excavations in the earth created by a person for domestic or farm use at his or her residence or farm.
- **SPS 308.03** Application. This chapter applies to both new and existing mines, pits and quarries, unless specifically stated otherwise.

SPS 308.04 Definitions. In this chapter:

- (1) "Department" means the department of safety and professional services.
- (2) "Excavation" or "workings" has the meaning given in s. 101.15 (2) (a) 1., Stats.
 - **Note:** Section 101.15 (2) (a) 1., Stats., defines "excavation" or "workings" as any or all parts of a mine excavated or being excavated, including shafts, tunnels, drifts, cross cuts, raises, winzes, stopes and all other working places in a mine.
- (3) "Mine" means a surface or underground opening or excavation in the earth for the purpose of extracting minerals or other materials.
- **(4)** "Mineral" has the meaning given in s. 101.15 (2) (a) 2., Stats.
 - Note: Section 101.15 (2) (a) 2., Stats., defines "mineral" as a product recognized by standard authorities as mineral, whether metalliferous or nonmetalliferous.
- **(5)** "Operator" means the person or firm that operates or is responsible for an excavation in the earth for the purpose of extracting minerals or other materials.
- **(6)** "Pit" means a surface opening or excavation in the earth for the purpose of extracting minerals or other materials.
- (7) "Quarry" means a surface opening or excavation in the earth for the purpose of extracting nonmetallic minerals or other nonmetallic materials.
- **(8)** "Shaft" has the meaning given in s. 101.15 (2) (a) 3., Stats.
 - **Note:** Section 101.15 (2) (a) 3., Stats., defines "shaft" as an opening made for mining minerals, for hoisting and lowering persons or material, or for ventilating underground workings.
- **SPS 308.05 Petition for variance.** The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. SPS 303. The petition for variance shall include, where applicable, a position statement from the fire department having jurisdiction.
 - **Note:** Chapter SPS 303 requires the submittal of a petition for variance form (SBD 9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter SPS 303 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

Note: Form SBD 9890 The petition for variance form is available from the Department's Division of Industry Services at P.O. Box 7162, Madison, WI 53707-7162; by email at dsps@wisconsin.gov; or at by telephone 608/266 3151 or 877/617 1565 at (608) 266-2112, (877) 617-1565, or 411 (Telecommunications Relay); or at the Division's Web site division's website at http://dsps.wi.gov/programs/industry-services.

- **SPS 308.06 Penalties.** The department may impose penalties and obtain additional remedies for violations of this chapter, as provided in ss. 101.02 (12) and (13) (a) and 101.15 (2) (f) 2., Stats.
 - **Note:** Section 101.02 (12), Stats., indicates that every day during which any person, persons, corporation or any officer, agent or employee thereof, fails to observe and comply with an order of the department will constitute a separate and distinct violation of such order.
 - Note: Section 101.02 (13) (a), Stats., indicates that if any employer, employee, owner, or other person violates ss. 101.01 to 101.599, Stats., or fails or refuses to perform any duty lawfully enjoined, within the time prescribed by the department, for which no penalty has been specifically provided, or fails, neglects or refuses to obey any lawful order given or made by the department, or any judgment or decree made by any court in connection with ss. 101.01 to 101.599, Stats., for each such violation, failure or refusal, such employer, employee, owner or other person shall forfeit and pay into the state treasury a sum not less than \$10 or more than \$100 for each such offense.
 - Note: Section 101.15 (2) (f) 2., Stats., indicates that the department may apply to a court of record for the closing of any underground mine, quarry, pit, zinc works or other excavation where the same is being operated in violation of any of its rules or orders, and the owners or operators have failed within a reasonable time to correct any unsafe methods of operation. The failure of any owner or operator to comply with the order or judgment of the court shall subject such party or parties to criminal contempt proceedings.

SPS 308.07 Appeals.

- (1) APPEAL OF DEPARTMENT ORDER. Pursuant to s. 101.02 (6) (e), Stats., any employer or other person who owns or occupies a property that is affected by an order of the department may petition the department for a hearing on the reasonableness of the order.
 - Note: Section 101.01 (4), Stats., defines "employer" as any person, firm, corporation, state, county, town, city, village, school district, sewer district, drainage district and other public or quasi-public corporations as well as any agent, manager, representative or other person having control or custody of any employment, place of employment or of any employee.
- (2) APPEAL OF LOCAL ORDER. Pursuant to s. 101.02 (7) (b), Stats., any person affected by a local order that is in conflict with an order of the department may petition the department for a hearing on the local order.
 - **Note:** Section 101.01 (8), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of alderpersons, board of trustees or the village board, of any village or city, a regulation or order of the local board of health, as defined in s. 250.01 (3), Stats., or an order or direction of any official of a municipality, upon any matter over which the department has jurisdiction.
- (3) PETITION OF ADMINISTRATIVE RULE. Pursuant to s. 227.12, Stats., any municipality, corporation or any 5 or more persons having an interest in an administrative rule may petition the department requesting the adoption, amendment or repeal of the rule.

Subchapter II - General Requirements

- **SPS 308.10 Notification to begin crushing operation.** Each year before crushing work is commenced in a mine, pit or quarry, the person responsible for the crushing work shall notify the department that work is about to begin. The notification shall be made to the department at least 10 days prior to the beginning of crushing work in each mine, pit or quarry.
 - **Note:** The notice is required from the person responsible for the crushing work for all mines, pits and quarries where crushing work is performed, whether or not the person owns the mine, pit or quarry. Only one initial notice is required for a mine, pit or quarry where crushing work is performed on an intermittent basis during the year.
 - Note: Notification may be made on form SBD 6736, Notice to Begin Operation, which A notification form is available from the Department's Division of Industry Services at P.O. Box 7162 7302, Madison, WI 53707-7162 7302; by email at dsps@wisconsin.gov; or at by telephone 608/266 3151 or 877/617 1565 at (608) 266-2112, (877) 617-1565, or 411 (Telecommunications Relay); or at the Division's Web site division's website at http://dsps.wi.gov/programs/industry-services.

 Notification may also be provided by email to DSPSMineSafety@wisconsin.gov.

SPS 308.11 Arrangements for medical assistance. Each year before any work is commenced in a mine, pit or quarry, the mine, pit or quarry operator shall make arrangements for obtaining emergency medical assistance and transportation for injured persons.

SPS 308.12 Permits.

- (1) GENERAL. Before an excavation of a shaft may be commenced, a permit shall be obtained from the department. As provided by s. 101.15 (2) (c), Stats., this section does not apply to shafts less than 50 feet in depth wherein persons are not employed, shafts not equipped with power driven hoists used for hoisting persons in and out of shafts, or shafts not covered with a flammable building.
- (2) APPLICATION FOR PERMIT. Application for a shaft excavation permit shall be made on form SBD-52 forms provided by the department together with the payment of the permit fee.
 - Note: Form SBD 52, Mine Shaft Excavation Permit Application, The mine shaft excavation permit application is available from the Department's department's Division of Industry Services at P.O. Box 7302, Madison, WI 53707-7302; by email at dsps@wisconsin.gov; or at by telephone 608/266-3151 or 877/617-1565 at (608) 266-2112, (877) 617-1565, or 411 (Telecommunications Relay); or at the Division's Web site division's website at http://dsps.wi.gov/programs/industry-services.
- **(3)** PLANS AND SPECIFICATIONS. Plans and specifications shall be submitted with the application for a shaft excavation permit which show that the shaft, excavation and workings are in compliance with this chapter.
- **(4)** PERMIT PROCESSING TIME. The department shall review and make a determination on a shaft excavation permit application within 30 business days of receiving the required information and fees.

SPS 308.13 Fees.

- (1) SAFETY SERVICE FEE. An annual safety service fee as specified in ch. SPS 302 shall be paid by the person or firm operating the crushing, screening or washing equipment.
- (2) SHAFT EXCAVATION PERMIT FEE. A shaft excavation permit fee as specified in ch. SPS 302 shall be paid by the person applying for the permit.
- (3) INSPECTION FEE. A miscellaneous inspection fee as specified in ch. SPS 302 shall be paid by the person requesting a consultation inspection of the person's operation, if that person is not required to pay a safety service fee under sub. (1).
- **(4)** TRAINING FEE. A training fee as specified in ch. SPS 302 shall be paid by the person requesting annual refresher training provided by the department and required by the federal mine safety and health administration.

SPS 308.14 Inspections.

- (1) GENERAL. Pursuant to ss. 101.02 (15) (g) and 101.15 (2) (f) 1., Stats., the department may enter and cause the inspections of mines, pits and quarries in order to determine compliance with this chapter.
- (2) OVERDUE INSPECTIONS. If the department determines that an inspection of a mine, pit or quarry as required under s. 101.15 (2) (f) 1., Stats., has not been performed, the department shall notify the federal mine safety and health administration that an inspection is due.
- **SPS 308.15 Federal requirements.** No person may operate a mine, pit or quarry unless the person complies with 30 USC 811, 957 and 961 and the safety and health standards in Title 30 CFR Parts 1 to 199.

Note: Authority over mines is given to the federal government under the federal Mine Safety and Health Act. The safety and health related requirements for the operation of surface and underground mines are contained in the Code of Federal Regulations issued by the Mine Safety and Health Administration, Department of Labor, under Title 30 CFR Parts 46, 56 and 57.

Subchapter III - Additions to Federal Regulations

SPS 308.20 Additions to federal regulations. The additions to the federal mine safety and health administration regulations are specified in this subchapter and are rules of the department.

SPS 308.21 Abandoned shafts and wells.

- (1) PROTECTION. All abandoned mine shafts, exploration shafts and test wells in this state shall comply with s. 167.27 (5) and (6), Stats.
- **(2)** Mapping of underground workings.
- (a) All underground workings shall be surveyed and mapped within a reasonable time as work develops. All underground workings shall be surveyed and mapped before they are allowed to become inaccessible. All surveys shall be tied to an exterior quarter section corner.
- (b) Before any mine having underground workings is abandoned, the operator of the mine shall have an engineer or surveyor make a map, on a scale not smaller than 100 feet to the inch, showing all underground workings. A print or copy of such a map certified by the operator or designee as being accurate shall be filed with the department.

TEXT OF RULE

- SECTION 1. SPS 307.03 is renumbered SPS 307.03 (a) and amended to read:
- **SPS 307.03** (a) Fees Except as provided in par. (b), fees for safety inspections and petitions for variance shall be submitted as specified in ch. SPS 302.
- SECTION 2. SPS 307.03 (b) is created to read:
- **SPS 307.03 (b)** A fee is not required to be submitted for a safety inspection of a premise on which the manufacture of fireworks takes place, if all of the following apply:
- **1.** All of the fireworks manufactured on the premise are for the personal use of the manufacturer.
- **2.** None of the fireworks manufactured on the premise are intended for sale or distribution.
- **3.** The manufacturer does not sell a service in which the fireworks manufactured on the premise are used.
- SECTION 3. SPS 307.15 is created to read:
- **SPS 307.15 Appeal of local order.** Any person affected by a local order which may be in conflict with a rule of the department may petition the department for a hearing on the grounds that the local order is unreasonable and in conflict with the rule of the department.
- **Note:** Section 101.01 (8), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of alderpersons, board of trustees or the village board, of any village or city, or the board of health of any municipality, or an order or direction of any official of such municipality, upon any matter over which the department has jurisdiction.
- SECTION 4. SPS 307.20 (15g), (15r), and (17m) are created to read:
 - SPS 307.20 (15g) "GPS" means Global Positioning System.
- (15r) "Global Positioning System" means a system of satellites established by the United States Navigational Satellite System that determines latitude and longitude of a particular ground location or elevation.
 - (17m) "Municipality" means a city, village, or town.

SECTION 5. SPS 307.20 (21) is amended to read:

SPS 307.20 (21) "Unreasonable annoyance" means an excessive, repeated noise, action, or other disturbance <u>caused by use of explosive materials</u> that is not <u>justified by reason</u> in compliance with the standards under this chapter.

SECTION 6. SPS 307.21 is amended to read:

SPS 307.21 Adoption of standards. NFPA 495, Explosive Materials Code, 2006 2013, subject to the modifications specified in this chapter, is hereby incorporated by reference into this chapter.

Note: A copy of NFPA 495, Explosive Materials Code is on file in the offices of the department and the legislative reference bureau. Copies of NFPA 495, Explosive Materials Code may be purchased from the National Fire Protection Association, 1 Batterymarch Park, Box 9101, Quincy, MA, 02269-9101 02169-7471.

SECTION 7. SPS 307.31 (2) (intro.) and (a) are amended to read:

SPS 307.31 (2) (intro.) These are department rules in addition to the requirements in NFPA 495 section $10.1.3 \pm 1.3$

(a) Blaster requirements. When blasting operations are conducted in communities a municipality, the shots shall be designed and initiated by a properly licensed Class 5, 6, or 7 blaster.

SECTION 8. SPS 307.31 (2) (b) is renumbered SPS 307.31 (2) (b) 1. and amended to read:

SPS 307.31 (2) (b) 1. Any person conducting blasting operations in a community municipality shall notify the department, the local fire department and the local law enforcement agency of the date and location of the blasting operation. Notification to the department shall be made on forms provided by the department.

SECTION 9. SPS 307.31 (2) (b) 2. is created to read:

SPS 307.31 (2) (b) 2. Any person conducting blasting operations in a municipality shall notify the local fire department and local law enforcement agency of the location of the blasting operation; the first date on which blasting is scheduled to occur; and, if requested by the local fire department or local law enforcement agency or required by municipal ordinance, subsequent dates on which blasting is scheduled to occur.

SECTION 10. SPS 307.31 (2) (b) (Note) and (4) (c) 2. are amended to read:

SPS 307.31 (2) (b) (Note) Copies of the A notice of blasting in a community (form SBD-7336) are form is available from the department's Division of Industry Services at P.O. Box 2658 7302, Madison, WI 53701-2658 53707-7302; by email at

dsps@wisconsin.gov; or at by telephone at (608) 261-8500 266-2112, or (877) 617-1565, or 411 (Telecommunications Relay); or at the Division's Web site division's website at http://dsps.wi.gov/programs/industry-services.

- (4) (c) 2. Specific blast location, including GPS location or latitude and longitude coordinates, address, and bench and station number if applicable.
- SECTION 11. SPS 307.44 (4) (d) and (Note) are repealed.
- SECTION 12. SPS 307.44 (5) is created to read:
- **SPS 307.44 (5)** REPORTING ADVERSE EFFECTS. The blaster shall report to the department any flyrock, airblast, or ground vibration that does not meet the requirements under this section.
- SECTION 13. SPS 307.51 (3) is amended to read:
- **SPS 307.51 (3)** PERIODIC INSPECTIONS. The department or the department's designated deputy shall inspect a fireworks manufacturing plant at least once a year every 3 years.
- SECTION 14. SPS 308.05 (Note 1) and (Note 2) are amended to read:
- **SPS 308.05 (Note 1)** Chapter SPS 303 requires the submittal of a petition for variance form (SBD-9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter SPS 303 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.
- (Note 2) Form SBD-9890 The petition for variance form is available from the Department's department's Division of Industry Services at P.O. Box 7162, Madison, WI 53707-7162; by email at dsps@wisconsin.gov; or at by telephone 608/266-3151 or 877/617-1565 at (608) 266-2112, (877) 617-1565, or 411 (Telecommunications Relay); or at the Division's Web site division's website at http://dsps.wi.gov/programs/industry-services.
- SECTION 15. SPS 308.10 (Note 2) is amended to read:
- SPS 308.10 (Note 2) Notification may be made on form SBD 6736, Notice to Begin Operation, which A notification form is available from the Department's department's Division of Industry Services at P.O. Box 7162 7302, Madison, WI 53707-7162 7302; by email at dsps@wisconsin.gov; or at by telephone 608/266-3151 or 877/617-1565 at (608) 266-2112, (877) 617-1565, or 411 (Telecommunications Relay); or at the Division's Web site division's website at http://dsps.wi.gov/programs/industry-services. Notification may also be provided by email to DSPSMineSafety@wisconsin.gov.

SECTION 16. SPS 308.12 (2) and (Note) are amended to read:

SPS 308.12 (2) Application for permit. Application for a shaft excavation permit shall be made on form SBD 52 forms provided by the department together with the payment of the permit fee.

(Note) Form SBD 52, Mine Shaft Excavation Permit Application, The mine shaft excavation permit application is available from the Department's department's Division of Industry Services at P.O. Box 7302, Madison, WI 53707-7302; by email at dsps@wisconsin.gov; or at by telephone 608/266-3151 or 877/617-1565 at (608) 266-2112, (877) 617-1565, or 411 (Telecommunications Relay); or at the Division's Web site division's website at http://dsps.wi.gov/programs/industry-services.

(END OF TEXT OF RULE)