

STATE OF WISCONSIN

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Governor Scott Walker Secretary Dave Ross

COMMITTEE MEETING

Room 121C, 1400 East Washington Avenue, Madison Contact: Dale Kleven (608) 261-4472 **September 28, 2016**

EXPLOSIVES, FIREWORKS, MINES, PITS AND QUARRIES CODE ADVISORY

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)
- **Administrative Matters**
 - 1. Committee and Staff Introductions
 - **Advisory Committee Overview**
 - Administrative Rules Process 3.
- C. Election of Officers (2)
- D. Fireworks Manufacturing in Wisconsin Information and Discussion
- E. Legislative and Administrative Rule Matters Discussion and Consideration (3-11)
 - Scope Statement (3-5)
 - Committee Discussion and Recommendations for SPS 307 (6-9)
 - Subchapter I General Requirements
 - b. Subchapter II Definitions and Standards
 - c. Subchapter III Use of Blasting Materials
 - d. Subchapter IV Blasting Resultants
 - e. Subchapter V Fireworks
 - Committee Discussion and Recommendations for SPS 308 (10-11)
 - a. Subchapter I Administration and Enforcement
 - b. Subchapter II General Requirements
 - c. Subchapter III Additions to Federal Regulations
- F. Public Comments
- G. Adjournment

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:		
Nifty Lynn Dio, Bureau Assistant				09/26/2016		
Tunty Lynn Dio, Dareau 75515tant				Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting		
3) Name of Board, Comr	nittee, Co	ouncil, Sections:				
SPS 307-308 – Explosive	es. Firewo	orks, Mines, Pits an	d Quarrie	es Code Advisory Co	mmittee	
4) Meeting Date: 5) Attachments: 6) How s				should the item be titled on the agenda page?		
09/28/2016	☐ Yes ☐ No		Election of Officers			
7) Place Item in:		8) Is an appearance	ce before	the Board being	9) Name of Case Advisor(s), if required:	
Open Session		scheduled?		J		
☐ Closed Session		□ Voc (Fill out I	Doord Ar	ppearance Request)	N/A	
		No No	Dualu Ap	pearance Request)		
10) Describe the issue a	nd action		dressed:			
The Committee should	elect a Ch	air and Vice Chair				
		_				
11)		А	Authoriza	tion		
Nifty Lynn Dio					09/26/2016	
Signature of person mal	king this	request			Date	
Supervisor (if required)				Date		
, , ,						
Executive Director signs	ature (ind	icates approval to a	add post	agenda deadline item	n to agenda) Date	
9		•••	•		<u> </u>	
Directions for including supporting documents: 1. This form should be attached to any documents submitted to the agenda.						
2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director.						
3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a						

STATEMENT OF SCOPE

Department of Safety and Professional Services

Rule No. :	Chapters SPS 307, 308, 303, 305, and 314
Relating to:	Explosives, fireworks, mines, pits, and quarries
Rule Type:	Permanent

1. Detailed description of the objective of the proposed rule:

The primary objective of this rulemaking project is to evaluate and update ch. SPS 307, *Explosives and fireworks*, and chapter SPS 308, *Mines, pits and quarries*. This rulemaking update is intended to keep these administrative rule chapters consistent with current regional and national public safety and fire prevention practices and standards, and with legislation enacted since the previous update of these chapters.

In addition, the project is expected to evaluate other administrative codes of the Department that may be affected by this update of chs. SPS 307 and 308, including chs. SPS 303, 305, and 314, relating to, administrative procedures; licenses, certifications and registrations; and fire prevention. This evaluation may result in changes and updates of the rules in these chapters.

2. Description of the existing policies relevant to the rule, new policies proposed to be included in the rule, and an analysis of policy alternatives:

Chapter SPS 307 contains standards for the use of blasting materials and blasting resultants; and incorporates by reference the 2006 edition of the National Fire Protection Agency's (NFPA) 495, Explosive Materials Code. This chapter also includes provisions for the licensing and inspection of fireworks manufacturers.

Chapter SPS 308 establishes requirements and regulations for mines, pits and quarries in addition to the federal requirements in 30 USC 811, 957 and 961 and the safety and health standards in Title 30 CFR Parts 1 to 199.

The primary purpose of the codes under consideration is to protect public safety, health, and welfare. Periodic review and update of these codes is necessary to ensure that they still achieve that purpose. In addition, the review and update allows the opportunity to recognize and stay current with fire protection and public safety products and practices. The review and update under this scope statement will include evaluation of the 2013 edition of the above-mentioned explosive materials code for incorporation. A review of regulations affecting mines, pits, and quarries will evaluate the existing code in relation to current day practice.

The primary alternative would be to not perform this rule-review process. This would reduce the public benefits that would otherwise occur by performing this review.

3. Detailed explanation of statutory authority for the rule (including the statutory citation and language):

Section 101.02 (1), Stats. reads, "The department shall adopt reasonable and proper rules and regulations relative to the exercise of its powers and authorities and proper rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings."

Section 101.15 (2) (e), Stats. reads: "The department shall promulgate rules to effect the safety of mines, explosives, quarries and related activities. Such rules shall 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 any person or property outside any controlled blasting site area.

Section 167.10 (6m), Stats. reads in part: The department of safety and professional services shall promulgate rules to establish safety standards for the manufacture in this state of fireworks and devices listed under..."

4. Estimate of amount of time that state employees will spend developing the rule and of other resources necessary to develop the rule:

The Department estimates approximately 500 hours will be needed to perform the review and develop any needed rule changes. The Department will assign existing staff to perform the review and develop the rule changes, and no other resources will be needed.

5. List with description of all entities that may be affected by the proposed rule:

The proposed rules may affect any business or other entity involved with the use, manufacture, or inspection of explosives or fireworks and any business or other entity involved with the operation or inspection of mines, pits, or quarries.

6. Summary and preliminary comparison with any existing or proposed federal regulation that is intended to address the activities to be regulated by the rule:

Explosives and fireworks

<u>Code of Federal Regulations</u> – An Internet-based search for "federal explosives code" and "federal fireworks code" in the *Code of Federal Regulations* (CFR) did not identify any federal regulations pertaining to these topics.

<u>Federal Register</u> – An Internet-based search for "federal explosives code" and "federal fireworks code" in the *Federal Register* did not identify any proposed federal regulations pertaining to these topics.

The proposed rule package is expected to update the incorporation by reference of NFPA 495, Explosive Materials Code to the 2013 edition. The next version of NFPA 495 will be the 2018 edition, which is not expected to be published until late 2017.

Mines, pits, and quarries

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. The provisions of the United States Code (USC) and the *Code of Federal Regulations* (CFR) are occasionally updated by the federal government. There are no current planned updates of these sections.

7. Anticipated economic impact of implementing the rule (note if the rule is likely to have a significant economic impact on small businesses):

The anticipated economic impact of implementing this rule is minimal. The rule is not likely to have a significant impact on a substantial number of small businesses.

Approved for publication in the *Wisconsin*Administrative Register at Madison, Wisconsin, this date:

DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES

DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES

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Contact Person: Dan Smith, Rules Coordinator, daniel2.smith@wi.gov, (608) 261-4463.

Dave Ross, Secretary

Dave Ross, Secretary

File reference: SPS 307/Scope Statement

Chapter SPS 307

EXPLOSIVES AND FIREWORKS

Subchapter I — General Requirements	SPS 307.31 Changes, additions or omissions to NFPA 495.
SPS 307.01 Purpose. SPS 307.02 Scope.	Subchapter IV — Blasting Resultants
SPS 307.03 Fees.	SPS 307.40 Regulation of blasting resultants.
SPS 307.06 Petition for variance.	SPS 307.41 Preblasting notification.
SPS 307.10 Penalties.	SPS 307.42 Blasting schedules.
Subchapter II — Definitions and Standards SPS 307.20 Definitions.	SPS 307.43 Instrumentation. SPS 307.44 Control of adverse effects.
SPS 307.21 Adoption of standards.	Subchapter V — Fireworks
Subchapter III — Use of Blasting Materials	SPS 307.50 Licensing of fireworks manufacturers.
SPS 307.30 General.	SPS 307.51 Inspections.

Note: Chapter Ind 5 as it existed on April 30, 1985 was repealed and a new chapter ILHR 7 was created effective May 1, 1985. Chapter ILHR 7 was renumbered ch. Comm 7 under s. 13.93 (2m) (b) 1., Stats., and corrections made under s. 13.93 (2m) (b) 6. and 7., Stats., Register, October, 1996, No. 490; CR 06–120: r. and recr. Comm. 7, Register February 2008 No. 626, eff. 3–1–08. Chapter Comm 7 was renumbered chapter SPS 307 under s. 13.92 (4) (b) 1., Stats., Register December 2011 No. 672.

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.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

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.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

SPS 307.03 Fees. Fees for safety inspections and petitions for variance shall be submitted as specified in ch. SPS 302. History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08; correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

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.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08; correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

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.

History: CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

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.
- 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 CFB 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
- **(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.
- **(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 that is not justified by reason

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08; correction in (11) made under s. 13.92 (4) (b) 6., Stats., Register December 2011 No. 672.

SPS 307.21 Adoption of standards. NFPA 495, Explosive Materials Code, 2006, 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.

History: CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

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.

History: CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

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:
- (a) *Blaster requirements*. When blasting operations are conducted in communities, 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*. Any person conducting blasting operations in a community 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.

Note: Copies of the notice of blasting in a community (form SBD-7336) are available from the Division of Industry Services at P.O. Box 2658, Madison, WI 53701-2658; or at telephone (608) 261-8500 or (877) 617-1565 or 411 (Telecommunications Relay); or at the Division's Web site 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 x 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:
- Name, signature and license number of the blaster in charge of the blast.
- Specific blast location, including address, 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.

History: CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

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.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

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.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

- **SPS 307.42 Blasting schedules.** All surface blasting shall be conducted between surrise 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.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

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.

History: CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

- 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.

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

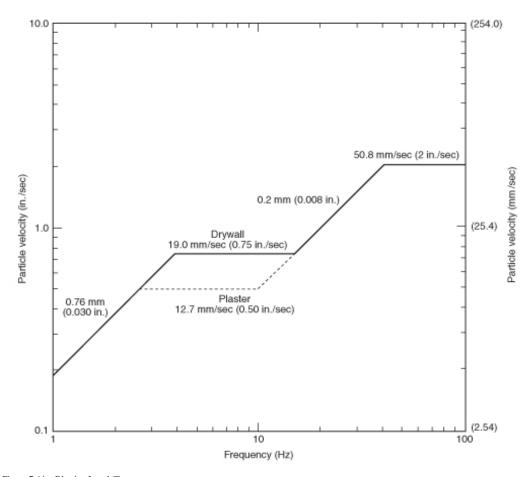


Figure 7.44 – Blasting Level Chart **History:** CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

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

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.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

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.
- **(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.

History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

Chapter SPS 308

MINES, PITS AND QUARRIES

Subchapter 1	- Administration and Enforcement	SPS 308.11	Arrangements for medical assistance.	
SPS 308.01	Purpose.	SPS 308.12	Permits.	
SPS 308.02	Scope.	SPS 308.13	Fees.	
SPS 308.03	Application.	SPS 308.14	Inspections.	
SPS 308.04	Definitions.	SPS 308.15	Federal requirements.	
SPS 308.05 Petition for variance.		Subchanter III - Additions to Federal Regulations		
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Note: Chapter Ind 3 as it existed on June 30, 1983 was renumbered as ch. ILHR 8 and revised, effective July 1, 1983; chapter ILHR 8 as it existed on September 30, 1994, was repealed and a new chapter ILHR 8 was created effective October 1, 1994. Chapter ILHR 8 was renumbered chapter Comm 8 under s. 13.93 (2m) (b) 1. and corrections made under s. 13.93 (2m) (b) 6. and 7., Stats., Register, August, 1997, No. 500. Chapter Comm 8 as it existed May 31, 2001 was repealed and a new chapter Comm 8 was created, Register, May, 2001, No. 545, effective June 1, 2001. Chapter Comm 8 was renumbered chapter SPS 308 under s. 13.92 (4) (b) 1., Stats., Register December 2011 No. 672.

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.

History: Cr. Register, May, 2001, No. 545, eff. 6-1-01.

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.

History: Cr. Register, May, 2001, No. 545, eff. 6-1-01.

SPS 308.03 Application. This chapter applies to both new and existing mines, pits and quarries, unless specifically stated otherwise.

History: Cr. Register, May, 2001, No. 545, eff. 6–1–01.

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.

History: Cr. Register, May, 2001, No. 545, eff. 6–1–01; correction in (1) made under s. 13.92 (4) (b) 6., Stats., Register December 2011 No. 672.

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 is available from the Department's Division of Industry Services at P.O. Box 7162, Madison, WI 53707–7162; or at telephone 608/266–3151 or 877/617–1565 or 411 (Telecommunications Relay); or at the Division's Web site at http://dsps.wi.gov/programs/industry-services.

History: Cr. Register, May, 2001, No. 545, eff. 6–1–01; correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

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.

History: Cr. Register, May, 2001, No. 545, eff. 6–1–01.

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.

History: Cr. Register, May, 2001, No. 545, eff. 6–1–01.

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 is available from the Department's Division of Industry Services at P.O. Box 7162, Madison, WI 53707-7162; or at telephone 608/266-3151 or 877/617-1565 or 411 (Telecommunications Relay); or at the Division's Web site at http://dsps.wi.gov/programs/industry-services.

History: Cr. Register, May, 2001, No. 545, eff. 6-1-01.

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.

History: Cr. Register, May, 2001, No. 545, eff. 6–1–01.

- **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 together with the payment of the permit fee.

Note: Form SBD–52, Mine Shaft Excavation Permit Application, is available from the Department's Division of Industry Services at P.O. Box 7302, Madison, WI 53707–7302; or at telephone 608/266–3151 or 877/617–1565 or 411 (Telecommunications Relay); or at the Division's Web site 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.

History: Cr. Register, May, 2001, No. 545, eff. 6-1-01.

- **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.

History: Cr. Register, May, 2001, No. 545, eff. 6–1–01; CR02–042: am. (4), Register October 2002 No. 562, eff. 11–1–02; correction in (1), (2), (3), (4) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

- **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.

History: Cr. Register, May, 2001, No. 545, eff. 6-1-01.

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.

History: Cr. Register, May, 2001, No. 545, eff. 6–1–01.

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.

History: Cr. Register, May, 2001, No. 545, eff. 6-1-01.

- 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.

History: Cr. Register, May, 2001, No. 545, eff. 6-1-01.