

Chapter 118: EXPLOSIVES AND BLASTING

GENERAL REFERENCES

Noise — See Ch. .
Zoning — See Ch. .

§ 118-1. Intent.

The Village Board of Trustees hereby finds that the uncontrolled and unregulated use of explosive is detrimental to the public safety, health and general welfare, and set forth to establish minimum safeguards to protect the health, safety and welfare of the residents of the Village of South Blooming Grove as well as their property by establishing reasonable regulations governing the possession and use of explosive materials.

§ 118-2. . Definitions.

The following words and terms, when used in this chapter, shall have the following meanings:

AIR BLAST — The airborne shock wave or acoustic transient generated by an explosion.

BLACK POWDER — A deflagrating or low-explosive compound composed of sulfur, charcoal and an earth nitrate.

BLASTER — A person who holds a valid permit to perform blasting operations.

BLASTING AGENT — Any material or mixture intended for blasting not otherwise classified as an explosive.

BURDEN

A. That dimension of a medium to be blasted measured from the bore hole to the face at right angles to the spacing.

B. The total amount of material to be blasted by a given hole.

CERTIFICATE OF COMPETENCY — Any authorization to keep, store, transport, manufacture or use explosives issued under New York State Labor Law Article 16.

CFR — Refers to the Code of Federal Regulations.

EXPLOSIVE — Any chemical compound or mixture, that is commonly used or intended for the purpose of producing an explosion, that contains combustible materials in such quantities that an ignition by detonation or otherwise may cause a sudden generation of highly heated gases capable of producing destructive effects. The term "explosive," except as specifically stated herein, does not include:

A. Small arms ammunition, including smokeless or black powder when possessed for noncommercial purposes in quantities of five pounds or less.

B. An explosive in a form prescribed by the United States Pharmacopeia.

C. Fireworks regulated under state law.

HERTZ — Cycles per second.

NEPA — The National Fire Protection Association.

PEAK PARTICLE VELOCITY — The peak particle velocity recorded on any one of the three mutually perpendicular components of blasting vibrations in the vertical and horizontal directions.

Chapter 118: EXPLOSIVES AND BLASTING

SEISMOGRAPH — An instrument which records ground vibration by measuring and recording particle velocity, displacement or acceleration in three mutually perpendicular directions.

STEMMING — An inert material placed in the bore hole after the explosive for the purpose of confining explosive materials or to separate charges of explosive material in the same bore hole.

§ 118-3. Application and scope of authority.

- A. This chapter shall apply to each and every person, corporation and business engaged in the manufacture, sale, transportation, storage, handling or use of explosives in the Village, except as provided in § 118-3.
- B. The technical standards set forth in this chapter are based upon generally recognized criteria and accepted industry standards. All persons must comply with all applicable local, state and federal laws, rules, codes and regulations.

§ 118-4. Exceptions.

- A. The provisions of this chapter shall not apply to the following:
 - (1) The military forces of the United States or the duly authorized militia of any state or any police force, provided that the same are acting in the performance of their public duties.
 - (2) The transportation of explosives in interstate or intrastate commerce regulated by state or federal law.
 - (3) Model rocketry.
 - (4) Fireworks subject to regulation under the Penal Law.
 - (5) Small-arms ammunition, including smokeless or black powder when possessed for noncommercial purposes in quantities of five pounds or less.
- B. The Building Inspector and/or Village Engineer may grant a written request for an exemption where it is evident that strict compliance would cause an undue hardship and said relief would not compromise public safety.

§ 118-5. Permit requirements; fee.

- A. No person shall manufacture, sell, possess, store, use or detonate explosives within the Village unless the Building Inspector and/or Village Engineer have issued an permit. The application for a permit must contain the following:
 - (1) The applicant's full name, address and telephone number, as well as the name of the blaster.
 - (2) The location where the applicant proposes to manufacture, sell, possess, store or use explosives.
 - (3) A statement as to the purpose and need to manufacture, sell, possess, store or use explosives.
 - (4) Where the manufacture, sale, possession or storage of explosives is subject to state or federal regulation and licensing, a copy of any state or federal license or permit shall also be provided.
 - (5) The quantity of explosives to be manufactured, sold, possessed, used or stored.

Chapter 118: EXPLOSIVES AND BLASTING

- (6) The name, address and telephone number of a designated representative who will be present at the location during all blasting who is authorized to act on behalf of the applicant.
 - (7) A copy of the blaster's license to purchase, own, possess, transport and use explosives and certificate of competence.
 - (8) An estimate of how much blasting is anticipated and the type and amount of material to be ignited or discharged. Where more than one blast is anticipated, the applicant shall estimate how many separate blasts are expected and the duration that the blasting activity will continue.
 - (9) The time, date and location blasting is scheduled.
 - (10) A list of all landowners, including name and address, within a one-thousand-foot radius of the proposed blast site.
 - (11) A pre-blast survey of the site, where one inch equals 30 feet in scale, showing all structures within a one-thousand-foot radius of the proposed blast site.
- B.** Expiration, revocation or cancellation of the blaster's state license shall automatically void any permit issued under this chapter.
- C.** No permit holder shall transfer or assign a permit issued under this chapter.
- D.** A fee of \$250 shall accompany each application for a permit. Said permit fee may be modified from time to time by resolution of the Village Board.

§ 118-6. Insurance.

- A.** Before any permit is issued, the applicant shall submit proof of insurance by supplying a certificate of insurance, issued by an insurance company authorized to do business in the State of New York, certifying worker's compensation and general liability coverage for the handling or use of explosive materials and blasting activity in an amount of not less than \$3,000,000 for general liability, including bodily injury, and \$2,000,000 for property damages. The insurance certificate shall name the Village as an additional insured and provide a statement that the policy or policies involved will not be canceled, terminated or modified by the insurance company unless 30 days' written notice is given to the Village and such changes or modification is agreed upon by the Village.
- B.** The applicant shall also furnish a notarized statement agreeing to defend, indemnify and hold the Village harmless from any and all claims, actions, proceedings, costs and expenses, including reasonable attorney's fees, brought by any person, firm or corporation for any injury to any persons or damage to any property arising or resulting, directly or indirectly, from the use, storing, handling, transporting or manufacturing of explosive material or the conducting of blasting activity.

§ 118-7. Inspection, revocation of permit; and appeal.

- A. Inspection.** The Village Building Inspector, Village Engineer, Consulting Engineer, Highway Superintendent or any police officer may inspect any vehicle, structure, construction site or other area where explosives are manufactured, sold, possessed, stored or used within the Village for the purpose of verifying compliance with and enforcing this chapter.
- B. Permit revocation.** The Building Inspector, his deputy or any other officer or employee designated by the Village Board (all "Building Inspector" for purposes of this section) may revoke or modify a permit issued pursuant to this chapter where it appears that the permit holder has violated any local, state or federal law, rule, code or regulation, or provided a false

Chapter 118: EXPLOSIVES AND BLASTING

statement or representation on the application for a blasting permit or for violation of any applicable safety standard or where the Building Inspector determines that public safety has been compromised. Where a permit has been revoked or modified, the Building Inspector shall send a written notice of same to the permit holder by first-class certified mail within two working days, setting forth the reasons the permit was revoked or modified and informing the permit holder of his right to appeal such revocation or modification by filing a notice of appeal with the Village Mayor within 20 working days.

- C. Appeals.** The Village Board shall hear an appeal pursuant to this section. The Building Inspector shall appear and state his findings and the reasons for revoking or modifying the permit. The permit holder shall be offered the opportunity to appear, with or without an attorney, and present evidence and witnesses on his behalf. The Board may sustain the Building Inspector's decision, reinstate any permit or amend any modifications imposed by the Building Inspector.

§ 118-8. Blasting operations.

- A.** At least five business days prior to the scheduled start of blasting, the permit holder shall meet with the Building Inspector to review and finalize the proposed blasting plan.
- B.** Each blasting permit holder shall establish and delineate a blast zone prior to detonating a blast. The blast zone must be clearly marked and adequate precautions implemented to prevent unauthorized entry into the area.
- C.** In the case of multi-occupancy structures, residential and commercial, located within 500 feet of the blast site, a Notice of Intent to Blast shall be conspicuously posted at all commonly used entrances to such structures at least 10 days prior to blasting. The notice of intent shall contain the location where blasting is to occur, with as much specificity as possible as well as the projected dates and times of the blasting, and the name, address and telephone number of the blaster and his local designated representative.
- D.** At least five days prior to blasting, the blaster or his designee shall notify all owners of property within 1,000 feet, in writing, by certified mail, that blasting operations are scheduled, indicating when and where said blasting will take place. A copy of the notice and proof of mailing must be submitted to the Building Inspector. In addition, the blaster shall sound a siren or horn loud enough to be heard throughout the designated blast zone five minutes prior to blasting and again 30 seconds prior to blasting, warning all persons that blasting is imminent.
- E.** If the Building Inspector determines that an on-site inspector or police personnel are required during blasting, the permit holder shall reimburse the Village for the cost of all such inspection services and police personnel. The permit holder and the blaster shall make available to the Building Inspector a copy of all seismic readings and data collected regarding any blasting.
- F.** The blasting permit holder shall notify the Building Inspector, or his designated representative, the Police Department and the local Fire Department of an impending blast at least three hours but not more than 12 hours prior to the time each blast is scheduled.
- G.** The material to be blasted shall be properly covered or screened by the blaster to prevent injury or damage to persons or property.
- H.** The blaster on a form approved by the Village Building Inspector shall keep a record of each blast. The permit holder shall retain all such records and blaster as prescribed by state law, and a copy shall be provided to the Building Inspector at the end of each day. Said record shall include the location of each blast; the time of each blast; the number, diameter and depth of each hole and the distance between holes; burden depth; stemming length; make and type of explosives; delay make, number and period; and weather conditions. Seismograph information must also be recorded for each blast and provided to the Building

Chapter 118: EXPLOSIVES AND BLASTING

Inspector; including seismograph serial number; range/gain setting; date of last shake table calibration and microphone calibration; air channel low-frequency limit; exact seismograph location and location in relation to the blast; peak over pressure readout; peak particle velocity readout and the name of the operator.

- I. The permit holder shall immediately notify the Building Inspector of any accident and prepare a report regarding same on a form supplied by the Building Inspector. No further blasting shall be conducted until the Building Inspector has had an opportunity to review the accident report and the permit.
- J. Blasting may only be conducted Monday through Friday between the hours of 9:30 a.m. and 3:00 p.m. No blasting shall take place on weekends and/or legal religious holidays or federal or state holidays.

§ 118-9. Vibration and concussion standards.

- A. The maximum allowable concussion or air blast resulting from blast operations shall not exceed 130 decibels peak, measured at a flat frequency response (2 decibels) over the range of at least six to 200 Hertz.
- B. When blasting is of a continuing nature, 124 to 130 decibels shall be the acceptable range.
- C. The permit holder shall report each blast exceeding acceptable parameters to the Building Inspector within 24 hours. Following a blast exceeding acceptable parameters, the Building Inspector may order all blasting to cease.
- D. When no instrument is used to measure the seismic effect of a blast, the maximum amount of explosives detonated shall not exceed the limits shown in the following table:

Distance Versus Weight of Explosives Method
NOTE: Distances over 60 feet are based on the formula $W=D \times 1.5/90$

Where:

W = weight

D = distance

Distance to Nearest Building (feet)	No. of Pounds per Delay
0 to 5 1/4	
5 to 10 1/2	
10 to 15 3/4	
15 to 60	1 per ft. D
60 to 70	6
70 to 80	7 1/4
80 to 90	9
90 to 100	10 1/2
100 to 110	12
110 to 120	13 3/4
120 to 130	15 1/2
130 to 140	17 1/2
140 to 150	19 1/2

Chapter 118: EXPLOSIVES AND BLASTING

150 to 160	21 1/2
160 to 170	23 1/4
170 to 180	25
180 to 190	28
190 to 200	30 1/2
200 to 220	34
220 to 240	39
240 to 250	42
250 to 260	45
260 to 280	49
280 to 300	55
300 to 325	61
325 to 350	69
350 to 375	79
375 to 400	85
400 to 450	98
450 to 500	115
500 to 550	135
550 to 600	155
600 to 650	175
650 to 700	195
700 to 750	220
750 to 800	240
800 to 850	263
850 to 900	288
900 to 950	313
950 to 1,000	340
1,000 to 1,100	375
1,100 to 1,200	435
1,200 to 1,300	493

- E. When an instrument is used to measure the seismic effect of a blast, the maximum peak particle velocity of any one component of an instrument measuring three-component motion shall not exceed the limits of the following table:

Distance Versus Peak Particle Velocity Method

Distance (feet)	Peak Particle Velocity of Any One Component* (inches per second)
1 to 100	1.50
100 to 200	1.25
200 to 500	1.00

Chapter 118: EXPLOSIVES AND BLASTING

500 to 1,000	.50
Over 1,000	.25

*Note: The measuring instrument's transducer shall be firmly coupled to the ground.

§ 118-10. Demolition.

Any person proposing to demolish any structure in excess of 20 feet in height must agree to pay for the cost of any engineering analysis or other technical study deemed necessary by the Building Inspector to determine if and how blasting can be conducted safely.

§ 118-11 Administration and enforcement.

For the purpose of administering and enforcing this chapter, any duly authorized enforcement officer, Building Inspector, Code Enforcement Officer, the Village's Engineer, the Highway Superintendent, any police officer or any other officer or employee designated by the Village Board, shall have the right to enter into or upon any lands in or upon which explosives are being stored, used, or manufactured to examine and inspect such location and they shall enforce the provisions of this chapter.

§ 118-12. Penalties for offenses.

- A. Any person, including any owner or agent or corporation, who violates any of the provisions of this chapter or any lawful order issued hereunder shall, following conviction, be guilty of a violation.
- B. Any person who violates any provision of this chapter or any lawful order issued hereunder shall, for the first violation, be subject to a fine not to exceed \$2,500 and/or imprisonment for a period not to exceed 10 days. For the second and each subsequent violation, each person shall be subject to a fine not to exceed \$5,000 and/or imprisonment subject to a period of incarceration not to exceed 15 days.

§ 118-13. Judicial review.

Any persons aggrieved by any decision or determination made by the Village Board pursuant to this article may bring a proceeding to review such determination in the manner provided by Article 78 of the Civil Practice Law and Rules.

§ 118-14. Application.

No statement in this article shall be construed to interfere with any additional requirements that may be imposed by any federal, state or local health authority having jurisdiction.

§ 118-15. Supersession of other laws.

This chapter supersedes, and is in derogation of, Chapter 118 of the Code of the Town of Blooming Grove, County of Orange, and State of New York. In addition, it is not intended that this chapter supersede the authority of the County of Orange Department of Health.

Chapter 118: EXPLOSIVES AND BLASTING

§ 118-16. Authority.

This chapter is enacted by authority of § 20, Subdivision 5, of the Municipal Home Rule Law and any other law referenced herein as authority herefor.

§ 118-17. Repeal.

All ordinances, local laws and parts thereof inconsistent with this local law are hereby repealed.

§ 118-18. Effective Date.

This local law shall take effect immediately when it is filed in the Office of the New York State Secretary of State in accordance with section 27 of the Municipal Home Rule Law.