



**GARDINER CITY COUNCIL
AGENDA ITEM INFORMATION SHEET**



Meeting Date	01/19/2022	Department	Planning/Economic Dev
Agenda Item	4.c) Consideration of a First Read to approve a proposed amendment to the Code of Ordinances relating to blasting		
Est. Cost	n/a		

Background Information

Please find attached a memo from our City Planner, Mark Eyermen that defines these changes.

The amendment focuses primarily on assuring that the City is aware of planned blasting activities and that the neighbors are adequately notified of the blasting and when it will occur.

Requested Action	"I move to approve the First Reading of the proposed amendment to the Code of Ordinances relating to blasting. I also move to send it to a Second Read on February 2, 2022."
City Manager and/or Finance Review	Acting City Manager approves the above motion.
Council Vote/ Action Taken	
Departmental Follow-Up	

City Clerk Use Only	1 st Reading _____	Advertised _____	EFFECTIVE DATE _____
	2 nd Reading _____	Advertised _____ w/in 15 Days	
	Final to Dept _____	Updated Book _____	Online _____

To: City Council
From: Ordinance Review Committee/Mark Eyerman
Subject: Blasting Requirements
Date: December 30, 2021

The Ordinance Review Committee has prepared an amendment to the Code of Ordinances dealing with blasting. The proposed amendment creates a new chapter in Title 13 Health and Safety that would be Chapter 13 Blasting. The amendment focuses primarily on assuring that the City is aware of planned blasting activities and that the neighbors are adequately notified of the blasting and when it will occur. The proposed amendment has been reviewed by people involved with blasting.

Here is an outline of proposed ordinance provisions:

- Applicability – applies to all blasting related to demolition, excavation, construction and development.
- Permit – requires a permit from the CEO at least 5 days prior to any blasting. No blasting is allowed until a permit is issued.
- Notification – requires applicant to publish notice of the application for the permit prior to submitting the application and provide written notice to people within 250 feet at least 10 days prior to first blast.
- Blasting notice – requires applicant to provide notice to the CEO at least 24 hours prior to any blast as well as to property owners who request to be notified
- Preblast survey – requires the applicant to offer to conduct a preblast survey for all properties within 250 feet as well as water tests for drinking water wells
- Seismic monitoring – requires the applicant to monitor the blasting and maintain the records.

Proposed Amendment to the Code of Ordinances Relating to Blasting

Amend Title 13 Health and Safety in the Code of Ordinances by creating a new Chapter 13 Blasting to read:

CHAPTER 13 BLASTING

13-1. Purpose. The purpose of this chapter is to protect the public's health, safety, and general welfare by assuring that City staff and officials, property owners in the vicinity of the blast site and the general public are aware of blasting operations within the City, without causing undue financial and administrative hardship to blasting operators.

13-2. Applicability. This chapter shall apply to all blasting operations related to demolition, excavation, construction and development within the City.

13-3 Permit. A blasting permit shall be obtained from the Code Enforcement Officer (CEO) prior to the commencement of any blasting activity. The CEO shall issue a permit only if he/she determines that the applicant will comply with the notice requirements and standards of this chapter. The application for a permit may be approved, approved with conditions or denied by the CEO.

13-4 Application requirements. An application for a blasting permit shall be submitted to the CEO not less than five (5) business days prior to the planned initiation of blasting activities. The application shall be made on a form provided by the City. The application shall include the following:

- (1) Name of applicant;
- (2) Name of property owner;
- (3) Name of the general contractor with overall responsibility for the project;
- (4) Name and qualifications of the person or company to perform the blasting;
- (5) Documentation of State of Maine certification;
- (6) Documentation of insurance;
- (7) Location of blasting operations, including a map of the subject property, and the blast area for which the permit is requested;
- (8) Estimate of the number of cubic yards of material to be removed by blasting;
- (9) Estimated number of blasts required to complete the blasting operation;
- (10) Description of the project for which the blasting is being undertaken;
- (11) Projected dates work is to be undertaken;
- (12) Evidence that notification has been published in a newspaper of general circulation at least ten (10) calendar days prior to the intended date of the commencement of the blasting operations;
- (13) Evidence that notification of property owners has been sent by United States Postal Service (USPS) certified mail at least ten (10) calendar days prior to the intended date of the commencement of the blasting operations;

- (14) Evidence that preblast surveys were offered to property owners;
- (15) Evidence that drinking water well tests were offered to property owners; and
- (16) The permit fee in accordance with the fee schedule adopted by the City Council.

13-5 Standards and requirements. All blasting shall be conducted in accordance with the following standards and requirements:

(1) Hours of operation. Blasting operations, other than the actual blasting, shall be limited to between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, and 7:00 a.m. to 2:00 p.m. on Saturday. The actual blasting shall not occur prior to 8:00 a.m., Monday through Saturday.

(2) Property owner notification requirements. The applicant shall notify all landowners and the owners of any utilities including public water and sewer services within two hundred fifty (250) feet of the proposed blasting operation. Notice shall be sent by United States Postal Service (USPS) certified mail at least ten (10) calendar days prior to the intended date of the commencement of the blasting operations. The notice shall include the blasting schedule, a description of the blasting signals to be used during the operation, an address and telephone number where property owners may request further information and additional notification, information about the no-cost pre-blast survey, and an offer to provide further information, upon written request.

(3) Newspaper notice publication requirements. The applicant shall publish a notice of the proposed blasting in a newspaper of general circulation at least ten (10) calendar days prior to the intended date of the commencement of the blasting operations. The newspaper notice shall include the blasting schedule, a description of the blasting signals to be used during the operation, and a mailing address and telephone number where anyone may request further information and additional notification about the time of blasts.

(4) City notification requirements. After receiving a blasting permit, the blasting contractor or other responsible party shall notify the CEO when a blasting operation is planned. Such notification shall be received at least twenty-four (24) hours prior to the planned detonation and shall give the time of the planned detonation and the location where the blasting is to be done. The notification may be given orally over the telephone; however, the burden of proof as to whether the notification was in fact received rests with the person responsible for the blasting operation.

(5) Additional property owner notification requirements. Prior to any blast, the person responsible for the blasting operation shall inform any property owner who has requested in writing to be so informed of the impending blast. Such notification shall be given by telephone twenty-four (24) hours prior to the blasting operation. The burden of proof as to whether the notification was in fact received rests with the person responsible for the blasting operation.

(6) Preblast survey requirements. The applicant shall offer to hire an independent firm to perform preblast surveys on all buildings within two hundred fifty (250) feet of the blasting area. The survey shall include a written description and either a video or photographic documentation of any preexisting conditions on the inside and outside of each building. At least three (3) documented attempts must be made to physically offer the survey before the landowner may be deemed a non-respondent. All preblast survey documentation shall be held by the independent firm.

(7) Well testing requirements. The applicant shall offer to hire an independent water testing company to perform water tests of all drinking water wells within two hundred fifty (250) feet of the blasting area. The test shall document the turbidity of the well water prior to blasting, as well as the levels of coliform bacteria, e-coli, nitrate, nitrite and ph. At least three (3) documented attempts must be made to physically offer the water test before the abutter may be deemed a non-respondent. The water test results shall be held by the independent water testing company, and upon request, shall be made available to the landowner within fourteen (14) days of such a request.

(8) Seismic monitoring requirements. Either an independent firm, retained at the sole cost and expense of the applicant, or the applicant themselves, shall monitor airblast and vibration for the blasting operations. Instrument(s) shall be installed at the closest point of the building in greatest proximity to the shot to be recorded.

(9) Records maintenance requirements. The person or firm responsible for a blasting operation shall maintain a record of each blast. All records shall be retained for at least five (5) years following the cessation of blasting operations, copies of which shall be provided to the code enforcement office within ten (10) days of request. Such written records shall contain the following:

- (a) Name of person responsible for the blasting operation.
- (b) Location, date(s), and time of blast.
- (c) Name of blaster.
- (d) Type of material blasted.
- (e) Number of holes, burden and spacing.
- (f) Diameter and depth of holes.
- (g) Types of explosives used.
- (h) Amount of explosives used.
- (i) Whether mats or other protections were used.
- (j) Seismograph and airblast readings: when and where measured.

13-6 Definitions. As used in this article, the following terms shall have the meanings indicated:

AIRBLAST—An airborne shock wave resulting from the detonation of explosives. The movement of overburden or the release of expanding gas into the air resulting from the detonation of explosives may also cause airblast. Airblast may or may not be audible.

BLASTING—Any activity entailing the use of explosives for the purpose of producing an explosion to demolish structures or to fragment rock for mining, quarrying, excavation, or construction. Related terms are as defined in the BOCA National Fire Prevention Code and NFPA 495 Explosive Materials Code.

BLASTING OPERATION — Includes all blasting anticipated to be undertaken during the completion of a contract or series of contracts, for demolition, excavation, construction, and development. A blasting operation includes all work involving the preparation, drilling, loading and detonation as well as the excavation and clean-up of the blasted area.

EXPLOSIVES — Any substance, chemical compound, or mechanical mixture that is commonly used for the purpose of producing an explosion for blasting, as defined by this chapter. Initiating devices (detonators, detonating cords, etc.) are also included in this definition.

INDEPENDENT FIRM—A bona fide company approved by the Code Enforcement Officer who is not affiliated with the applicant but is contracted to impartially render services.

PARTICLE VELOCITY — A measure of ground vibration. Particle velocity describes the velocity at which a particle of ground vibrates when excited by a force producing ground motion such as an earthquake or an explosion, measured in inches per second.

SEISMOGRAPH — An instrument that measures and records earthborn vibration induced by the detonation of explosives. The instrument shall produce a direct printout of ground motion frequency, acceleration, particle velocity and amplitude, or produce a record from which any of these parameters can be calculated.