

Community Code Service

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Randy Kerkman, Administrator
Village of Bristol
19801 83rd Street
Municipal Office
Bristol, WI 53104

RE: Blasting Ordinance

Dear Randy and Village Officials:

Enclosed you will find a new Original Ordinance pertaining to blasting activities. This new Ordinance is an amendment to Title 7 Licensing and Regulation [which the Village Board has not earlier reviewed and adopted as part of the recodification]. Thus, I am treating this as an amendment to the existing *Village of Bristol Code of Ordinances*; this created a need for some some format/numbering changes.

Why an Ordinance regulating blasting? The use of explosives for the razing of structures, with nonmetallic mining, and particularly with pylon construction for wind energy towers has been controversial elsewhere – citizens want regulations which strengthen local control. Wind energy systems in particular have been controversial in some communities, although local decisions regarding the actual siting of such systems have been partially pre-empted by state regulations. It is prudent for the Village to have any possible standards enacted which provide some degree of local control over such facilities. Bristol could be targeted as the location of a wind energy system complex given its open lands and proximity to energy-hungry major urban areas.

While this is not a zoning amendment per se, there is a nexus between this Ordinance and zoning. Thus, I recommend that the Plan Commission be provided with a copy of this Ordinance, even though no action is required by the commissioners [the Village Board alone enacts licensing-type ordinances].

However, blasting is an activity which is partially regulated by the state in SPS 305 and 307, Wis. Adm. Code. These Administrative Codes are quite technical. While certain Administrative Code standards are reflected in the enclosed Ordinance, some local provisions are more restrictive, such as the enclosed language on blasting notifications, pre-blasting property inspections, required blasting log information, insurance, etc.

Please note that this is a licensing/permitting Ordinance, not an amendment to the Zoning Code, even though a zoning conditional use permit for most blasting sites is also required and will be

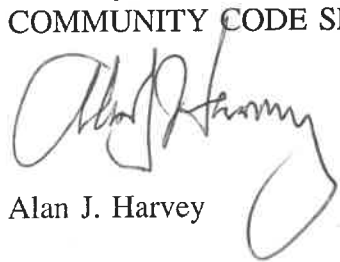
reflected later in your Zoning Code text – a parallel approval process. The reason I took this approach is to not have the Village be completely confined by the strict statutory restrictions which the Legislature has imposed on zoning conditional use permit approvals and conditions, that conditional use permit conditions be based on "substantial evidence" which are measurable. However, no similar restrictions have been imposed on local licensing ordinances. Importantly, a local government has much greater latitude under its licensing authority to require common sense standards.

Also, please note that if the Village ever intends to utilize extraterritorial zoning (ETZ) this licensing Ordinance would need to be re-drafted for use in the ETZ Code, since a municipality cannot impose regulatory or licensing requirements outside of its corporate boundaries other than through zoning regulations. This licensing Ordinance is applicable only within Village municipal boundaries.

Please feel free to contact me if you have questions or if I can be of assistance.

Thank you.

Sincerely,
COMMUNITY CODE SERVICE

A handwritten signature in dark ink, appearing to read "Alan J. Harvey". The signature is fluid and cursive, with a large loop at the end.

Alan J. Harvey

AJH:dsk

Enc.

Ordinance No. _____

An Ordinance Regarding Regulation of Blasting

The Village Board of the Village of Bristol, Kenosha County, Wisconsin, do ordain as follows:

SECTION I. RENUMBERING AND ADOPTION OF PROVISIONS.

Title 7, Chapter 14 is renumbered to Title 7, Chapter 15 of the *Village of Bristol Code of Ordinances* and a new Title 7, Chapter 14 is adopted to read as follows:

Title 7 ► Chapter 14

Blasting

7-14-1	Title; Purpose and Intent; Authority
7-14-2	Definitions
7-14-3	Applicability
7-14-4	Application for Blasting Permit; Required Plans
7-14-5	Application Review Procedures; Determination
7-14-6	Pre-Blasting Structural Surveys; Blasting Notifications
7-14-7	Regulation of Blasting Resultants
7-14-8	Enforcement and Penalty Provisions
7-14-9	Permit Suspension or Revocation

Sec. 7-14-1 Title; Purpose and Intent; Authority.

- (a) **Title.** This Chapter shall be cited as the Village of Bristol Blasting Ordinance and hereinafter referred to as "this Ordinance" or "this Chapter."
- (b) **Requirements.** No person shall use or detonate explosive materials, other than fireworks complying with state and local requirements, in the Village of Bristol unless he/she:
- (1) Possesses a valid State of Wisconsin Blaster's License with the proper classification or is supervised by a holder of a valid State of Wisconsin Blaster's License with the proper classification; and
 - (2) Possesses all necessary state and local permits and complies with all applicable local, state and federal regulations, including, but not limited to, the requirements of this Chapter and SPS 305 and 307 Explosives and Fireworks, Wis. Adm. Code.
- (c) **Purpose and Intent; Authority.**
- (1) The purpose of this Chapter is to regulate the use of explosives in the erection or placement of structures greater than twenty-five (25) feet in height above the ground surface, above or below ground in non-metallic mining operations, and in the demolition of structures that require a state Class 5 Blaster's License or higher per SPS 305.20, Wis. Adm. Code and issued by the Wisconsin Department of Safety and Professional Services (SPS).
 - (2) The intent of this Chapter is to limit the adverse affects of such blasting and use of explosives on persons and/or property outside of any controlled blasting site area, in accordance with Sec. 61.34(1), Wis. Stats., and SPS Chapters 305 and 307, Wis. Adm. Code. This Chapter is adopted to protect the public health, safety and welfare of the residents of the Village of Bristol, and in furtherance of that goal the Village standards herein may be more restrictive than state regulations.

- (3) NFPA 495 Explosive Materials Code (2013), subject to the modifications specified in SPS Ch. 307, Wis. Adm. Code, is also hereby incorporated by reference into this Chapter. The use of explosive materials for blasting shall be executed in accordance with NFPA 495 Chapter 10, per SPS 307.30, Wis. Adm. Code.

State Law Reference: SPS Chs. 305 and 307, Wis. Adm. Code

Sec. 7-14-2 Definitions.

- (a) **Definitions Established.** When used in this Chapter, the terms below shall be defined as follows. In the event the definitions in SPS 307.20, Wis. Adm. Code, are amended, such revised definitions shall be applicable, except where local definitions are more restrictive:
- (1) **Affected Building or Structure Area.** A building or structure extending one-quarter mile [one thousand three hundred and twenty (1,320) feet] from the outer perimeter of a controlled blasting site area.
 - (2) **Airblast.** An airborne shockwave resulting from the detonation of explosives.
 - (3) **Barrier.** An object that separates, keeps apart, or demarcates in a conspicuous manner, such as, but not limited to, warning signs, tape barriers, or cones.
 - (4) **Blast Area.** The area of the blast, as determined by the blaster in charge, within the influence of flying rock, missiles, gases, and concussion.
 - (5) **Blast Site.** The area where explosive materials are handled during the loading of blast holes, including fifty (50) feet in all directions from the perimeter formed by the loaded blast holes. A minimum of thirty (30) feet may replace the fifty (50) foot requirement, if the perimeter of loaded blast holes is marked and separated from the non-blast area outside of the site by a protective barrier. The fifty (50) foot or thirty (30) foot distance requirements, as applicable, apply in all directions along the full depth of the blast hole.
 - (6) **Blaster.** An individual holding, at a minimum, a valid state Class 5, or higher, Blaster's License issued by the Wisconsin Department of Safety and Professional Services as defined in SPS 305.20(1)(b), Wis. Adm. Code. The blaster shall also hold any other licenses required by law to conduct blasting and related activities in the Village of Bristol.
 - (7) **Blaster in Charge.** The qualified person in charge of, and responsible for, loading and firing the blast.
 - (8) **Blasting.** Any method of loosening, moving or shattering masses of solid matter by use of an explosive.
 - (9) **Blasting Operation.** Any operation, enterprise, or activity involving the use of blasting.
 - (10) **Blasting Resultants.** Effects caused by blasting including, but not limited to, projectile matter, vibrations and concussion that can cause injury, damage or unreasonable annoyance to persons or property located outside the controlled blasting site area.
 - (11) **Controlled Blasting Site Area.** An area that surrounds a blast site for which the operator has a legal right and duty to take all reasonable means to assure the safety of persons and property, either because the operator owns the area, the operator has

leased or has some special agreement with the owner of that area, or because the operator or blaster owes a special duty to other persons or property under other applicable regulations or laws.

- (12) **Detonator.** Any device containing a detonating charge that is used for initiating detonation in an explosive. The term includes, but is not limited to:
 - a. Electric blasting caps of instantaneous and delay types initiated by electric current;
 - b. Blasting caps for use with safety fuses;
 - c. Detonating cord delay connectors;
 - d. Non-electric instantaneous and delay blasting caps; or
 - e. Other similar or like devices used for this purpose.
- (13) **Explosion.** The substantially instantaneous release of both gas and heat.
- (14) **Explosive.** 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 Wisconsin Department of Safety and Professional Services by rule.
- (15) **Explosive Materials.** 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.
- (16) **Flyrock.** Rock or karst that is propelled through the air from a blast.
- (17) **Ground Vibration.** A shaking of the ground caused by the elastic wave emanating from a blast.
- (18) **Highway.** Any public street, public alley, public road or record right-of-way easement.
- (19) **Inhabited Building.** A building designed for, or regularly occupied in whole or in part, as a habitation for human beings, or any church, school, 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 for the blasting activity.
- (20) **Karst.** An area of surficial geological features subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include areas with soils less than sixty (60) inches thick over bedrock, caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps, swallets, and depressions with no surface drainage.
- (21) **Nonmetallic Mining (Nonmetallic Mining Operation).** These terms as used in this Chapter can refer to any of the following:
 - a. Extraction from the earth of mineral aggregates or nonmetallic minerals for off-site use or sale, including drilling and blasting as well as associated activities such as excavation, grading and dredging of such materials.
 - b. Manufacturing or processing operations that may involve the use of equipment for the crushing, screening, separation, or blending of the mineral aggregates or nonmetallic minerals obtained by extraction from the mining site or with materials transferred from off-site.
 - c. Manufacturing processes aimed at producing nonmetallic products or by products of such manufacturing processing for sale or use by the operator.

- d. Stockpiling of nonmetallic products for sale or use off-site and stockpiling of waste materials.
- e. Transport of the extracted nonmetallic materials, finished products or waste materials to or from the extraction site.
- f. Disposal of waste materials.
- g. Reclamation of the extraction site.
- (22) **Nuisance.** An excessive, repeated noise, dust, vibration, or other disturbance that would cause an unreasonable annoyance.
- (23) **Operator.** The person who is responsible for the operation at a pit, quarry, mine, or construction site where blasting occurs.
- (24) **Particle Velocity.** Any measure of ground vibration describing the velocity at which a particle of ground vibrates when excited by a seismic wave.
- (25) **Permit (Blasting Permit).** A Village permit or license to engage in blasting or other activities authorized under this Chapter.
- (26) **Powder Factor.** Any ratio between the amount of explosive powder loaded and the amount of rock broken.
- (27) **Primer.** A capped fuse, electric detonator or other detonating device inserted in or attached to a cartridge of detonating sensitive explosive.
- (28) **Stemming.** The inert material, such as drill cutting, used in the collar portion or elsewhere of a blast hole to confine the gaseous products of detonation.
- (29) **Unreasonable Annoyance.** An excessive repeated noise, action, or other disturbance caused by use of explosive materials that is not in compliance with the standards of this Chapter or SPS Ch. 307, Wis. Adm. Code.

Sec. 7-14-3 Applicability.

- (a) **Scope.** This Chapter shall apply:
 - (1) To any person who blasts in the Village of Bristol in order to establish a footing, foundation, or other method of support for the construction, placement or erection of structures greater than twenty-five (25) feet above the ground surface.
 - (2) To any person who conducts blasting in the Village as part of a nonmetallic mining operation.
 - (3) To any person who blasts in the Village in order to demolish buildings or other structures when these require a state Class 5 Blaster's License or higher, issued by the Wisconsin Department of Safety and Professional Services.
- (b) **State and Other Applicable Licenses Requirement.** No Village blasting permit shall be issued to any person unless the operator/operation which is involved in the blasting activity has all necessary State, County and Village permits and is in compliance with all State, County and Village regulations, including, but not limited to, the requirements of this Chapter.

Sec. 7-14-4 Application for Blasting Permit; Required Plans.

- (a) **Acceptance of Responsibility.** Applications for an original or renewal permit to blast shall require an individual who holds a valid Class 5 or higher Blaster's License issued by the Wisconsin Department of Safety and Professional Services to affix their signature accepting responsibility for the blasting activity and its compliance with local and state regulations.
- (b) **Blasting Businesses.** Applications for a blasting permit may be submitted by and issued to a blasting business entity, provided that an individual who holds valid Class 5 or higher Blaster's License issued by the Wisconsin Department of Safety and Professional Services supervises the blasting activities.
- (c) **Regulatory Compliance.** The applicant shall file with the blasting permit original or renewal application copies of all required state and county regulations.
- (d) **Required Original or Renewal Application Information.** The applicant shall sign and submit a completed application form to the Village office together with all additional required documentation. In the alternative to utilizing an application form, the applicant may submit an application letter with the required information. Applications shall be filed with the Village office a minimum of thirty (30) days prior to the projected use date or existing blasting permit expiration date. An application shall be regarded as complete only when the information required by this Subsection has been submitted to the Village. The application shall include the following information on the form or attached to the form or application letter:
 - (1) Applicant's name, address, state blaster license number, land and cell telephone numbers, fax number, and email address of the blaster in charge, including such information if the blaster is someone other than the applicant.
 - (2) Name, address, land and cell telephone numbers, fax number and email address of the person in charge of the operation that blasting will be used to support. This individual shall serve as the contact person with the Village. Also included are all individuals in a partnership, and officers of a corporation, including a limited liability corporation, for which the same information shall be provided.
 - (3) A map showing the location of the blasting site and a description of the operations at the site, including the location of all buildings and structures within one thousand three hundred and twenty (1,320) feet of the blasting site. Also to be provided are the names and contact information of the owners of those buildings and structures.
 - (4) Copies of all county and state permits/licenses which have been granted to the operator for whose operation the blasting is to support.
 - (5) Signature(s) indicating acceptance of responsibility for blasting activity by an individual who holds a valid state blaster's license, with the proper classification, issued by the Wisconsin Department of Safety and Professional Services. The information specified in Subsection (d)(1) above shall be provided if such person is different from the applicant.
 - (6) Proof of insurance as required in Subsection (f) below.
 - (7) A pre-blasting site inspection report.
- (e) **Fees.**
 - (1) The applicant/permittee shall pay required fees at the time of application.

- (2) Each non-adjacent parcel shall require a separate permit and permit fee. For the purpose of this Chapter, properties shall be considered non-adjacent if they have a separate parcel identification number and are not contiguous. Parcels separated by a public road are deemed to be non-adjacent.
- (f) **Certificate of Insurance.** Each permit application, or a renewal or reissuance thereof, shall be accompanied by a certificate of insurance for a commercial general liability policy. The policy shall have limits of coverage of not less than Three Million Dollars (\$3,000,000.00) in the aggregate and One Million Dollars (\$1,000,000.00) per occurrence. The Village of Bristol shall be listed on the policy as a third-party named insured. The permittee shall notify the Village in writing if such insurance policy is cancelled, not renewed or if otherwise no longer in effect, which is grounds for permit revocation.
- (g) **Explosives Use Plan.** Each permit application, or a renewal or reissuance of a permit, shall include a written description of the total area within which explosives are proposed to be used and the blasting procedures to be employed, including types of explosives. Also to accompany this plan are a drawing or aerial photograph, acceptable to the Village, with a scale of no less than 1 inch=100 ft. and which accurately includes all areas and inhabited buildings within one thousand three hundred twenty (1,320) feet of all boundary lines of the property upon which blasting is proposed to occur.
- (h) **Blasting Notifications Plan.** Per this Chapter, each applicant for a permit, including a renewal or reissuance of an existing permit, shall provide the Village with a written blasting notification plan. This plan shall include providing the Village office, Fire Chief and local law enforcement authorities written notice at least twenty-four (24) hours prior to commencement of blasting operations. The notifications plan shall also address the public notification procedure which shall include, at a minimum, conspicuous display of a fluorescent flag and legible sign that will be displayed a minimum of one (1) hour prior to and during all blasting operations.
- (i) **Hours of Operation Plan.** Each applicant for a blasting permit, a reissuance or a renewal of a use permit, shall include a written hours of operation plan. The plan shall acknowledge that blasting shall only be conducted between 8:00 a.m. and 4:00 p.m. Monday through Friday. Permittees, in the event of an emergency, may on occasion, due to special or unique circumstances, has delayed a blast beyond 4:00 p.m., loaded blasting holes may be fired within one (1) hour thereafter; blasting shall not be conducted at other times or on Saturdays, Sundays or legal federal holidays without written permission from the Village President, who shall only grant said permission upon the applicant/permittee showing special, unique and/or extreme need.
- (j) **Site Reclamation or Post-Blasting Plan.** Each applicant for a blasting permit, a reissuance or a renewal of a blasting permit, shall include a written site reclamation or post-blasting construction plan. If the operation involves non-metallic mining, the applicant shall submit a site reclamation plan meeting the requirements of NR 135.19, Wis. Adm. Code. In the interest of avoiding duplication, the plan may incorporate by reference existing plans that meet the requirements of this Chapter and the Wisconsin Administrative Code. If the blasting will occur solely within an approved nonmetallic mining operations site, this plan may simply be a written statement that the site reclamation plan is a component of the nonmetallic mining operation permits and conditional use permit approvals.

- (k) **Blasting Log Plan.** The applicant shall provide with his/her permit application a blasting log plan meeting the requirements of Section 7-14-6(d) below.

Sec. 7-14-5 Application Review Procedures; Determination.

(a) **Review Procedures.**

- (1) **Village Board to Review.** Upon receipt of a complete application for an original or renewal permit, accompanied by required permit fees, the blasting permit application shall be placed on the agenda of the next regularly scheduled Village Board meeting. If the Village Board determines that the permit application is complete and the proposed blasting activity will comply with all applicable provisions of this Chapter and the Wisconsin Administrative Code, the Village Board may grant a blasting permit.
- (2) **Site Inspection.** The filing of an application (original or renewal) shall grant the Village and its staff, consultants and agents the right of access onto the site and contiguous lands owned or leased by the applicant/permittee for the purpose of inspecting the site and adjacent lands for pre-permit issuance inspections, for compliance with any permit under this Chapter, if issued, and for any other purpose relative to this Chapter. Except in emergencies, access shall be granted during normal business hours with reasonable notice to the applicant/permittee or operator. Inspections shall report to the person in charge of the site and comply with established safety regulations.
- (3) **General Review Standards.** Village officials reviewing the application must consider, but not be limited to, the following:
 - a. The application materials.
 - b. Neighboring land uses, including area drainage, water, wetland and floodplain features (if applicable to the proposed blasting site).
 - c. Road/highway/street access and usage, including traffic and circulation.
 - d. Natural beauty and wildlife habitat.
 - e. Quality of life of the neighboring dwellings and inhabited structures.
 - f. Access considerations by emergency services.
 - g. Whether or not the applicant, or permit renewal applicant, is applying as to a legal pre-existing blasting operation and use, and the rights which may have accrued to such application as a result thereof.
 - h. Any other pertinent requirements deemed necessary by the Village Board to minimize, eliminate, alleviate or control unreasonable danger, hazard, risk, harm, or nuisance to people, domestic animals and/or property what exists or could occur as a result of the blasting operation for which the application is made.
- (4) **Public Hearing.**
 - a. Upon receipt of a complete application for an original or renewal permit, the Village shall schedule a public hearing on the application before the Village Board. Notice of the public hearing shall be legally posted in the Village on the designated public viewing locations of the Village, and as a Class 2 notice in a newspaper of general circulation within the Village. In addition, the notice of said public hearing shall be mailed to the last-known address of all property

owners or inhabited structures within one thousand three hundred twenty (1,320) feet of the subject property. Failure to receive such notice shall not invalidate any action taken by the Village Board.

- b. At the hearing, the Village Board shall hear and receive any comments/evidence presented by the applicant (or permittee in the case of a permit renewal) or by an authorized agent. At the conclusion of the applicant's/permittee's, or agent's, presentation, the Village Board shall hear first any public comments from those in support of the application, then from those in opposition to the application, and finally the recommendations, if any, from Village staff and consultants. The applicant/permittee shall be given an opportunity to respond to any adverse comments, evidence or recommendations.
- (5) **Consultants.** In performing its review, the Village Board may consult with outside experts, at the cost of the applicant.
 - (6) **Determination; Application Approval or Denial.**
 - a. Within forty-five (45) days after the public hearing, the Village Board shall either grant, deny, or grant with modifications or conditions the permit application based upon specific findings and conclusions.
 - b. The Village Board may approve an application conditioned upon meeting certain operational and reclamation provisions and standards which shall not be less stringent than the standards set forth in this Chapter.
 - c. In deciding upon an application for a legal pre-existing operation, the Village Board shall take into account the pre-existing nature and circumstances of the operation.
 - d. If the Village Board determines that the application is incomplete or that the proposed blasting activity will not, or cannot, be conducted as required by this Chapter or the Wisconsin Administrative Code, the Village Board shall deny the permit request. The reasons for such denial shall be provided in writing to the applicant.
- (b) **Conditions; Zoning Conditional Use Permit Requirement.**
 - (1) **Permit Conditions.** The Village Board may attach site-specific operational and reclamation conditions to any blasting permit issued, which shall not be less stringent than the minimum standards prescribed in this Chapter. The provisions of the plans required to be submitted as part of an application shall automatically become required conditions of any blasting permit issued by the Village Board, except if modified by the Village Board.
 - (2) **Conditional Use Permit Requirement.** In addition to the blasting permit required under this Chapter, the owner of any blasting site property shall also be required to obtain a zoning conditional use permit pursuant to Title 13 of this Code of Ordinances. The requirements and standards prescribed with a blasting permit shall be attached and incorporated by reference into any such zoning conditional use permit.
 - (c) **Permit Validity.** Blasting permits shall be issued on an annual basis commencing July 1 and ending on June 30. Blasting permits applied for after July 1 shall be prorated from the date of issuance through the end of the permit year [June 30].
 - (d) **Renewal or Reissuance Applications.** When filing for a renewal or reissuance of a blasting permit, the applicant/permittee, or authorized agent, may be exempted from including in the application the following plans: explosives use plan; blasting notification

plan; pre-blasting survey notification plan; reclamation or post-blasting plan; and/or blasting log plan if no changes have occurred or if any specific plan needs to be updated to meet Village or state statutory, administrative code, and/or local ordinance amendments/changes, updated plans will be submitted with the renewal or reissuance application.

- (e) **Appeals.** Appeals from the decision of the Village Board on granting or denying a blasting permit application or renewal application shall be to the Circuit Court of competent jurisdiction.

Sec. 7-14-6 Pre-Blasting Structural Surveys; Blasting Notifications.

(a) Notification Requirements for Pre-Blasting Surveys.

- (1) ***Twenty-Four Hour Minimum Notification of Local Blasting; Pre-Blasting Structural Survey Requests.*** At least twenty-four (24) hours prior to initial blasting operations at a blasting site, the blaster in charge shall make a reasonable effort to notify in writing or verbally all residents or owners of affected dwelling and other structures within six hundred and fifty (650) feet of the blasting site that a blasting operation is to begin. The blaster in charge shall offer to perform a pre-blasting survey. With the permission of the property owner or resident(s), pre-blasting surveys shall be conducted to determine the condition of all buildings within six hundred and fifty (650 feet) of the blast site(s); the quality of water in all wells in that area, including public water supply wells, shall be tested prior to the onset of blasting. [The Village elects to have a more restrictive affected area definition in the interest of standardization and fairness than that prescribed in SPS 307.41(2), Wis. Adm. Code].
- (2) ***Pre-Blasting Survey Required Information.*** The pre-blasting surveys shall be completed at the applicant's expense. Each survey shall provide the name, address, telephone number(s) and email addresses of the resident or owner of said buildings, structures, and/or wells, and shall document any pre-blasting presence or absence of damage or other physical factors that could reasonably be expected to be affected by the use of explosives. The purpose of a pre-blasting survey is to establish a baseline record of the pre-existing condition of a structure or well against which the effects of blasting can be assessed. Pre-blasting surveys should include the exterior and interior of the buildings.
- (3) ***Property Owner/Resident Survey Copy.*** If a resident or owner requests a copy of the pre-blasting survey, the blaster in charge shall provide a copy for not more than the actual cost of the copy within forty-eight (48) hours of the request [SPS 307.41(1)(a), Wis. Adm. Code]. Except as provided below, only one (1) initial pre-blasting survey is required for a blast site.
- (4) ***Private Well Testing.*** The testing of wells shall determine whether the water is safe for human consumption according to established drinking water quality standards, including standards applicable to children of all ages and pregnant women. If the blasting for which a permit application is being made is part of an operation that has already been permitted and that tested wells within a timeframe acceptable to the Village, information regarding those tests shall be submitted instead of testing the wells again.

- (5) **Public Well Testing.** Where public water service exists, the Village may require a pre-blasting survey of such water lines within one-quarter mile (1,320 feet) of the blast site(s).
- (b) **New Buildings and Structures.** If any new building or structure is erected or a new well drilled subsequent to the effective date of the permit, the property owner or resident may request a survey to be done of that building or well and the permittee shall conduct that survey, at the permittee's expense. In addition, if a building or structure is improved and the cost of the improvement exceeds fifty percent (50%) of its fair market value prior to the improvement, the owner of that building or structure may request that a pre-blasting survey be completed at the permittee's expense.
- (c) **State and Local Blasting Notification Requirements.** In addition to the above locally required pre-blasting survey notification requirements, SPS 307.31(b), Wis. Adm. Code, requires the following state blasting notifications:
- (1) **Non-Quarry State Blasting Minimum Notifications.** Any person conducting blasting operations in the Village at a location other than a mine, pit or quarry shall notify the Village and the Wisconsin Department of Safety and Professional Services ("Department"), local Fire Department, and the law enforcement agency serving the Village of the first date on which blasting is scheduled and the location of the blasting operation. Notification shall be made on forms provided by the Department [(608) 266-2112 or email dsps@wisconsin.gov]; such notification shall occur a minimum of ten (10) days prior to the first date on which blasting is scheduled to occur.
- (2) **Quarry Operation State Blasting Minimum Notifications.**
- a. Each calendar year before annual blasting begins at a mine, pit or quarry located in the Village, the person conducting blasting operations shall notify the Village and the Wisconsin Department of Safety and Professional Services that blasting is about to begin. Notification shall be made on forms provided by the Department and occur at least ten (10) days prior to the date on which blasting is scheduled to begin. Unless notification of annual or subsequent blasting is requested by the local Fire Department or law enforcement agency serving the Village, or is required by municipal ordinance, only one (1) initial notice to the Department each calendar year is required.
- b. The Village elects that local notifications for blasting with mines, pits and quarries shall occur as prescribed in Section 7-14-4(h) above.
- (d) **Storage of Explosives.** No storage of explosive material on-site is permitted.
- (e) **Blasting Log Plan.**
- (1) **Requirement.** Each applicant for a blasting permit, or a reissuance or renewal of such permit, shall include with the application submittal a written blasting log plan. The plan shall include a written blasting log plan. Such plan shall include an example of the type of blasting log to be used; a description on how it will be maintained; and the identity of the responsible person who will provide a complete copy to the Village within three (3) days of a request for a copy of such log. Per SPS 307.31(4), Wis. Adm. Code, a blasting log shall be required for each blast fired.
- (2) **Retention Period.** As required by SPS 307.31(4)(b), Wis. Adm. Code, all blasting logs shall be kept on file by the blaster for a minimum period of three (3) years and shall be made available to state and local officials upon request.

- (3) **Log Analysis.** The Village Board may require the permittee to provide to the Village an analysis of any particular blasting log to be prepared by the permittee. In the event the permittee will not or cannot prepare a reliable analysis, the Village may obtain such an analysis from an independent consultant at the permittee's expense. The permittee shall also be liable for the reasonable cost of any independent analysis if it is determined, after an opportunity to be heard before the Village Board, that this Chapter was violated by the permittee.
- (4) **Required Log Information.** Each blasting log shall include, but not limited to, the following information:
- a. Name, signature and state license number of the blaster in charge of the blast;
 - b. Blast location references, including address, bench and station number, if applicable;
 - c. Date and time of the blast;
 - d. Weather conditions at the time of the blast;
 - e. Diagram/sketch and cross-section of the blast hole layout;
 - f. Number of blast holes;
 - g. Blast hole diameter and depth;
 - h. Spacing of blast holes;
 - i. Maximum holes per delay;
 - j. Maximum pounds of explosives per delay;
 - k. Depth and type of stemming used;
 - l. Total pounds and type of explosives used;
 - m. Distance to nearest inhabited building not owned by the permittee or blaster in charge;
 - n. Distance of blast hole to groundwater;
 - o. Type of initiation used;
 - p. Seismographic and airblast information, which shall address:
 1. Type of measuring instrument and last calibration date;
 2. Exact location of instrument, with date, time and distance from the blast noted;
 3. Name, telephone number, email address, and company affiliation of the person taking the reading;
 4. Name, telephone number, and email address of the person and company analyzing the seismographic and airblast data when required;
 5. Vibrations and airblast levels recorded;
 6. Trigger levels for ground and air vibrations; and
 7. Copy of seismographic printout.

Sec. 7-14-7 Regulation of Blasting Resultants.

- (a) **Section Purpose.** It is the purpose of this Section to provide for uniform limits on permissible levels of blasting resultants consistent with Secs. SPS 307.40, 307.43, and 307.44, Wis. Adm. Code, to reasonably assure that blasting within the Village does not cause damage, injury or unreasonable annoyance to persons or property outside of the controlled blasting site area. [SPS 307.40, Wis. Adm. Code]. The Village exercises it

police powers to require some provisions which are more stringent than in the Wisconsin Administrative Code.

- (b) **Blast-Monitoring Instrumentation.** All seismographs used to determine compliance with this Chapter shall meet the following minimum specifications, as prescribed in SPS 307.43, Wis. Adm. Code:

- (1) **Seismic Frequency Range:** 2 to 200 Hz, plus or minus 3 Hz.
- (2) **Acoustic Frequency Range:** 2 to 200 Hz, plus or minus 1 Hz.
- (3) **Velocity Range:** 0.02 to 4.0 inches per second.
- (4) **Sound Range:** 110 to 140 dB linear.
- (5) **Transducers:** Three (3) mutually perpendicular axis.
- (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 the manufacturer's recommendations.
- (8) **Printout:** Direct printout showing time, date, peak air pressure, peak particle velocity and frequency in three (3) directions and a printed waveform graph of the event depicting measured air blast and particle velocity in the three (3) directions.

- (c) **Monitoring Location.** The permittee shall monitor all blasts at the closest location to the controlled blast area of any affected building or structure beyond the controlled blast area, provided, however, that the permittee may monitor at another location approximately the same distance from the perimeter of the controlled blast area, if the permittee is unable to obtain permission to conduct the monitoring from the owner of the preferred location. The Village Board, at its discretion, may require the relocation of the monitoring equipment to a more suitable site.

- (d) **Control of Adverse Effects.**

- (1) **General Requirements.** Blasting shall be conducted so as to prevent injury, damage or unreasonable annoyance to persons or 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 the controlled blasting site area.
- (3) **Airblast.**
 - a. Airblast shall not exceed 133 peak dB at the location of any structure, dwelling, public building, place of employment, school, church, community or institutional building, or any other type of inhabited structure outside and beyond the controlled blasting 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. The maximum ground vibration at the location of any dwelling, public building, or place of employment outside the controlled blasting site area shall be in accordance with the blasting level chart found in SPS 307.44(4), Wis. Adm. Code.

- b. All structures in the vicinity of the controlled blasting site area not listed in Subsection (c)(3)a above, such as water towers, pipelines and other utilities infrastructure, 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(s).
- c. The blaster shall use ground vibration limits specified in Figure 7.44 of SPS 307.44(4), Wis. Adm. Code, to determine the maximum allowable ground vibration. Ground vibration shall be measured as the particle velocity. Particle velocity shall be recorded in three (3) mutually perpendicular directions.
- d. 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 Wisconsin Department of Safety and Professional Services and the Village.
- e. For quarry operations, the blaster shall report any ground vibration levels to the Village that are above 0.75 inch per second with frequencies less than 40 Hz.
- (5) **Reporting Adverse Effects.** The blaster in charge shall report to the Village and the Wisconsin Department of Safety and Professional Services any flyrock, airblast, or ground vibration which does not meet the requirements herein.
- (6) **More Restrictive Local Standards.** The Village reserves the right to require more restrictive regulations than those in this Section as conditions to a blasting permit issued under this Chapter and/or pursuant to a zoning conditional use permit.

Sec. 7-14-8 Enforcement and Penalty Provisions.

- (a) **Enforcement.** The following are some criteria that the Village Board may consider, but not limited to, for renewal, issuance, suspension or revocation of a blasting permit:
 - (1) Compliance with the blasting standards established by the Village as noted herein by this Chapter or conditional use permit.
 - (2) Development and submittal to the Village of the application materials required by this Chapter.
 - (3) Compilation and submittal to the Village when requested of the blasting log required by this Chapter, and compliance with the operation plan with the required information.
 - (4) Maintaining the insurance required by this Chapter.
 - (5) Compliance with the hours of operation for blasting established by this Chapter.
 - (6) Compliance with airblast and ground vibration standards prescribed by this Chapter.
 - (7) Compliance with the pre-blasting notification requirements to area persons and the Village as required by this Chapter.
 - (8) Remedial steps made by the applicant/permittee to comply with the provisions of this Chapter.
 - (9) Consideration of unanticipated atmospheric conditions including, but not limited to, geophysical conditions and other conditions beyond the control of the applicant/permittee.

(b) **Penalties.**

- (1) In addition to the suspension or revocation by the Village Board of a blasting permit under this Chapter and/or a zoning conditional use permit pursuant to the Village Zoning Code [Title 13], any applicant/permittee, or other person in violation of such provisions, or who shall fail to obtain a blasting permit as required hereunder shall, upon conviction of such violation, be subject to a forfeiture in an amount not less than Five Hundred Dollars (\$500.00) nor more than Five Thousand Dollars (\$5,000.00) for each day of continued violation, together with the costs of prosecution. Any default of such forfeiture(s) determined by a court of competent jurisdiction shall be subject to the penalties provided in Secs. 66.0109, 66.0113, 66.0114 and 66.0115, Wis. Stats., as may be amended. In addition, the Village may seek injunctive relief.
- (2) Each violation and each day of violation continues or occurs shall constitute a separate offense. Nothing in this Chapter shall preclude the Village of Bristol from maintaining any appropriate action to prevent or remove a violation of any provision of this Chapter.

Sec. 7-14-9 Permit Suspension or Revocation.

- (a) **Verified Complainants.** Unless expressly provided herein or by other *Village of Bristol Code of Ordinances* provisions, a blasting permit may be suspended or revoked for substantial noncompliance with this Chapter after hearing, except when an emergency situation exists, as determined by the Village Board, whereas the blasting permit may be suspended temporarily for a set time period. Prior to any action for suspension or revocation, the Village must receive a written complaint concerning the blasting permit or the related conduct of the applicant/permittee. The following persons may file a verified written complaint with the Village Board:

- (1) Village President.
- (2) Village Administrator.
- (3) Village Trustees, by majority vote.
- (4) Village Zoning Administrator or Building Inspector.
- (5) Law enforcement authorities.
- (6) Plan Commission Chairperson.
- (7) A landowner within one thousand (1,000) feet of the blasting site.

(b) **Complaint Sufficiency; Hearing; Village Board Actions.**

- (1) The Village Board will make a determination regarding if the allegations described in the complaint are of sufficient importance, magnitude or otherwise of such a nature as to require a formal evidentiary hearing.
- (2) The applicant/permittee or person subject to charges for violation of any Village ordinance addressing aspects of the blasting operation, or any violation of a condition of the blasting permit, shall be provided a copy of the complaint and notice of hearing before the Village Board. The scheduling of the hearing shall be not less than ten (10) days nor more than thirty (30) days after the date of receipt of the notice, unless stipulated in writing by the Village Board and the applicant/permittee or the person the subject of the complaint.

- (3) The applicant/permittee or person subject to the complaint alleging violation(s) of this Chapter, any other provision of Village ordinances, or any violation of a condition of a Village blasting permit shall be entitled to the following:
 - a. Representation by legal counsel.
 - b. Right to present and cross examine witnesses.
 - c. Right to subpoena witnesses by the Village President issuing subpoenas to compel attendance of witnesses.
 - (4) The Village Board, following the hearing, may act as follows:
 - a. Revoke the blasting permit.
 - b. Suspend the blasting permit for a date certain.
 - c. Request additional information as an interim decision prior to taking a future action.
 - d. Take no action on the blasting permit as a final decision; such a decision will allow the blasting permit to remain in place.
 - (5) The Village Board's decision shall be mailed to the applicant/permittee or person complained against by certified mail.
- (c) **Appeals.** The final decision of the Village Board to revoke or suspend a blasting permit shall be subject to appeal to Circuit Court, which appeal shall be filed with the Circuit Court not later than forty-five (45) days from the mailing date of the Village Board's decision.

SECTION II. SEVERABILITY.

If any provision of this Ordinance is invalid or unconstitutional or if the application of this Ordinance to any person or circumstance is invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the other provisions or applications of this Ordinance which can be given effect without the invalid or unconstitutional provisions or applications.

SECTION III. EFFECTIVE DATE.

This Ordinance shall take effect upon passage and publication as provided by law.

ADOPTED this ____ day of _____, 2023.

VILLAGE OF BRISTOL, WISCONSIN

Village President

Village Clerk

INTRODUCED: _____

ADOPTED: _____

PUBLISHED: _____

State of Wisconsin:

County of Kenosha:

I hereby certify that the foregoing Ordinance is a true, correct, and complete copy of an Ordinance duly and regularly enacted by the Village Board of the Village of Bristol on the ____ day of _____, 2023 and that said Ordinance has not been repealed or amended and is now in full force and effect.

Dated this ____ day of _____, 2023

Renee Brickner, Village Clerk