# \*BLASTING - BLASTING - BLASTING\* !!STOP!!

## **READ ALL INFORMATION PROVIDED PRIOR TO COMPLETING BLASTING APPLICATION**

Please familiarize yourself with requirements for blasting in Greene County. It is important to understand that the Greene County Resource Management Department will enforce these regulations.

Attached to this application is a copy of the amended Requirements (Section 1803) for blasting that have been Adopted by Greene County under the <u>2006 International Building Code</u>. Make yourself aware of these requirements and understand that the Greene County Resource Management Department will enforce these regulations.



## **BLASTING PERMIT INFORMATION**

As set forth in the adopted Greene County Building Regulations, the following items are required prior to issuance of a permit for blasting:

### 1. Completed application.

- 2. Proof of ownership for parcel.
- 3. Copy of current license for blaster conducting blasting work.
- 4. Proof of insurance for blasting liability in the amount of no less than \$1,000,000 per incident and \$2,000,000 per project on an occurrence basis.
- 5. Pre-blast survey\* OR
- 6. Signed statement by property owner or authorized agent verifying that no blasting will be conducted within certain distances as prescribed by regulations. (Copy of statement to be signed is attached.)

\*Pre-blast survey must be submitted to the Resource Management Department a minimum of 48 hours prior to blasting.

### **GREENE COUNTY BUILDING REGULATIONS**

417-868-4015 940 N. Boonville, Springfield, MO 65802 Telephone: Resourcemanagement@greenecountymo.gov

Fax: 417-868-4175

	PERMIT APPLICATION
****FOR	R OFFICE USE ONLY****
ECEIVED BY:	PERMIT # PERMIT COST APPLICATION BLASTER LICENSE INSURANCE PRE-BLAST SURVEY SIGNED STATEMENT BY OWNER OR AUTHORIZED AGENT
	OWNERSHIP
1. Permit for: 🛛 Residential Addition	Residential Remodel
2. Permit Issued To:	Contractor/Installer
3. Name of Recorded Property Owner:	
Mailing Address:	
	Mobile/Evening Phone:
Email Address:	
4. Contractor/Installer Information:	
Work/Day Phone: Mobile/Evening Phone:	
Email Address:	
5. Work Site Address: (Must be approved by the second seco	he Greene County Addressing Office—Room 305).
6. EXACT Directions to Work Site: (Must furnis	sh nearest intersection of county and/or state roads.)
7. When will blasting begin?	
8. How long will blasting continue?	
9. Have you conducted your Pre-Blast Survey?	🗆 Yes 🛛 No

*A copy of that survey <b>MUST</b> be provided to this office <b>PRIOR</b> to commencing	work. Blasting permit is not valid until submitted.
**If no Pre-Blast Survey submitted, attached letter <b>MUST</b> be signed.	
*****	*******
By my signature below, I affirm that I am the property owner or his/her legally au	thorized representative.
PRINT NAME:	DATE:
SIGNATURE:	PERMIT NO

## **Owner (or Legally Authorized Agent) Statement:**

I hereby certify that no blasting shall be done within three hundred fifty (350) feet of a building, residential or other structure, railway or highway, utility, water well or any other installation. I further certify that no blasting shall be done within five hundred (500) feet of a cave, spring, or designated historic site.

Please Print Name of Recorded Property Owner or Legally Authorized Agent

Signature of Recorded Property Owner or Legally Authorized Agent

Date

### EXCERPT FROM THE 2006 BUILDING CODE ADOPTED BY GREENE COUNTY ON MAY 7, 2007 / EFFECTIVE JULY Ì, 2007)

Amend all chapters of the Building Code that makes reference to any section contained in the repeal of Chapter I by directing all references to Greene County Commission Order dated July 6, 2004, and to those sections in said Order that correspond in content to the referenced section.

#### h. Section 1803 is amended to add the following:

1803.7 Grading Permit Requirements. A grading permit must be obtained from the Resource Management Department for any multi-family residential or non-residential building site. The permit may be waived by the department if less than one (1) acre of land will be disturbed by grading operations as provided in Section 114.3 of the Greene County Storm Water Design Standards.

1803.8 Blasting Requirements. A permit must be obtained from the Resource Management Department for use of explosive materials in any building, facility or on any property.

1803.8.1 Application Requirements. In order to obtain a blasting permit, a written application must be submitted on forms provided by the Department. The application must be signed by the owner of the property or their legally authorized representative.

**1803.8.2 Definitions.** For the purposes set forth in this section the following definitions shall apply:

Administrator shall mean the Administrator of the Resource Management Department or his designated representative.

**Blaster** shall mean a competent person meeting the qualifications set forth in Sections 1803.8.3 or 1803.8.4.

Blasting area shall mean the area where explosives are loaded and detonated, and where there is a high risk of injury due to explosion or flying debris.

1803.6.3 Blaster Qualifications. Blasting operations shall be conducted only by approved, competent blasters familiar with the required safety precautions and the hazards involved and in accordance with the provisions of NFPA 495.

A blaster shall be considered qualified if he or she:

- \$ holds a current blaster=s license issued by the City of Springfield, or
- \$ has successfully completed a blaster=s certification course by ISEE (International Society of Explosive Engineers), MLPA (Missouri Limestone Producers Association) or other recognized testing agency and has kept the certification current. Such individual will be considered as having fulfilled the requirements of NFPA 495, Section 2-4.2.

A qualified blaster must be present on site during the entire period in which explosives are transported, handled, loaded and defonated and shall remain on site until the AAll Clear@ signal has been given.

1803.8.4 Blaster Who Has Not Been Previously Certified: A blaster who has not been previously certificated by a recognized testing agency shall provide documentation of a minimum of two (2) years or two thousand (2,000) hours of experience using explosives as a regular part of employment. Written confirmation of this experience must be provided by a current or former employer.

1803.8.5 Required Insurance Coverages: The blasting contractor or operator of a facility engaged in blasting shall provide proof of insurance for blasting liability in the amount of no less than \$1,000,000 (one million dollars) per incident and \$2,000,000 (two million dollars) per project on an occurrence basis.

1803.8.6 Hours of Operation Restricted: Surface blasting operations shall be conducted only between the hours of 8:00 a.m. and 5:00 p.m. local time, Monday through Friday, unless otherwise approved in writing by the Administrator.

1803.8.7. Protection of Property and Utilities. No blasting shall be done within three hundred fifty (350) feet of a building, residential or other structure, railway, or highway, utility, water well or any other installation until a pre-blast survey has been completed and a report stating the precautions to be taken to minimize earth vibrations and air blast effects has been submitted.

1803.8.8 Protection of Natural and Historic Resources. No blasting shall be done within five hundred (500) feet of a cave, spring, or designated historic site unless approved in writing by the Administrator.

1803.8.9 Pre-Blast Survey: The blaster shall be responsible for conducting pre-blast surveys where required. The pre-blast survey shall consist of photographic, video tape, and written descriptions of existing conditions of the structure or other property or utility surveyed. Any cracks or other visible defects in walls, chimneys, foundations, sidewalks, settlement of utility trenches, etc., shall be noted. The objective is to document pertinent conditions that may potentially be affected by or attributed to the blasting operations.

Pre-blast surveys shall be submitted to the Resource Management Department a minimum of forty-eight (48) hours prior to blasting

The pre-blast survey for a water supply well shall document:

- \$ The casing depth of the well.
- \$ \$ Total depth of the well.
- Static level of the well.
- Estimated yield of the well.

1803.8.10 Notice to Property and Utility Owners: At least seventy-two (72) hours prior to any blasting, written notice shall be delivered to all property and utility owners or managers within the pre-blast survey area and shall contain at a minimum:

- Blasting contractor(s) or facility operator=s name, address and phone number. \$
- \$ \$ Starting and ending dates of blasting.
- Approximate times of day blasting will occur.

\$ \$ Location of blasting site.

Name of the owner of the blasting site.

**1803.8.11 Monitoring Requirements.** A minimum of one (1) seismograph shall be used on all blasting areas. Additional seismographs may be required by the Administrator if deemed necessary. Seismographic data shall be submitted to the Resource Management Department on a daily basis. Certification shall be submitted to verify the calibration of the seismograph and the accuracy of the data. Seismographs must be kept in a tamper resistant housing.

Seismic reading shall not exceed 1.0 IPS (Inches Per Second) at the closest structure or well.

Sound levels shall not exceed 140 decibels at the seismic area.

1803.8.12 Record Keeping Requirements. The blaster shall maintain all seismographic and pre-blast survey records for a period of one (1) year following the blasting operation.

**1803.8.13 Blasting Area Security.** During the time that holes are being loaded or are loaded with explosive materials, blasting agents or detonators, only authorized persons engaged in drilling and loading operations or otherwise authorized to enter the site shall be allowed at the blast site. The blasting area shall be guarded or barricaded and posted. Blasting area security shall be maintained until after the post-blast inspection has been completed.

1803.8.14 Signage: For electrically initiated blasts or blasts which may be affected by two-way radios or cellular phones, proper signage shall be set on all streets, roads or highways within one thousand (1,000) feet of the blasting area unless otherwise approved by the Administrator, declaring ABLAST AREA - TURN OFF TWO-WAY RADIOS and NO CELLULAR PHONE USAGE. @ For other blasting proper signage shall be set on all streets, roads or highways within one thousand (1,000) feet of the blasting area unless otherwise approved by the Administrator, declaring ABLAST AREA.@

**1803.8.15 Warnings and Precautions:** No blast shall be fired until the blaster has made certain that all surplus explosive materials are in a safe place in accordance with Section 3304, and that all persons and equipment are at a safe distance or under sufficient cover, and that the proper warnings have been given as follows:

- The blast area must be visually inspected and cleared of people and/or animals. a.
- b. Three (3) five to ten (5 to 10) second soundings from a siren, air horn or other approved warning device with a minimum sound level of one hundred forty (140) decibels at one hundred (100) feet shall be sounded.

**1803.8.16 Post-Blast Procedures.** After the blast, the following procedures shall be observed:

- a. No person shall return to the blast area until allowed to do so by the blaster in charge.
- b. The blaster shall allow sufficient time for smoke and fumes to dissipate and for dust to settle before returning to or approaching the blast area.
- The blaster shall inspect the entire blast site for misfires before allowing other personnel to return to the blast area. c.
- An ALL CLEAR<sup>®</sup> voice command shall be given after the blast and when the post blast procedures have been d. completed.

1803.8.17 Misfires. Where a misfire is suspected, all initiating circuits shall be traced and a search made for unexploded charges. Where a misfire is found, the blaster shall provide proper safeguards for excluding all personnel from the blasting area. Misfires shall be reported to the blasting supervisor immediately. Misfires shall be handled under the direction of the person in charge of the blasting operation in accordance with NFPA 495.

**1803.8.18** Fly Rock. No fly rock shall leave the immediate blasting area. Blasting mats or other protective means shall be used when conditions warrant to prevent fragments from being thrown.

**1803.8.19** Manufacturer=s Instructions. Blasting operations shall be performed in accordance with the instructions of the manufacturer of the explosive materials being used.

1803.8.20 Non-Electric Detonator Precautions. Precautions shall be taken to prevent accidental discharge of electric detonators from currents induced by radar and radio transmitters, lightning, adjacent power lines, dust and snow storms, or other sources of extraneous electricity.

1803.8.21 Non-Electric Detonator Precautions. Precautions shall be taken to prevent accidental initiation of non-electric detonators from stray currents induced by lightning or static electricity.

**1803.8.22** Drill holes. Holes drilled for the loading of explosive charges shall be made and loaded in accordance with NFPA 495.

**1803.8.23 Removal of Excess Explosive Materials.** After loading for a blast is completed and before firing, excess explosive materials shall be removed from the area and returned to the proper storage facilities.

**1803.8.24** Initiation Means. The initiation of blasts shall be by means conforming to the provisions of NFPA 495.

**1803.8.25** Connections. The blaster shall supervise the connecting of the blast holes and the connection of the loadline to the power source or initiation point. Connections shall be made progressively from the blasthole back to the initiation point. Blasting lead lines shall remain shunted (shorted) and shall not be connected to the blasting machine or other source of current until the blast is fired.

Amend Section 3410.2 Applicability, by adding the effective date of adoption of this Code. 0.

#### **SECTION IV. Savings Clause.**

Nothing in this Order or in any International Code hereby adopted and amended shall be construed to affect any suit or proceeding now pending in any court or any rights acquired or liability incurred nor any cause or causes of action accrued or existing, under any act or amendment hereby repealed, or shall any right or remedy of any character be lost, impaired, or affected by this amendment.