

**CITY OF GARDEN RIDGE, TEXAS  
ORDINANCE 34-0?2011**

AN ORDINANCE OF THE CITY OF GARDEN RIDGE TEXAS PROHIBITING BLASTING, WITHIN THE CITY LIMITS; PROVIDING FOR LIMITED EXEMPTION PERMIT; ESTABLISHING REGULATIONS PERTAINING TO BLASTING; ESTABLISHING CRIMINAL AND CIVIL PENALTIES FOR VIOLATIONS; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE; PROVIDING FOR SEVERABILITY; INCLUDING A REPEALER CLAUSE; AND DECLARING AN EFFECTIVE DATE

**WHEREAS**, the City of Garden Ridge, Texas has created the Quarry Commission of the City of Garden Ridge, Texas (hereafter the “Quarry Commission”) to study and report on the operation of Excavation sites, Surface Mining Operations, and Blasting within and adjacent to the City of Garden Ridge, Texas;

**WHEREAS**, the City, through its Quarry Commission has extensively studied (delete “spent several years studying”) Excavation sites, Surface Mining Operations, and Blasting both generally and within and adjacent to the City of Garden Ridge and the related impact the land use of excavation sites and surface mining operations have on property value, development, the economy, employment, property taxes and the public and communities who live and work adjacent to such land use;

**WHEREAS**, the City, through its Quarry Commission has extensively studied (delete “spent several years studying”) the activity of Blasting, both generally and in connection with Excavation sites, Surface Mining Operations and in connection with other development, demolition and construction uses and its impact on property value, development, the economy, employment, property taxes and the public and communities who live and work adjacent to such activities;

**WHEREAS**, the City, through the Quarry Commission has received local citizen input, industry input, and has obtained advice and counsel from professional consultants in the industries related to and supporting Excavation sites, Surface Mining Operations, and Blasting, and has developed recommendations presented to the City Council in the form of local ordinances;

**WHEREAS**, the City, through its Quarry Commission held numerous public meetings, sought input from professionals in the industry and the community, and considered all the information provided and available to the City, including historical information related to operation and impact of Excavation sites, Surface Mining Operations, and Blasting (including but not limited to the achievable level of performance for Blasting activities) over the last several years, and after significant, complex and detailed deliberations, has formulated and presented information demonstrating a need for the City of Garden Ridge, Texas to pass this ordinance, exercising its general police power and powers to control nuisances to protect and preserve the health, safety and general welfare of the public in connection with Excavation sites, Surface Mining Operations and Blasting;

**WHEREAS**, the City recognizes the related value of Excavation sites, Surface Mining Operations, and the ability to use Blasting techniques in certain development, demolition, and/or commercial activities;

**WHEREAS**, this ordinance is enacted to address the need to reasonably balance the City's obligations of protecting property interests and public safety of all impacted by Blasting in the operation of Excavation sites, Surface Mining Operations and the use of Blasting in commercial activities with the rights of the public to expect and receive protection of their property values, their property, public safety, health & welfare interests, **environmental concerns with respect to particulate air quality (dust), water quality and quarry operational noise**, including the quality of life within the City.

**WHEREAS**, the Quarry Commission presented a proposed ordinance to the Planning & Zoning Commission to consider the land use elements of its recommendations for use to amend the City's Zoning regulations;

**WHEREAS**, the City conducted all necessary public hearings and all other acts necessary and has met all conditions precedent to the adoption and enforcement of this ordinance, including publication upon its passage;

**WHEREAS**, the City of Garden Ridge, Texas finds that Excavation sites, Surface Mining Operations, and Blasting (including not only the use of Blasting for exploration and/or production and removal of Minerals, but for other development and construction related uses within the City) should be generally prohibited within the City, and only permitted otherwise under limited circumstances to be regulated by this Ordinance;

**WHEREAS**, the City of Garden Ridge, Texas finds and adopts the attached Blasting data demonstrates and supports the Blasting regulations set forth in this ordinance and do not infringe on the rights of and/or improperly infringe upon any land use, or unreasonably interfere with any reasonable investment backed expectations of existing property owners regulated by this ordinance. (See Attachment A – Blasting Data)

**WHEREAS**, the City of Garden Ridge, Texas possesses the police power of the state, which is delegated to cities by law, and hereby invokes such power to aid in the enforcement and the adoption this ordinance.

**NOW THEREFORE, BE IT ORDAINED BY THE CITY OF GARDEN RIDGE, TEXAS:**

**SECTION 1: CITY OF GARDEN RIDGE, ORDINANCE 34:**

The City Council of the City of Garden Ridge, Texas hereby revokes and repeals in its entirety the now existing Ordinance 34, and replaces it by the adoption of the regulations contained in this Ordinance.

## SECTION 2: DEFINITIONS

All technical industry words or phrases related to Excavation sites, Surface Mining Operations, and Blasting not specifically defined in this Ordinance shall have the meanings customarily attributable thereto by prudent and reasonable persons in the field of excavation, surface mining and Blasting unless otherwise provided in this Ordinance. The following words, terms, and phrases, when used in this Ordinance, shall have the meanings ascribed to them in this section.

**Air Overpressure or Air Blast**<sup>1</sup> is the airborne shock wave or acoustic transient generated by an explosion. As this air wave (measured in decibels (dBL)) contacts structures, it causes walls to vibrate.

**Blasting**<sup>1</sup> shall mean the firing of any Explosive Material that generates seismic waves and/or Air Blast. It does not include or apply to those explosives generally referred to as “fireworks”, which is governed under a separate ordinance.

**Decibel** shall mean a unit of sound pressure commonly used to measure Air Blast from explosives.

**Excavation** means the act of digging, mining or otherwise removing Minerals. This term does not include site grading or other site development activity that has been reviewed and/or authorized by the City of Garden Ridge; or site preparation activities on land that is the subject of a then applicable development permit or agreement with the City.

**Explosive Material**<sup>1</sup> is a term which includes, but is not necessarily limited to, dynamite and other high explosives, slurries, water gels, emulsions, blasting agents, black powder, pellet powder, initiating explosives, or any other similar Blasting materials used in Excavation activities, as well as any detonators, safety fuses, squibs, detonating cord, igniter cord, and igniters.

**Flyrock** means the fragments of rock thrown and scattered during quarry blasting.

**Frequency** refers to how many waves occur within a second, which is measured in Hertz.

**Hertz** is a term used to express the frequency of ground vibrations and Air Blast; one hertz is one cycle per second.

**Minerals** shall mean shall include coal, lignite, uranium, clay, sand, hard rock, soil or other substances of value (commercial or otherwise), from natural deposits on or in the earth.

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<sup>1</sup> See generally ISEE (International Society of Explosive Engineers), Blasters Handbook 18<sup>th</sup> Edition 2011.

## NOISE

**Noise** shall mean any undesired sound, especially a statistically random and persistent disturbance that provokes strong discomfort on the part of those people experiencing the noise.

**Noise Level** is the weighted sound pressure level called sound level

**dBA** is the term used to measure noise and involves quantifying both the rate (frequency in Hz) and intensity (pressure) relative to normal atmospheric pressure. People do not perceive all frequencies with same sensitivity and are more responsive to higher frequencies. A dBA sound level measurement weighs the various frequency components of sound as perceived by the human ear in order to yield a single number indicator of its relative intensity.

**Peak Particle Velocity (PPV)**<sup>1</sup> the measure of the intensity of ground vibration, specifically the velocity of motion of the ground particles as they are excited by the wave energy.

**Regulatory Authority** shall mean the City of Garden Ridge, Texas.

**Partial Exemption Permit** means a permit issued from the City, for a single event or for continuing operations, for a maximum term of 12 months, or that remaining to the end of the City's Fiscal Year, to be renewed annually from fiscal year to fiscal year, permitting a person to conduct Blasting activities otherwise prohibited by this Ordinance.

**Surface Mining** means the mining of Minerals by Excavation or other commercial removal of the overburden lying above the natural deposit of Minerals and mining directly from the natural deposits that are exposed and those aspects of underground mining having significant effects on the surface.

**Surface Mining Operation** means those Surface Mining activities conducted at or near an Excavation site and concomitant with Surface Mining including extraction, storage, processing and shipping of minerals and reclamation of the land affected.

### SECTION 3: BLASTING PROHIBITED.

All Blasting within the City's municipal limits is prohibited.

Any violation of any state or federal law, rule or regulation related to Blasting now in effect or in effect at the time of the violation is additionally prohibited by this Ordinance.

### SECTION 4: SCOPE AND APPLICABILITY:

1. Nothing contained herein is intended to, nor shall it be interpreted to mean, that future action of the Regulatory Authority is in any manner is regulated, affected or constrained by the terms of this Ordinance; rather, all Regulatory Authority operations are specifically exempted from the provision of this Ordinance.

## **SECTION 5: PARTIAL EXEMPTION PERMITS - BLASTING**

The City of Garden Ridge, Texas may, by the issuance of a Partial Exemption Permit, allow a person to engage in an activity contrary to the prohibitions contained in this Ordinance upon a finding of the following conditions:

1. Partial Exemption Permits may be issued for Blasting. Such permits may be issued by the City Council upon the finding of a complete application for a Partial Exemption Permit to conduct Blasting within the City limits as provided by this Ordinance. All applications for Partial Exemption Permits must be in the form as provided in Attachment C.
2. The City Council shall evaluate all information pertinent to the Partial Exemption Permit request exercising reasonable discretion to ensure the aspects contained in the findings of this ordinance are adequately being remediated by the applicant. If the City Council finds inadequate remediation, it may deny the application or move to authorize the City to mediate with the applicant before taking final action on the application. The City Council will endeavor to make a determination with regard to the Partial Exemption Permit within ninety (90) days of the receipt of the administratively complete petition. The decision of the City Council is final and not subject to appeal.
3. Any Partial Exemption Permit otherwise approved by the City Council is not valid unless any and all conditions are met and all fees are paid in full.
4. Blasting with a Partial Exemption Permit must be conducted pursuant to the limitations and conditions provided for such Blasting in this Ordinance.
5. All quarry blasting and surface mining operations are to be in strict compliance with any and all local, state and federal regulations and permits with respect to environment including air quality, water quality and noise pollution.

## **SECTION 6: REGULATIONS ON BLASTING WITH PERMIT**

1. All Blasting activity conducted by Partial Exemption Permit shall comply with the following regulations:
  - a) **Distance Requirements** - No blasting shall occur within 1,000 feet of the property line of any person unless the owner of the affected real property issues written permission, which must be filed with the City prior to the

Blasting taking place. A Permit Holder, upon application and fee, may request assessment of a shorter distance requirement, based on technology and blasting materials used, for consideration to waive this requirement, upon a finding that such blasting will be performed in such a way not to increase the impact such blasting at distances within 1,000 feet would have on adjacent property owners or the general public.

- b) **Timing** - No Blasting shall occur on Saturdays, Sundays and legal holidays. Blasting operations shall only occur between the hours of 9:00 a.m. and 4:30 p.m. Monday through Friday. The permit holder shall notify the Regulatory Authority, or its designee, at least 10 minutes prior to and after each Blast. In the case of circumstances resulting in a potential danger to public safety requiring the detonation of explosives outside this time period, notification and approval of the detonation outside this time limitation may be obtained from the either the Chief of Police or City Administrator. Each request and determination made shall be reported to the Quarry Commission.
- c) **Air Blast Limit** – Air Blast shall not exceed 125dB
- d) **Ground Vibration Limit** – Ground vibration shall not exceed the frequency based PPV limit of 70% of the USBM Z-Curve. See Attachment D.
- e) **Air Particulate Limit** – Air Particulates shall not exceed the limits as identified in any required city, state or federal permits obtained by the quarry or its blaster. A copy of all such permits shall be filed with the City upon any new or renewal application for Partial Exemption Permit(s).
- f) **Noise Limit** – Noise shall not exceed 85 dBA. Noise at or in excess of 85 dBA, when monitored at the quarry property line or a residence, shall constitute a noise level that is deemed reasonably calculated to disturb the peace and unreasonably offensive to the public.
- g) **Flyrock control** – Flyrock traveling in the air or along the ground shall not be cast from the Blasting site beyond the area under the control of the operator.
- h) **Third-Party Monitoring** – all Blasting shall be monitored by a third-party selected by the City to accumulate data with respect to the seismographic, frequency and Air Blast effects of said Blasting activities. Additionally in order to monitor environmental effects of blasting and surface mining operations with respect to particulate air quality and operational noise, monitor(s) may be utilized at designated locations to take air samples and record noise levels during quarry operations.
  - i. Single event blasting operations, such as pool excavations or basement excavations may be monitored at the discretion of the third-party consultant retained by the City.
  - ii. Any Blasting operations taking place beyond single events shall be regularly monitored and such monitoring shall be performed at a minimum of three different locations. While the location of all monitoring devices will remain at the discretion of the Regulatory Authority, the Regulatory Authority, or its designee, will seek to

recover, at least on a monthly basis, all data obtained from other than single event monitoring locations. In all cases, one of the monitoring locations shall be at the closest permissible real property line from each blast site.

1. A seismographic record including both particle velocity and vibration-frequency levels shall be maintained for each blast.
  2. Seismographs shall be self-triggering and capable of recording three mutually perpendicular components of ground motion time histories, in terms of velocity. Additionally, the units shall be capable of recording Air Blast levels and reporting the frequency as well as peak values for all vibration time histories.
  3. Seismographic units shall be calibrated annually to ensure the units are operating within the specifications.
  4. Air particulate monitor(s) shall be able to sample air on a continuous or intermittent basis and record air particulate size consistent with quarry operational air permitting requirements. Records documenting air quality compliance shall be made available to the City upon request or upon application for renewal of Partial Exemption Permit(s). Permit holders shall demonstrate compliance with air quality requirements.
  5. Noise monitor(s) shall be capable of monitoring and recording on a continuous or intermittent basis any noise level in excess of 80 dBA.
- iii. All monitoring data obtained by monitoring devices used to monitor quarry operations including blasting activities and environmental effects shall be posted for public inspection at City Hall and shall be available for inspection by the public. Data will be provided on a monthly basis and shall be posted at City Hall (electronic posting on the City's internet site will satisfy this posting requirement is available).
- g) **Proof of Insurance** – Permit Holder shall have in effect \$10,000,000 of insurance insuring against any loss or damage suffered by a third-party and shall provide to the City all information necessary in order to verify insurance and that would allow a person to file a claim. The city shall make the information available to any person wishing to file a claim.
- h) **Annual Fee** – Any Permit issued is automatically revoked for lack of payment of the required fee, or for failure to comply with this section. If the fee is not paid by the date the Permit is issued and the date of any subsequent renewal such revocation is automatic. If it is for the failure to comply with another provision of this section, a Permit Holder may obtain a 30 day extension upon request for Action on the next City council meeting to discuss violation and request exemption from the revocation provision. If Permit Holder's permit expires, there is no refund of any

fee paid and the permit holder must re-apply for a new permit should they wish to continue Blasting activities within the City.

- i) **Inspection of Records** – as a condition of the Permit, any Permit holder shall allow City designees to observe all Blasting activity to ensure compliance with this Ordinance and shall make all business records available for inspection to the Regulatory Authority, to the extent necessary to ensure compliance and enforcement of this Ordinance. Any request for records shall be fulfilled within 7 days of request. Failure to provide such access and/or inspection or records constitutes a voluntary surrender of any such permit effective upon the failure by the Permit holder.
2. Any real property owner who permits Blasting activities on their property in violation of this Ordinance violates this Ordinance and is held jointly and severally responsible for any such civil or criminal penalty, cost or fee, including attorney's fees expended in the pursuit of enforcing this Ordinance.

#### **SECTION 7: ENFORCEMENT & INSPECTION**

1. This Ordinance shall be enforced by the Regulatory Authority and its designated agencies or representatives through all means available by law.

#### **SECTION 8: PENALTIES**

1. Violation of any non-administrative provision of this Ordinance is a class C misdemeanor and upon conviction shall be punished by a fine of \$500 per occurrence. Each section of the ordinance violated constitutes a separate violation and each day a violation occurs is a separate violation.
2. Violation of any non-administrative provision of this article that results in harm to the public safety or welfare shall be subject to a fine of \$2,000 upon conviction. Additional remedies and civil penalties may all be sought and assessed.
3. The Regulatory Authority may immediately seek additional remedies at law, or in equity, to prevent a violation of this Ordinance.
4. Concurrent with any criminal prosecution, the City may for any violation of this ordinance, seek up to \$1,000 per day as a civil penalty for any violation of this ordinance in addition to declaratory and injunctive relief in an action to enforce this ordinance pursuant to Texas Local Government Code Chapter 54, as amended.
5. The Regulatory Authority may immediately seek additional remedies at law, or in equity, to prevent blasting by any party who does not have a Permit..
6. The Regulatory Authority may revoke a Blasting Permit where the permit holder has demonstrated a pattern of intentional or repeated violations of this Ordinance.

A pattern of violations is established upon three final convictions, for substantive and not administrative violations, within a 12 month period not otherwise overturned on appeal.

**SECTION 9: SEVERABILITY**

The provisions of this Ordinance are declared to be severable. If any section, sentence, clause, or phrase of the Ordinance shall for any reason be held to be invalid or unconstitutional by a court of competent jurisdiction, such decisions shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance, but they shall remain in effect; it being the legislative intent that this Ordinance shall remain in effect notwithstanding the validity of any part. In the event that changes are made to Texas Health & Safety Code §§ 342 or 343, or Texas Transportation Code § 683, the provisions of state law will govern in the event of a conflict.

**SECTION 10: REPEAL**

All former ordinances, including the prior Ordinance 34 is repealed and all other ordinances or parts of ordinances in conflict with any of the provisions of this ordinance are hereby repealed insofar as the same is in conflict with the provisions hereof.

**SECTION 11: NOTICE**

The City Secretary for the City of Garden Ridge is hereby directed to publish notice of this Ordinance as required by the laws of the State of Texas.

**SECTION 12: FEES**

All fees assessed in this ordinance shall be determined by amending Ordinance No. \_\_\_\_ which is the City's Fees ordinance and are subject to change without prior notice.

**SECTION 13: EFFECTIVE DATE**

This ordinance shall become effective immediately upon its passage, approval and publication as provided by law. The prohibitions against Blasting contained herein shall not be enforceable for a period of 90 days (during which time the predecessor Ordinance 34 will remain in effect), to permit any such activities to come into compliance with this Ordinance.

Passed and approved this \_\_\_\_ day of \_\_\_\_\_ 2011.

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Jay F. Feibelman, Mayor

Attest:

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Shelley Goodwin, City Secretary