

# **Noise Ordinance**



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# LAS CRUCES POLICE DEPARTMENT MEMORANDUM

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**Date:** December 3, 2013

**To:** Robert Garza, City Manager

**From:** James A Chavez; Interim Chief of Codes

**Subject:** Work session for January 13<sup>th</sup> 2014

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I will be presenting a brief summary on the current noise ordinance and the use of noise meters for the scheduled City Council Work Session January 13, 2014. I will discuss the pros and cons of the noise meters and answer any questions that may occur.

# Noise

## Sec. 19-121. - Prohibited.

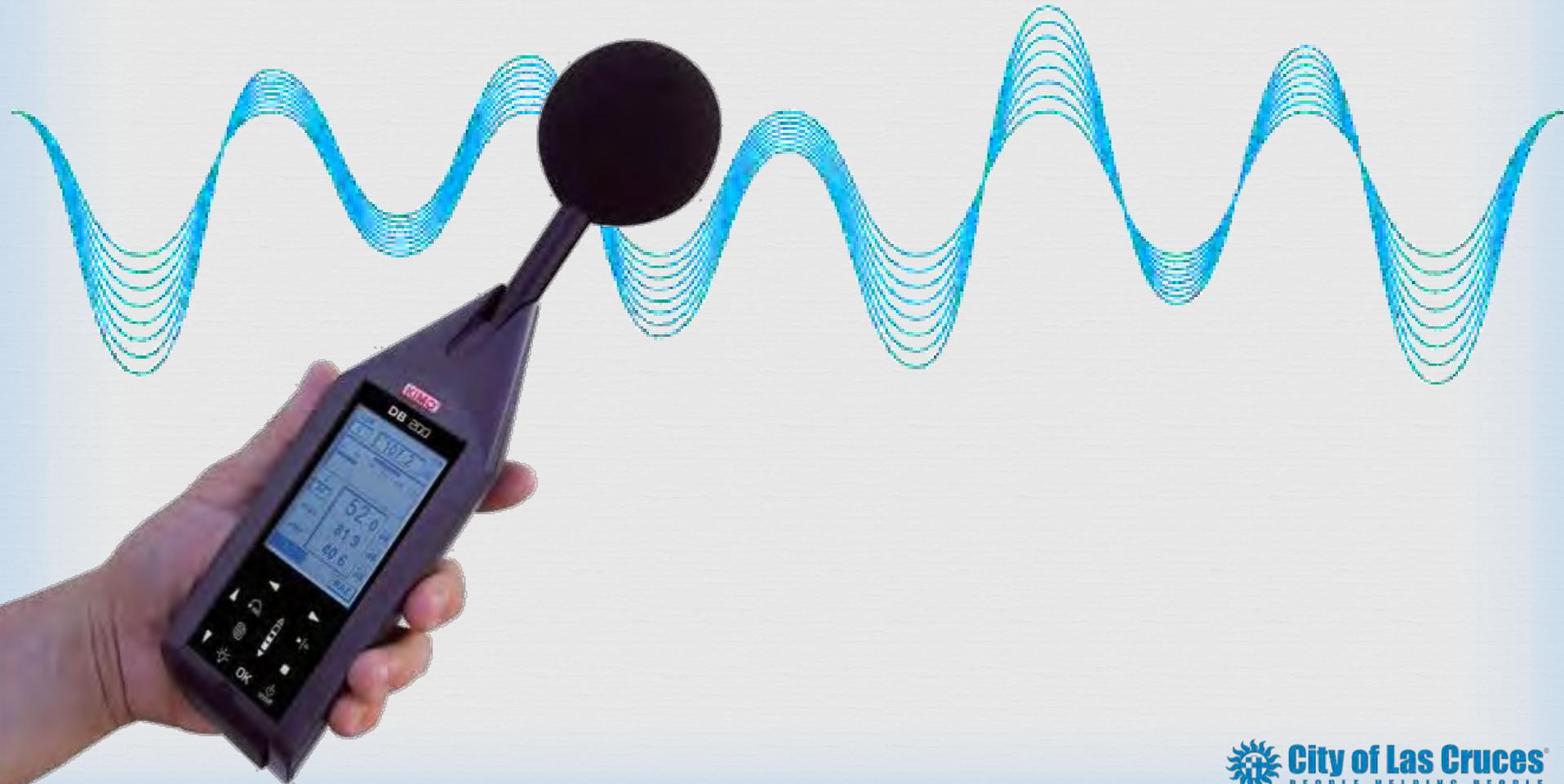
- 1) It shall be unlawful for any person to make, continue or cause to be made any loud or unusual noise which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of others.
  
- 2) It shall be prima facie evidence of a violation of this division if any loud or unusual noise is audible by any person or police officer at a ***distance of 30 or more feet from the source or causes a person or police officer to be aware of the vibration accompanying the sound at a distance of 30 or more feet from the source.***

# Noise

## Examples of Prohibited Noise

- **Horns and Signaling Devices**
- **Radios and Phonographs**
- **Loudspeakers and Amplifiers**
- **Yelling or Shouting**
- **Animals**
- **Pounding**
- **Mufflers and Exhaust Devices**
- **Construction, Repair or Demolition Work**
- **Vehicular Sound Amplification Systems**

# USING A NOISE DECIBEL METER



Activity	Noise Level (dB(A))	Apparent Loudness	Typical Physical Response
Rock music peak	150		Danger
Military jet	130	512 times as loud	Limited ability to hear amplified speech. Noise may cause pain and brief exposure can injure unprotected ears
Air raid siren			
Shotgun			
Thunderclap	110-115	Over 128 times as loud!!	Maximum vocal effort. Can damage hearing after 15 minutes exposure per day
Sand-blasting			
Squealing pigs			
Amplified Rock Music			
Jet takeoff @ 500m	100	64 times as loud	Can damage hearing after 2 hours exposure per day.
Train horn @ 30m			
Heavy truck @ 15m			
Busy city street	90	32 times as loud	Very annoying. Can damage hearing after 8 hours exposure per day.
Lawn mower			
Loud shout			
Busy traffic intersection			
Motorway construction site	80	16 times as loud	Annoying
Motorway traffic @ 15m			
Roadside traffic	70	8 times as loud	Telephone use difficult
Train horn @ 500m			
Noisy restaurant			
Fortissimo singer 3 ft. away			
Normal piano practice			
Light car traffic @ 15m	60	4 times as loud	Intrusive
City or commercial areas			
Ringling Telephone			
Noisy office			
Normal speech			
Background music			
Quiet office	50	2 times as loud	Speech interference
Suburban area with medium transportation density	40	Arbitrary Base Reference Level	Quiet
Kitchen/bathroom			
Leaves rustling	30	1/2 as loud	Very quiet
Very soft music			
Public library			
Living/dining/bedroom			
Soft whisper @ 5m	10	1/8 as loud	Just audible
Threshold of hearing	0	N/A	Not audible

Not all decibel meters offer the same capabilities and features. A lot of them are capable of noise measurement levels of 30 up to 130 decibels.

However, there is also a number of noise meter devices that have a wider measurement range that is capable of detecting audio that would seem distorted to the naked ear.

# Types of sound level meters:

Sound level meters also vary widely in quality.

The higher quality meters (recommended) are designed to meet international standards such as IEC 60651, IEC 60804 and ANSI S1.4 and are graded as type (or class) 0-3.

- **Type 0:** Suitable for making high-precision measurements (in a scientific laboratory, for example). Yearly calibration and certification required.
- **Type 1:** Slightly less accurate, but still suitable for high-precision work. Yearly calibration and certification required.
- **Type 2:** Suitable for more general use, but not really for lab-quality measurements.
- **Type 3:** Which are considerably less expensive, are less accurate again and only really suitable for rough survey work or for making preliminary measurements.

# Decibel levels within an Noise Ordinance :

*(What other Municipalities are doing with in the region)*

## Similarities between Noise Ordinance Levels:

Municipalities such as Santa Fe, Albuquerque and El Paso all have some sort of decibel noise level incorporated within their noise ordinances.

Levels are divided by different Noise Zones

- a) **Zone 1:** All single, double and multiple-family residential structures or property.
- b) **Zone 2:** All commercial properties.
- c) **Zone 3:** All manufacturing or industrial properties.

# Decibel levels within an Noise Ordinance :

*(What other Municipalities are doing with in the region)*

## Similarities between Noise Ordinance Levels:

Levels are divided by different Noise Zones

Zone	Time Interval	Exterior Noise Level
1	2200hrs-0700hrs	50db(A)
	0700hrs-2200hrs	55db(A)
2	2200hrs-0700hrs	60db(A)
	0700hrs-2200hrs	65db(A)
3	2200hrs-0700hrs	65db(A)
	0700hrs-2200hrs	70db(A)

# Decibel meters as enforcement tools

The advantage of using decibel meters (*according to conversations with other agencies*) is the help in setting zoning districts.

With zoning boundaries set, the meters are a good tool enforcing noise pollution between districts.

Codes Officers from other agencies utilize meters mostly on indoor noise complaints in Commercial Districts in places such as Night Clubs

# Decibel meters as enforcement tools

Difficulties in using meters in a residential zone :

- No standard of measuring distance.
- Officers from other agencies measure from the complaint source; this can be a problem when you don't have a complaint source (*most of the time the source of the complaint is unknown*)
- The time involved in getting a measurement when the complaining source is known.
- Time of complaint; the noise maybe gone by the time an officer arrives to investigate.
- You should also consider the environment wherein you will be using a sound meter. Decibel meters are designed to work best in enclosed spaces and thus would not give the optimum reading if used outdoors.

# Estimated cost of decibel meters

- A high quality professional Type 1 meter is recommended for a true and accurate reading and are used by other agencies.
- The meters can cost in the range of \$500-\$2500 per unit depending on manufacture.
- Additional cost is a yearly calibration cost of \$150-\$250 per unit. (Units must be sent back to manufacture for proper calibration and for a manufacture calibration certification documents) *Based on conversations we had with other agencies in the region that utilizes sound meters.*
- Training on the units is minimal.

# LCPD Noise Complaint Response

In 2012 LCPD Officers responded to 145,998 calls for service with in the city.

3101 of those calls were noise disturbance complaints.

Noise disturbance complaints accounted for 2.12% of total call volume.

# Equipping LCPD with Noise Meters

It would require a minimum of 12 units per LCPD patrol shift; Day, Swing and Graveyard for adequate coverage and response time.  
*(A total of 36 units to be shared among @ 80 Officers)*

# Codes Noise Complaint Response

In 2012 Codes Officers responded to 35,724 calls for service with in the city.

57 of those calls were noise disturbance complaints.

Noise disturbance complaints accounted for 0.16% of total call volume.

# Equipping Codes with Noise Meters

It would require a minimum of 6 units for 14 Codes Officers for adequate coverage and response time.