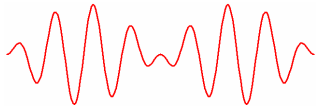


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Environmental Noise Regulations

A Guideline for Arizona Environmental Noise Criteria

Environmental Noise Criteria

Arizona does not have a state noise regulation. It is left to the Towns and Cities of Arizona to form their own noise regulation, however most communities in Arizona do not have well defined noise criteria.

The following presents a discussion of noise standards in other cities and states that can be used as a guideline for what is reasonable to accept. A summary of the noise regulations is shown in Table 1.

Town of Gilbert, Arizona

The Town of Gilbert Noise Ordinance (Section 42-61) limits noise radiating to residential receivers to 55 dBA during daytime hours (5 AM to 10 PM) and 45 dBA during nighttime hours (10 PM to 5 AM).

City of Mesa, Arizona

The Mesa City Code (Section 6-12-5) limits noise to residences to a 24 hour L_{eq} of 60 dBA.

City of Albuquerque, New Mexico

The Albuquerque General Noise regulation (9-9-12) states that it shall be unlawful to cause noise in excess of 50 dB(A), or 10 dB(A) above the ambient noise level, whichever is higher at any residential property line.

Regulation	Noise Limit (dBA)		Comments
	Daytime	Nighttime	
Town of Gilbert, AZ	55	45	
City of Mesa, AZ	60		24 hour L_{eq}
City of Albuquerque, New Mexico	50 or increase of 10 dBA		
City of Salt Lake City, Utah	55	50	
State of Colorado	55	50	L_{eq}
State of Oregon	55	50	L_{50} - New operations can increase existing levels by no more than 10 dBA
State of Massachusetts	Increase of 10 dBA		
State of Minnesota	60	50	Approximate L_{eq} noise levels
ADOT	64 or increase of 15 dBA		L_{eq} during the peak traffic hour
HUD	65		DNL

Table 1: Summary of Noise Criteria

City of Salt Lake City, Utah

The Salt Lake City Health Regulations (#21 Section 9.1) limits noise radiating to residential property to 55 dBA during daytime hours (7 AM to 10 PM) and 50 dBA during nighttime hours (10 PM to 7 AM).

State of Colorado

The State of Colorado Statutes (Chapter 25, Article 12, Section 103 (1) and (2)) limit the noise radiating to a residential property to 55 dBA during daytime hours (7 AM to 7 PM) and 50 dBA during nighttime hours (7 PM to 7 AM).

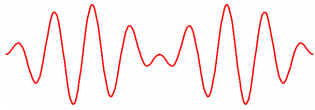
State of Oregon

The Oregon Department of Environmental Quality

(DEQ) noise regulations (OAR 340-35-035) limit noise radiating to residences to an L_{50} (about the same as an L_{eq}) of 55 dBA during daytime hours (7 AM to 10 PM) and 50 dBA during nighttime hours (10 PM to 7 AM). In addition, new industrial and commercial operation cannot increase the existing ambient noise level by more than 10 dBA. The Oregon DEQ (OAR 340-35-040) defines "Sports Facility Noise Impact Boundaries" as the DNL 55 dBA noise contour on the day of maximum projected use.

State of Massachusetts

The state of Massachusetts Air Pollution Control Regulation (310 CMR 7.10) states



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Forever realize that
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- Nelson Mandela

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ENVIRONMENTAL NOISE REGULATIONS (CONTINUED)

that a source of sound will be considered to be violating the Department's noise regulation if the source increases the sound level by more than 10 dBA above the existing ambient noise level.

State of Minnesota
Minnesota Pollution Control Agency Noise Pollution Control Regulation (7030.0040) states that noise radiating to residential property is limited to an L_{50} (about the same as an L_{eq}) of 60 dBA during daytime hours (7 AM to 10 PM) and 50 dBA during nighttime hours (10 PM to 7 AM)

U.S. Department of Housing and Urban Development (HUD)
HUD uses the day-night average sound level, abbreviated DNL, to evaluate external noise environments at a site. A DNL of 65 dBA or less is considered acceptable.

Arizona Department of Transportation (ADOT)
The Arizona Department of Transportation (ADOT) design guideline is used to determine when noise mitigation measures (such as noise walls) are appropriate to reduce the noise radiating from a highway to residences. The ADOT policy defines an impact as peak

hour traffic L_{eq} noise level of 64 dBA or more and/or a 15 dBA increase. Where noise impacts occur, mitigation must be considered.

Many of the regulations use different noise descriptors and different periods of time; however, some generalizations can be made. For most of the noise regulations evaluated, daytime hours are between 7 AM and 10 PM and the noise level at residential receivers is limited to 55 dBA. Nighttime hours are between 10 PM and 7 AM and the noise limit is 50 dBA. In addition, an increase of no more than 10 dBA is generally considered reasonable.

