Section 9
Noise

SECTION 9

NOISE

Goal 9.A: To protect County residents from the harmful and annoying effects of exposure to excessive noise.

Policies

9.A.1. New development of noise-sensitive uses shall not be permitted where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 9-1 as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 9-1.

9.A.2. Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 9-1 as measured immediately within the property line of lands designated for noise-sensitive uses: provided, however, the noise created by occasional events occurring within a stadium on land zoned for university purposes may temporarily exceed these standards as provided in an approved Specific Plan.

9.A.3. The County shall continue to enforce the *State Noise Insulation Standards (California Code of Regulations*, Title 24) of the *California Building Code* and *Placer County Code Article 9.36, Noise.*

9.A.4. Impulsive noise produced by blasting should not be subject to the criteria listed in Table 9-1. Single event impulsive noise levels produced by gunshots or blasting shall not exceed a peak linear overpressure of 122 db, or a C-weighted Sound Exposure Level (SEL) of 98 dBC. The cumulative noise level from impulsive sounds such as gunshots and blasting shall not exceed 60 dB L_{Cdn} or $CNEL_C$ on any given day. These standards shall be applied at the property line of a receiving land use.

9.A.5. Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 9-1 at existing or planned noise-sensitive uses, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in the project design. The requirements for the content of an acoustical analysis are listed in Table 9-2.

9.A.6. The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 9-3.

9.A.7. The County shall purchase only new equipment and vehicles which comply with noise level performance standards based upon the best available noise reduction technology.

9.A.8. New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources, including airports, which exceed the levels specified in Table 9-3, unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table 9-3.

9.A.9. Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 9-3 or the performance standards in Table 9-3 at outdoor activity areas or interior spaces of existing noise sensitive land uses.

9.A.10. Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 9-3 or the performance standards of Table 9-1, the County shall require submission of an acoustical analysis as part of the environmental review process so that noise mitigation may be included in

the project design. At the discretion of the County, the requirement for an acoustical analysis may be waived provided that all of the following conditions are satisfied:

a. The development is for less than five single-family dwellings or less than 10,000 square feet of total gross floor area for office buildings, churches, or meeting halls;

b. The noise source in question consists of a single roadway or railroad for which up-to-date noise exposure information is available. An acoustical analysis will be required when the noise source in question is a stationary noise source or airport, or when the noise source consists of multiple transportation noise sources;

c. The existing or projected future noise exposure at the exterior of buildings which will contain noise-sensitive uses or within proposed outdoor activity areas (other than outdoor sports and recreation areas) does not exceed 65 dB L_{dn} (or CNEL) prior to mitigation. For outdoor sports and recreation areas, the existing or projected future noise exposure may not exceed 75 dB L_{dn} (or CNEL) prior to mitigation;

d. The topography in the project area is essentially flat; that is, noise source and receiving land use are at the same grade; and

e. Effective noise mitigation, as determined by the County, is incorporated into the project design to reduce noise exposure to the levels specified in Table 9-1 or 9-3. Such measures may include the use of building setbacks, building orientation, noise barriers, and the standard noise mitigations contained in the *Placer County Acoustical Design Manual*. If closed windows are required for compliance with interior noise level standards, air conditioning or a mechanical ventilation system will be required.

9.A.11. The County shall require one or more of the following mitigation measures where existing noise levels significantly impact existing noise-sensitive land uses, or where the cumulative increase in noise levels resulting from new development significantly impacts noise-sensitive land uses:

a. Rerouting traffic onto streets that have available traffic capacity and that do not adjoin noise-sensitive land uses;

b. Lowering speed limits, if feasible and practical;

c. Programs to pay for noise mitigation such as low cost loans to owners of noise-impacted property or establishment of developer fees;

d. Acoustical treatment of buildings; or,

e. Construction of noise barriers.

9.A.12. Where noise mitigation measures are required to achieve the standards of Tables 9-1 and 9-3, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measure have been integrated into the project.

Goal 9.B: To ensure that areas designated for industrial uses pursuant to Goal 1.E. and Policy 1.E.1. are protected from encroachment by noise-sensitive land uses.

Policies

9.B.1. The County shall require that new noise-sensitive land uses established next to existing industrial areas be responsible for self-mitigating noise impacts from industrial activities.

9.B.2. The County shall apply noise standards in a manner consistent with encouraging the retention, expansion, and development of new businesses pursuant to Goal 1.N. and Policy 1.N.2.

9.B.3. Because many industrial activities and processes necessarily produce noise which will likely be objectionable to nearby non-industrial land uses, existing and potential future industrial noise emissions shall be accommodated in all land use decisions.

TABLE 9-1

ALLOWABLE Ldn NOISE LEVELS WITHIN SPECIFIED ZONE DISTRICTS [1]
Applicable to New Projects Affected by or Including Non-Transportation Noise Sources

Zone District of Receptor	Property Line of Receiving Use	Interior Spaces[2]
Residential Adjacent to Industrial[3]	60	45
Other Residential[4]	50	45
Office/Professional	70	45
Transient Lodging	65	45
Neighborhood Commercial	70	45
General Commercial	70	45
Heavy Commercial	75	45
Limited Industrial	75	45
Highway Service	75	45
Shopping Center	70	45
Industrial	---	45
Industrial Park	75	45
Industrial Reserve	---	---
Airport	---	45
Unclassified	---	---
Farm	(see footnote 6)	---
Agriculture Exclusive	(see footnote 6)	---
Forestry	---	---
Timberland Preserve	---	---
Recreation & Forestry	70	---
Open Space	---	---
Mineral Reserve	---	---

Notes:

- Except where noted otherwise, noise exposures will be those which occur at the property line of the receiving use.
- Where existing transportation noise levels exceed the standards of this table, the allowable Ldn shall be raised to the same level as that of the ambient level.
- If the noise source generated by, or affecting, the uses shown above consists primarily of speech or music, of if the noise source is impulsive in nature, the noise standards shown above shall be decreased by 5 dB.
- Where a use permit has established noise level standards for an existing use, those standards shall supersede the levels specified in Table 9-1 and Table 9-3. Similarly, where an existing use which is not subject to a use permit causes noise in excess of the allowable levels in Tables 9-1 and 9-3, said excess noise shall be considered the allowable level. If a new development is proposed which will be affected by noise from such an existing use, it will ordinarily be assumed that the noise levels already existing or those levels allowed by the existing use permit, whichever are greater, are those levels actually produced by the existing use.
- Existing industry located in industrial zones will be given the benefit of the doubt in being allowed to emit increased noise consistent with the state of the art[5] at the time of expansion. In no case will expansion of an existing industrial operation because to decrease allowable noise emission limits. Increased emissions above those normally allowable should be limited to a one-time 5 dB increase at the discretion of the decision making body.
- The noise level standards applicable to land uses containing incidental residential uses, such as caretaker dwellings at industrial facilities and homes on agriculturally zoned land, shall be the standards applicable to the zone district, not those applicable to residential uses.
- Where no noise level standards have been provided for a specific zone district, it is assumed that the interior and/or exterior spaces of these uses are effectively insensitive to noise.

[1] Overriding policy on interpretation of allowable noise levels: Industrial-zoned properties are confined to unique areas of the County, and are irreplaceable. Industries which provide primary wage-earner jobs in the County, if forced to relocate, will likely be forced to leave the County. For this reason, industries operating upon industrial zoned properties must be afforded reasonable opportunity to exercise the rights/privileges conferred upon them be their zoning. Whenever the allowable noise levels herein fall subject to interpretation relative to industrial activities, the benefit of the doubt shall be afforded to the industrial use.

Where an industrial use is subject to infrequent and unplanned upset or breakdown of operations resulting in increased noise emissions, where such upsets and breakdowns are reasonable considering the type of industry, and where the industrial use exercises due diligence in preventing as well as correcting such upsets and breakdowns, noise generated during such upsets and breakdowns shall not be included in calculations to determine conformance with allowable noise levels.

[2] Interior spaces are defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

[3] Noise from industrial operations may be difficult to mitigate in a cost-effective manner. In recognition of this fact, the exterior noise standards for residential zone districts immediately adjacent to industrial, limited industrial, industrial park, and industrial reserve zone districts have been increased by 10 dB as compared to residential districts adjacent to other land uses.

For purposes of the Noise Element, residential zone districts are defined to include the following zoning classifications: AR, R-1, R-2, R-3, FR, RP, TR-1, TR-2, TR-3, and TR-4.

[4] Where a residential zone district is located within an -SP combining district, the exterior noise level standards are applied at the outer boundary of the -SP district. If an existing industrial operation within an -SP district is expanded or modified, the noise level standards at the outer boundary of the -SP district may be increased as described above in these standards.

Where a new residential use is proposed in an -SP zone, an Administrative Review Permit is required, which may require mitigation measures at the residence for noise levels existing and/or allowed by use permit as described under "NOTES," above, in these standards.

[5] State of the art should include the use of modern equipment with lower noise emissions, site design, and plant orientation to mitigate offsite noise impacts, and similar methodology.

[6] Normally, agricultural uses are noise insensitive and will be treated in this way. However, conflicts with agricultural noise emissions can occur where single-family residences exist within agricultural zone districts. Therefore, where effects of agricultural noise upon residences located in these agricultural zones is a concern, an Ldn of 70 dBA will be considered acceptable outdoor exposure at a residence.

Table 9-2
Requirements for an Acoustical Analysis
(See Policy 9.A.5)

An acoustical analysis prepared pursuant to Policy 9.A.5 shall:
1. Be the financial responsibility of the applicant.
2. Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
3. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
4. Estimate existing and projected cumulative (20 years) noise levels in terms of L_{dn} or CNEL and/or the standards of Table 9-1, and compare those levels to the policies in this section. Noise prediction methodology must be consistent with the *Placer County Acoustical Design Manual*.
5. Recommend appropriate mitigation to achieve compliance with the policies and standards of this section, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance.
6. Estimate noise exposure after the prescribed mitigation measures have been implemented.
7. Describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.

TABLE 9-3
MAXIMUM ALLOWABLE NOISE EXPOSURE
Transportation Noise Sources

Noise Sensitive Land Uses [FY]	Outdoor Activity Areas [1]	Interior Spaces	
	L_{dn}/CNEL, dB	L_{dn}/CNEL,dB	L_{eq}, dB [2]
Residential	60 [3]	45	--
Transient Lodging [4]	60 [3]	45	--
Hospitals, Nursing Homes	60 [3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60 [3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

[2] As determined for a typical worst-case hour during periods of use.

[3] Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Implementation Measures

9.1. The County shall develop and employ procedures to ensure that noise mitigation measures required pursuant to an acoustical analysis are implemented in the project review process and, as may be determined necessary, through the building permit process.

Responsibility: CDRA Planning Services Division
Building Division

Time Frame: Ongoing

Funding: Permit fees

9.2. The County shall develop and employ procedures to monitor compliance with the standards of the Noise section of the *Policy Document* after completion of projects where noise mitigation measures were required:

Responsibility: CDRA Planning Services Division

Time Frame: Ongoing

Funding: Permit fees

9.3. The County shall periodically review and update the Noise section of the Policy Document to ensure that noise exposure information and specific policies are consistent with changing conditions within the community and with noise control regulations or policies enacted after the adoption of the *General Plan*.

Responsibility: CDRA Planning Services Division

Time Frame: Ongoing

Funding: Permit fees