

APPENDIX N NOISE STANDARDS

NOISE ATTENUATION

HUD's noise policy clearly requires that noise attenuation measures be provided when proposed projects are to be located in high noise areas. The requirements set out in Section 51.104(a) are designed to ensure that interior level noise does not exceed the 45 decibels (dB) level established as a goal in Section 51.101(a)(9). Thus, in effect, if the exterior noise level is 65 dB to 70 dB, 5 dB of noise attenuation must be provided; if the exterior noise level is between 70 and 75 dB, then 10 dB of attenuation is required.

There are three basic ways to provide the noise attenuation required:

- 1) The use of barriers or berms
- 2) Site design
- 3) Acoustical construction

The necessary attenuation can be achieved through the use of common construction techniques or materials. Sound Transmission Class (STC) is used as a measure of a material's ability to reduce sound. Thus, a high STC rating indicates a good insulating material.

NOISE ABATEMENT AND CONTROL

HUD's noise standards may be found in 24 CFR Part 51, Subpart B. For proposed new construction in high noise areas, the project must incorporate noise attenuation features. Consideration of noise applies to the acquisition of undeveloped land and existing development as well.

All sites whose environmental or community noise exposure exceeds the day-night average sound level (DNL) of 65 decibels are considered noise-impacted areas. For new construction that is proposed in high noise areas, grantees shall incorporate noise attenuation features to the extent required by HUD environmental criteria and standards contained in Subpart B (Noise Abatement and Control) of 24 CFR Part 51. The interior standard is 45 dB.

The "Normally Unacceptable" noise zone includes community noise levels from above 65 dB to 75 dB. Approvals in this noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dB but does not exceed 70 dB, or a minimum of 10 decibels of additional sound attenuation if the day-night average sound level is greater than 70 dB but does not exceed 75 dB.

Locations with day-night average noise levels above 75 dB have "Unacceptable" noise exposure. For new construction, noise attenuation measures in these locations required the approval of the Assistant Secretary for Community Planning and Development (for projects reviewed under Part 50) or the Responsible Entity's Certifying Officer (for projects reviewed under Part 58). The acceptance of such locations normally requires an environmental impact statement.

In "Unacceptable" noise zones, HUD strongly encourages conversion of noise-exposed sites to land uses compatible with the high noise levels.

HUD Guidance

Are there potential noise generators in the vicinity of the project?

Review general location maps and/or conduct a field review to screen for major roadways (within 1,000 feet), railroads (within 3,000 feet), and military or FAA-regulated airfields (within 15 miles) in the vicinity of the project.

If a noise assessment was performed, was the noise found to be Acceptable, Normally Unacceptable, or Unacceptable?

Site Acceptability Standards

Noise zone	Day-night average sound level (in decibels)	Special approvals & requirements
Acceptable	Not exceeding 65 dB	None
Normally Unacceptable	Above 65 dB but not exceeding 75 dB	- Environmental assessment and attenuation required for new construction - Attenuation strongly encouraged for major rehabilitation Note: An environmental impact statement is required if the project site is largely undeveloped or will encourage incompatible development.
Unacceptable	Above 75 dB	- Environmental impact statement required - Attenuation required for new construction with approval by the Assistance Secretary of CPD or Certifying Officer

Compliance and Documentation

The environmental review record should contain **one** of the following:

- Documentation the proposed action is not within 1,000 feet of a major roadway, 3,000 feet of a railroad, or 15 miles of a military or FAA-regulated civil airfield.
- If within those distances, documentation showing the noise level is *Acceptable* (at or below 65 dB).
- If within those distances, documentation showing that there’s an effective noise barrier (i.e., that provides sufficient protection).
- Documentation showing the noise generated by the noise source(s) is *Normally Unacceptable* (66-75 dB) and identifying noise attenuation requirements that will bring the interior noise level to 45 dB and/or exterior noise level to 65 dB.

