

Environmental Noise Control Guidelines

Scope

The scope of the procedure pertains to the reduction and control of noise (sound and vibration) to the campus community (employees, students, and visitors) and the surrounding environment. The guidelines are established in accordance with COMAR 26.02.03.02 (Control of Noise Pollution).

Responsibilities

A. Environmental Health & Safety (EHS)

1. EHS will conduct sound level monitoring to maintain compliance.
2. EHS may delegate monitoring to other departments.

B. Other Departments/Community

1. Other departments may conduct sound level monitoring with direction from EHS.
2. Departments and individuals who work on and/or visit campus should follow these guidelines.

General Guidelines

A. Noise Exposure

1. It is known that noise above certain levels is harmful to the health of humans.
2. Although precise levels at which all adverse health effects occur have not definitely been ascertained, it is known that one's well-being can be affected by noise through loss of sleep, speech interference, hearing impairment, and a variety of other psychological and physiological factors.
3. For employees who are exposed to full shift (eight hour) average noise exposures more than 85 dB on the A-weighted scale (or peak of 140 dB at any time) must be enrolled the [TU Hearing Conservation Program](#).

Table 1. Maximum Allowable Noise Levels (in dBA) for Receiving Land Use Categories. The table ascribes a set value for noise level threshold based on time of day and land use zone receiving the noise.

Time	Industrial	Commercial	Residential
Day (7AM-10PM)	75	67	65
Night (10PM-7AM)	75	62	55

B. Noise Level Permittance & Control

1. Applicable Areas

- a) A person may not cause or permit noise levels which exceed those specified in Table 1 except as provided in Steps B1b, B1c, or B3 of these guidelines.

- b) A person may not cause or permit noise levels emanating from construction or demolition site activities which exceed:
 - i. 90 dBA during daytime hours;*
 - ii. The levels specified in Table 1 during nighttime hours.*
- c) A person may not cause or permit the emission of prominent discrete tones and periodic noises which exceed a level which is 5 dBA lower than the applicable level listed in Table 1.
- d) A person may not cause or permit, beyond the property line of a source, vibration of sufficient intensity to cause another person to be aware of the vibration by such direct means as sensation of touch or visual observation of moving objects. The observer shall be located at or within the property line of the receiving property when vibration determinations are made.

2. Control Methods

- a) Appropriate ambient noise levels shall be achieved through reduction in the following methods:
 - i. Isolation of noise producing equipment*
 - ii. Dampening of sound waves by insulation*
 - iii. Equipment modification and redesign*
 - iv. Land use management*
 - v. Sound-amplification device placement*
- b) Examples of the above may include holding events indoors or in areas that are toward the interior of the campus; scheduling the endings of afternoon and evening events to coincide with the change in allowance to the nighttime sound level threshold; and limiting louder work activities to daytime hours.

3. Exemptions

- a) The provisions of these guidelines may not apply to devices used solely for the purpose of warning, protecting, or alerting the public, or some segment thereof, of the existence of an emergency or hazardous situation.
- b) The provisions of these guidelines do not apply to the following:
 - i. Household tools and portable appliances in normal usage during daytime hours;*
 - ii. Lawn care and snow removal equipment (daytime only) when used and maintained in accordance with the manufacturer's specifications;*
 - iii. Agricultural field machinery when used and maintained in accordance with manufacturer's specifications;*
 - iv. Blasting operations for demolition and construction (daytime only);*
 - v. Motor vehicles on public roads;*
 - vi. Aircraft and related airport operations at airports licensed by the Maryland Aviation Administration;*
 - vii. Boats on State waters or motor vehicles on State lands under the jurisdiction of the Department of Natural Resources;*
 - viii. Emergency operations;*

- ix. *Pile driving equipment during the daytime hours of 8AM to 5PM;*
- x. *Sound except those sounds that are electronically amplified, between 7AM to 12AM midnight, created by:*
 - 1) *Sporting events (except trap shooting, skeet shooting, or other target shooting);*
 - 2) *Entertainment events; and*
 - 3) *Other public gatherings operating under permit or permission of the appropriate local jurisdiction, each as stipulated above;*
- xi. *Construction and repair work on public property;*
- xii. *Air conditioning or heat pump equipment used to cool or heat housing on residential property; for this equipment, a person may not cause or permit noise levels which exceed 70 dBA for air conditioning equipment at receiving residential property and 75 dBA for heat pump equipment at receiving residential property;*
- xiii. *Household pets on residential property that are maintained in accordance with local zoning requirements; and*
- xiv. *Trash collection operations between the hours of 7 AM. and 10 PM.*

C. Sound Level Monitoring

1. The equipment and techniques employed in the measurement of noise levels may be those recommended by MDE and other accepted standards or recognized organizations, including, but not limited to ANSI, ASTM, SAE, IEC, and the EPA.
2. The measurement of noise levels shall be conducted at points on or within the property line of the receiving property or the boundary of a zoning district, and may be conducted at any point for the determination of identity in multiple source situations.
3. EHS (or assigned designees) may use sound level monitoring to measure compliance on campus or at the property line for events (e.g. athletics/sports, entertainment, public gatherings) where amplified sound may cause excess ambient noise.
4. Sound level meters used to determine compliance shall meet or exceed the specifications for Type II sound level meters.