

APPENDIX C: PERFORMANCE STANDARDS

- A. Purpose. No use otherwise allowed, shall be permitted within any district, which does not conform to the following standards of use, occupancy, and operation, which standards are hereby established as the minimum requirements to be maintained within said area:

<b>Land Use Category</b>	<b>Time Period</b>	<b>One hour Average dBA</b>
Undeveloped tracts of land in all Zoning Districts	7:00 am to 9:00 pm	70
Undeveloped tracts of land in all Zoning Districts	9:00 pm to 7:00 am	45
Residences, motels, hotels, inns, municipal services, schools, religious institutions, libraries, hospitals, parks, outdoor recreation facilities, playgrounds, active recreational amenities in all Zoning Districts	7:00 am to 9:00 pm	75
Residences, motels, hotels, inns, municipal services, schools, religious institutions, libraries, hospitals, parks, outdoor recreation facilities, playgrounds, active recreational amenities in all Zoning Districts	9:00 pm to 7:00 am	45
Developed lands, properties, or activities not included in the above two categories in all Zoning Districts	7:00 am to 9:00 pm	75
Developed lands, properties, or activities not included in the above two categories in all Zoning Districts	9:00 pm to 7:00 am	75

- B. Fire and Explosion Hazards. All activities involving, and all storage of, inflammable and explosive materials shall proceed with, and be provided with, adequate safety devices against the hazards of fire and explosion, and such adequate fire-fighting and fire suppression equipment and devices as are standard in the industry. Burning of waste materials in open fires is prohibited at any point. The relevant provisions of State of local laws and regulations shall also apply.

- C. **Vibration.** No vibration shall be produced which is transmitted through the ground and is discernible without the aid of instrument at or beyond the lot lines; nor shall any vibration produced exceed 0.002g peak at up to 60 cps. frequency, measured at or beyond the lot line using either seismic or electronic vibration measuring equipment. Vibrations occurring at higher than 50 cps. frequency or periodic vibrations shall not induce accelerations exceeding .001 g. Single impulse periodic vibrations occurring at an average interval greater than five (5) minutes shall not induce accelerations exceeding .01g.
- D. **Noise.** No excessive, unnecessary, unreasonably loud noise or disturbance shall be made, cause to be made, or assisted in making that disturbs, or endangers the comfort, health, peace, or safety of others within the immediate vicinity of the noise or disturbance. Sound level measurements shall be taken with a sound level meter meeting the minimum American Standards Institute (ANSI) requirements for Type I and II accuracy, and shall use the fast response setting. Noise measurements shall be made at the property line. The noise measurements shall not exceed the following stated limits during the stated time periods for noise generated on properties within each land category.
- E. **Smoke.** No emission shall be permitted at any point, from any chimney or otherwise, of visible gray smoke of a shade equal to or darker than No. 2 on the Power's Micro-Ringle-Mann Chart, published by McGraw-Hill Publishing Company, Inc. and copyright 1954 (being a direct facsimile reduction of the standard Ringle-Mann Chart as issued by the United States Bureau of Mines), except that visible gray smoke of a shade equal to No. 2 on said chart may be emitted for four (4) minutes in any 30 minutes. These provisions applicable to visible gray smoke shall also apply to visible smoke of a different color but with an apparently equivalent opacity. Wood or coal burning for residential heating uses is accepted.
- F. **Odors.** No emission shall be permitted of odorous gases or other odorous matter in such quantities as to be readily detected when diluted in the ratio of one (1) volume of odorous air emitted to four (4) volumes of clean air. Any process which may involve the creation or emission of any odors shall be provided with a secondary safeguard system, so that control will be maintained if the primary safeguard system should fail. There is hereby established as a guide in determining such quantities of offensive odors Table III, "Odor Thresholds". In Chapter 5, "Air Pollution Abatement Manuals", copyright 1951 by Manufacturing Chemists' Association, Inc., Washington D.C.
- G. **Fly Ash, Dust, Fumes, Vapors, Gases, Other Forms of Air Pollution.** No emission shall be permitted which can cause any damage to health to animals, vegetation or other forms or property, or which can cause any excessive soiling at

any point on the property of others, and in no event any emission from any chimney, or otherwise, of any solid or liquid particles in concentrations exceeding .022 parts per million (PPM) of 60 micrograms/cu. meter of the conveying gas. Sulfur dioxide contact shall not exceed .022 PPM or 60 micrograms/cu. meter. For measurement of the amount of particles in gases resulting from combustion, standard corrections shall be applied to stack temperature of 500 degrees Fahrenheit and 50% excess air.

- H. Electromagnetic Radiation. It shall be unlawful to operate, or cause to be operated, a planner or intentional source of electromagnetic radiation for such purposes as communication, experimentation, entertainment, broadcasting, heating, navigation, therapy, vehicle velocity measurement, weather survey, aircraft detection, topographical survey, personal pleasure, or any other use directly or indirectly associated with these purposes which does not comply with the then current Regulations of the Federal Communications Commission regarding such sources of electromagnetic radiation, except that government owned plants, the Regulations of the Interdepartmental Radio Advisory committee shall take precedence over the Regulations of the Federal Communication Commission regarding such sources or electromagnetic radiation. Further said operation in compliance with the Federal Communications Commission, or the Interdepartmental Radio Advisory Committee Regulations shall be unlawful if such radiation causes an abnormal degradation in performance of other electromagnetic radiators or electromagnetic receptors of quality and proper design because of proximity, primary field, blanketing, spurious re-radiation, harmonic content, modulation or energy conducted by power or telephone lines. The determination of “abnormal degradation in performance” and of “quality and property design” shall be made in accordance with good engineering practices as defined in the latest principles and standards of the institute of Electrical and Electronic Engineers. In case of any conflict between the latest standards and principles of the above groups, the following precedence in the interpretation of the standards and principles shall apply:
1. The Institute of Electrical and Electronic Engineers.
- I. Radioactive Radiation. No activities shall be permitted which emit dangerous radioactivity at any point beyond the property line. The handling of radioactive materials, the discharge of such materials into air and water, and the disposal of radio-active materials shall be in conformance with Regulations of the Nuclear Regulatory Commission as set forth in Title 10, Chapter One, Part 20-Standards for Protection Against Radiation, as amended; and all applicable Regulations of the State of Vermont, enforced on the date of the adoption of this Ordinance.
- J. Heat. For the purpose of these Regulations, heat is defined as thermal energy of a radioactive, conductive or convective nature. Heat emitted at any or all points shall not at any time cause a temperature increase on any adjacent property,

- whether such change by in the air or the ground in a natural stream or lake, or in any structure on such adjacent property.
- K. Liquid or Solid. No discharge shall be permitted at any point into any sewage disposal system or watercourse, or lake, or into the ground, except in accord with standards approved by the State Department of Health, Environmental Control Board, or other regulation department or agency, of any materials of such nature or temperature as can contaminate any water supply or otherwise cause the emission of dangerous or offensive elements. There shall be no accumulation of solid wastes conducive to the breeding of rodents or insects.
  - L. Other Requirements. Other requirements found elsewhere in these Regulations shall also apply, as well as other local or State Ordinances, Statutes or Regulations, and Federal Law, Statutes and Regulations.