

SECTION 25

REGULATED USES FACILITIES: ANTENNAS, MONOPOLE TOWERS, AND WIRELESS COMMUNICATION FACILITIES

25.1 Statement of Purpose:

This regulation establishes standards, requirements and permitting procedures for regulated facilities, including antennas, towers, and wireless communication facilities, that are subject to local zoning regulations in Connecticut.

Its purpose is to regulate the placement of regulated facilities, including antennas, towers, and wireless communication facilities, in order to:

- A. preserve the character and appearance of the Town of Haddam while allowing adequate telecommunication services to be developed,
- B. protect the scenic, historic, environmental, and natural or man-made resources of the Town of Haddam,
- C. protect property values, and the health, safety and welfare of the Town of Haddam,
- D. minimize the total number and height of towers throughout the Town of Haddam,
- E. require the sharing of existing regulated facilities where possible,
- F. provide for facility locations consistent with the Town of Haddam Community Plan of Conservation and Development, and the Town of Haddam's comprehensive plan (zoning regulations and zoning map),
- G. minimize adverse visual effects through proper design, siting and screening,
- H. avoid potential damage to adjacent properties, and,
- I. provide for orderly removal of abandoned facilities.

These regulations are intended to be consistent with “The Telecommunications Act of 1996,” as may be amended, in that: a) they do not prohibit, or have the effect of prohibiting, the provision of personal wireless services; b) they are not intended to be used to unreasonably discriminate among providers of functionally equivalent services; and c) they do not regulate personal wireless services on the basis of the environmental effects of radio frequency emissions to the extent that the regulated services and facilities comply with the FCC’s regulations concerning such emissions.

25.2 Definitions:

A. Adequate Capacity.

Capacity is considered to be “adequate” if the Grade of Service (GOS) is p.05 or better for median traffic levels offered during the typical busy hour, as assessed by direct measurement of the personal wireless facility or regulated facility in question. The GOS shall be determined by the use of standard Erlang B Calculations. As call blocking may occur in either the land line or radio portions of a wireless network, Adequate Capacity for this regulation shall apply only to the capacity of the radio components. Where capacity must be determined prior to the installation of the personal wireless service facility or regulated facility in question, Adequate Capacity shall be determined on the basis of a 20% busy hour (20% of all offered traffic occurring within the busiest hour of the day), with total daily traffic based on aggregate estimates of the expected traffic in the Coverage Area.

B. Adequate Coverage.

Coverage is considered to be “adequate” within that area surrounding a base station where the predicted or measured median field strength of the transmitted signal is such that the majority of the time, transceivers properly installed and operated will be able to communicate with the base station. In the case of cellular communications in a rural area like Haddam, this would be a signal strength of at least –90dBm for at least 75% of the coverage area. It is acceptable for there to be holes within the area of Adequate Coverage where the signal is less than –90dBm, as long as the signal regains its strength to greater than –90dBm further away from the Base Station. The outer boundary of the area of Adequate Coverage is that location past which the signal does not regain strength of greater than – 90dBm.

C. Antenna

The surface from which wireless radio signals are sent and received by a personal wireless service facility or regulated facility.

- D. Camouflaged or Stealth Facility.
A wireless communication regulated facility that is disguised, hidden, part of an existing or proposed structure, or placed within an existing or proposed structure.
- E. Carrier.
A company that provides wireless services.
- F. Co-location.
The use of a single mount on the ground by more than one carrier (vertical co-location) and/or several mounts on an existing building or structure by more than one carrier.
- G. Commission.
The Planning and Zoning Commission of the Town of Haddam.
- H. Elevation.
The elevation at grade or ground level shall be given in Above Mean Sea Level (AMSL). The height of a wireless service facility shall be given in Above Ground Level (AGL). AGL is a measurement of height from the natural grade of a site to the highest point of a structure. The total elevation of the wireless service facility is AGL plus AMSL.
- I. Environmental Assessment (EA).
An EA is the document required by the Federal Communications Commission (FCC) and the National Environmental Policy Act (NEPA) when a wireless communication facility or regulated facility is placed in certain designated areas.
- J. Environmental Impact Statement (EIS).
A report which shall evaluate the existing conditions of the proposed regulated facility and the full impact of construction on the existing conditions, terrestrial ecology, environmental setting and cultural resources through the actions of grading, soil disturbance, facility construction, site drainage and any other above or below ground disturbance.
- K. Equipment Shelter.
An enclosed structure, cabinet, shed or box at the base of the mount within which are housed batteries and electrical equipment necessary for the operation of the communication facility or regulated facility.

- L. Fall Zone.
The area on the ground within a prescribed radius from the base of a wireless communication facility or regulated facility. The fall zone is the area within which there is a potential hazard from falling debris (such as ice) or collapsing material.
- M. Reserved.
- N. Guyed Regulated Facility.
A monopole or existing lattice tower that is tied to the ground or other surface by diagonal cables.
- O. Lattice Regulated Facility.
A type of mount that is self-supporting with multiple legs and cross-bracing of structural steel for an existing lattice tower.
- P. Licensed Carrier.
A company authorized by the FCC to construct and operate a wireless communication facility or regulated facility.
- Q. Monopole Tower. A regulated facility that involves a type of mount that is self-supporting with a single shaft of wood, steel or concrete and a platform (or racks) for panel antennas arrayed at the top.
- R. Mount.
The structure or surface of a regulated facility upon which antennas are mounted, including the following four types of mounts:
1. Roof-mounted. Mounted on the roof of a building.
 2. Side-mounted. Mounted on the side of a building.
 3. Ground-mounted regulated facility. Mounted on the ground.
 4. Structure mounted. Mounted on a structure other than a building.
- S. Omnidirectional (whip) antenna.
A thin rod that beams and receives a signal in all directions.
- T. Panel Antenna.
A flat surface antenna usually developed in multiples such as whip antennas, panel antennas, and dish antennas.

- U. Propagation Studies or Coverage Plots.
Computer generated estimates of the signal emanating, and prediction of coverage, from antennas or repeaters sited on a specific regulated facility structure. The height above ground, power input and output, frequency output, type of antenna, antenna gain, topography of the site and its surroundings are all taken into account to create these simulations. They are the primary tool for determining whether a site will provide adequate coverage for the telecommunication facility proposed for the site.
- V. Radiofrequency (RF) Engineer.
An engineer specializing in electrical or microwave engineering, especially the study of radiofrequencies.
- W. Radiofrequency Radiation (RFR).
The emissions from wireless communication facilities or regulated facilities.
- X. Regulated facility.
All regulated facilities as defined by Section 25.2 of these zoning regulations, including mounts, towers and antennas, service and/or sites where these facilities are proposed or exist, or service is to be provided from, relating to personal communication services and any other wireless telecommunication service subject to local zoning regulation. A regulated facility, service and/or site includes, but is not limited to, a proposed co-located regulated facility, service and/or site.
- Y. Repeater.
A small receiver/relay transmitter of not more than 20 watts output designed to provide service to areas which are not able to receive adequate coverage directly from a base station.
- Z. Security Barrier.
A locked, impenetrable wall, fence or berm that completely seals an area from unauthorized entry or trespass.
- AA. Separation.
The distance between one carrier's array of antennas and another carrier's array.

25.3 Use Regulations:

A. Exemptions.

The following shall be exempt from this Section 25 of the zoning regulations of the Town of Haddam.

1. Repair and maintenance of regulated facilities including antennas.
2. Antenna used solely for residential television and radio reception.
3. Satellite antenna measuring 2 meters or less in diameter and located in commercial districts, and satellite antenna measuring 1 meter or less in diameter regardless of location.
4. Antenna used by the Town of Haddam in conjunction with police stations, firehouses, volunteer ambulance headquarters or other municipal building uses.

B. Any proposed regulated facility shall require Special Permit review and approval as provided by Section 15, and this Section 25, of these zoning regulations. Any proposed regulated facility shall comply with all Site Plan and Special Permit requirements of Sections 14 and 15, respectively, of these zoning regulations, and, in addition, shall comply with all the requirements of this Section 25 of these zoning regulations. No provision of these zoning regulations, as applies to a regulated facility pursuant to this Section 25, may be waived or varied by the municipal zoning board of appeals, or other land use board under Chapters 124 and/or 126 of the Connecticut General Statutes, as provided by Section 8-6 of the Connecticut General Statutes or any other law.

C. Permitted areas:

1. A regulated facility is permitted in any zoning district of the Town of Haddam subject to Section 25.3(B). However, no regulated facility, including but not limited to co-locations, is permitted in the Gateway Conservation Zone as provided by Section 10 of these zoning regulations, except for co-location on existing electrical power line structures subject to the height restriction of Section 25.3(C)(3) of these zoning regulations.
2. Any regulated facility shall not exceed one hundred fifty (150) feet in height subject to Section 25.3(C)(3) of these zoning regulations. However, a regulated facility may be permitted up

to, but not exceeding, a height of one hundred ninety (190) feet, within the Commission's discretion, if the regulated facility is proposed within one thousand (1,000) feet of the Route 9 right-of-way or additional tower height is required to accommodate co-location.

3. Any regulated facility proposal to be located within two hundred (200) feet of the Gateway Conservation Zone as provided by Section 10 of these zoning regulations, on a scenic area, scenic road or The National Register of Historic Places "Haddam Center Historic District": as shown in Appendix I of the Zoning Regulations, shall not exceed ten (10) feet of the height of the treeline or other vegetation on the site, nor shall any antenna be located more than five (5) feet above the height of such structure. The Commission may require a height lower than this maximum height. No accessory building to service any regulated facility shall exceed twelve (12) feet in height, and shall not exceed 300 square feet in gross floor area.

25.4 General Standards and Requirements for Regulated Facility:

A. Location.

Wherever feasible, regulated facilities shall be located on existing structures, including but not limited to buildings, water towers, existing telecommunications facilities, utility poles and towers provided the installation preserves the character and integrity of those structures.

1. Applicants are urged to consider use of existing telephone, cable, or electric utility power lines or structures as sites for regulated facilities.
2. The preferred location for free standing regulated facilities is where the existing topography, vegetation, buildings, or other structures provide the greatest amount of screening and have the least long range visual effect. Town owned land or buildings are preferred locations where the Town has determined that such Town owned land or building is appropriate for a regulated facility. Unless adequate coverage and adequate capacity cannot otherwise be achieved, regulated facilities shall be sited off ridgelines and in as low a population density area as is possible.
3. Site Justification for Ground Mounted Regulated Facility. An application for a ground mounted regulated facility shall include a detailed site justification report, prepared according to

accepted engineering practice, which:

- a. Establishes the location and defines the elevation of all proposed antenna facilities on the regulated facility consistent with federal regulations.
- b. Demonstrates that the proposed location (which includes both regulated facility position and antenna height) is superior to other potential locations for the proposed uses. Alternatives evaluated shall specifically include a regulated facility of lesser height, the use of repeaters, and other less visible technologies. The applicant shall provide the commission with the “search area” for the regulated facility based on propagation analysis.
- c. Documents that signal strength service objectives are consistent with accepted engineering practice for all proposed uses of the regulated facility.
- d. Includes complete and accurate propagation plots in relation to scaled elevation drawings addressing all facilities to be installed on the regulated facility.
- e. Demonstrates that for each proposed use of the regulated facility the proposed height is the minimum necessary to provide adequate coverage. This shall specifically include, but not be limited to, an evaluation of the regulated facility’s height of 50% and 75% of the proposed height.
- f. Documents in writing that existing telecommunication regulated facility sites in the Town of Haddam, and in abutting municipalities within four (4) miles of the Haddam town boundary, cannot reasonably be made to provide adequate coverage and/or adequate capacity to the Town of Haddam. This shall include documentation that addresses the feasibility of repeaters in conjunction with regulated facility sites in the Town of Haddam and abutting towns to provide adequate coverage and/or adequate capacity to the Town of Haddam.

B. Visibility, Camouflage and Color.

The Commission shall apply the following standards and requirements to minimize the visual impact of proposed regulated facilities.

1. Requirements for Existing Buildings or Structures.

- a. Roof Mount. Where a roof mount extends above the roof the applicant shall demonstrate every effort has been made to conceal the mount within or behind existing architectural features to limit visibility from public streets.
- b. Side Mount. Side mounts shall blend with the existing architecture and, if over 5 square feet, shall be painted or shielded with material consistent with the design features and materials of the building or structure.
- c. Mounts and antennas located on an historic structure shall be fully removable without diminishing the historic quality of the structure.
- d. Regulated facilities in an historic district shall be concealed within or behind existing architectural features, or shall be located so that they are not visible from public roads and viewing areas within the district.

2. Requirements for Proposed Ground Mounted Regulated Facility Structures.

Proposed ground-mounted regulated facility structures shall provide a vegetated buffer of sufficient height and a depth of not less than 50' to screen the facility to the extent feasible. Trees and vegetation may be existing on the subject property or installed as part of the proposed facility or a combination of both. Where it is not feasible to fully buffer a regulated facility, the applicant shall submit a landscape plan. The landscape plan shall recommend the type of tree and plant materials and depth of buffer appropriate to the site, design, height and location of the facility. The Commission may require reasonable modifications to the landscape plan where it determines such are necessary to minimize the visual impact of the regulated facility on the neighborhood and community character. All landscaping shall be properly maintained to ensure its good health and viability at the expense of the owner(s). The Commission reserves the right to require stealth or camouflage designs such as regulated facilities made to resemble trees or other structures. The Commission may require that landscaping and buffer areas be preserved by a scenic or conservation easement and/or that the landscaping be within the leased area.

3. Scenic Roads and Areas.

- a. The Commission may approve a ground mounted regulated facility structure located in an open area visible from a public road, recreational area, or residential development only where it has been demonstrated by the applicant to the satisfaction of the Commission that the proposed service cannot be reasonably provided in a location on an existing structure or a co-location.
- b. A regulated facility located within an area ranked high for protection according to the Town of Haddam Community Plan of Conservation and Development, or within 300 feet of a Town or State designated scenic road, shall not exceed the height of vegetation at the proposed location.

4. Sight Line and Elevation Information.

Where the Commission determines that sight line and/or elevation information is necessary to determine compliance with these zoning regulations it shall require the following:

- a. Tree cover on the subject property and adjacent properties within 300 feet, by dominant species and average height, as measured by or available from a verifiable source.
- b. Sight line representation. A sight line representation shall be drawn from any public road within 300 feet and the closest façade of each residential building (viewpoint) within 300 feet to the highest point (visible point) of the regulated facility. Each sight line shall be depicted in profile, drawn at one-inch equals 40 feet. The profiles shall show all intervening trees and buildings. In the event there is only one (or more) residential building within 300 feet there shall be at least two sight lines from the closest habitable structures or public roads, if any.
- c. Existing (before) condition photographs. Each sight line shall be illustrated by one four-inch by six-inch color photograph of what can currently be seen from any public road within 300 feet. These photographs shall be taken when deciduous leaves are off the trees.

- d. Proposed (after) condition photographs. Each of the existing condition photographs shall have the proposed regulated facility superimposed on it to show what will be seen from public roads if the proposed facility is built.
- e. Sight elevations. Sight elevations, or view at-grade, from the north, south, east and west for a 50-foot radius around the proposed regulated facility plus from all existing public and private roads that serve the subject property. Elevations shall be at either one-quarter inch equals one foot or one-eighth inch equals one foot scale and show the following:
 - (1) Antennas, mounts and equipment shelter(s), with total elevation dimensions and AGL of the highest point.
 - (2) Security barrier. If the security barrier will block views of the regulated facility, the barrier drawing shall be cut away to show the view behind the barrier.
 - (3) Any and all structures on the subject property.
 - (4) Existing trees and shrubs at current height and proposed trees and shrubs at proposed height at time of installation, with approximate elevations dimensioned.
 - (5) Grade changes, or cuts and fills, to be shown as original grade and new grade line, with two-foot contours above mean sea level.

C. Environmental and Safety Standards.

- 1. Regulated facilities and/or regulated facility shall not be located in wetlands. Locating of regulated facilities in wetland buffer areas shall be avoided whenever possible and disturbance to wetland buffer areas shall be minimized.
- 2. No hazardous waste shall be discharged on the site of any regulated facility. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with

a sealed floor, designed to contain at least 110% of the volume of the hazardous materials stored or used on the site.

3. There shall be no increase in the rate of storm water runoff.
4. No signal lights or illumination shall be permitted unless required by the FCC or FAA, except for manually operated emergency lights for use only when operating personnel are on site.
5. Radiofrequency Radiation (RFR) Standards and Requirements. The applicant shall provide documentation that all equipment proposed for a regulated facility is authorized according to FCC Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (FCC Guidelines) or its successor publication.

D. Additional Standards:

1. Feasible Alternative.
Where a new ground mounted regulated facility structure is proposed, the applicant shall have the burden of proving that there are no feasible existing structures or co-location sites upon which to locate.
2. Lot Size.
All ground mounted regulated facility structures and their associated equipment shelters shall be considered an accessory structure and use and shall comply with all of the requirements for the zoning district in which the regulated facility is to be located
3. Fall Zone.
In order to ensure public safety, the minimum distance from the base of any new proposed ground-mounted regulated facility structure to any property line, road, habitable dwelling, business or institutional use, or public recreational area shall be equal to 125% of the height of the regulated facility structure including any antennas or other appurtenances. Provision shall be made that no new public road, habitable dwelling, business or institutional use, or public recreational area be located within the fall zone. The required fall zone is to be located on the applicant/owners property in less the visual impact can be minimized by having the fall zone on a neighboring property. Such neighboring property shall not be developed and will be subject to a legally binding agreement preventing development during the time the regulated facility is in place.

4. Addition Service Providers.

The proposed regulated facility shall be designated for a minimum of five (5) additional personal wireless service providers, (including, but not limited to, personal wireless service providers for local police, fire and ambulance needs), unless it is determined by the Commission to be technically unfeasible or not desirable from an impact point-of-view.

5. Construction Timing.

A Special Permit for the construction of a regulated facility shall not be granted for a regulated facility to be built on speculation. All regulated facilities must be utilized for the purpose stated in the Special Permit within ninety (90) days of completion of construction and all construction must be completed within one (1) year of the granting of the Special Permit.

6. Signage.

A sign no greater than two (2) square feet indicating the name of the regulated facility owner and a 24 hour emergency telephone number shall be posted adjacent to the entry gate. No advertising shall be permitted from or on the regulated facility.

25.5 Application Filing Requirements:

The following shall be included with an application for a Special Permit for all regulated facilities.

A. General Filing Requirements

1. Name, address and telephone number of applicant, co-applicants, and any agents for the applicant or co-applicants.
2. Co-applicants shall include the landowner of the subject property, and any licensed carriers and tenants for the proposed regulated facility.
3. A licensed carrier shall either be an applicant or a co-applicant and shall provide documentation of qualifications as a "licensed carrier."
4. Original signatures for the applicant and all co-applicants applying for the Special Permit. If the applicant or co-applicant will be represented by an agent, an original signature authorizing the agent to represent the applicant and/or co-applicant is required. Photoreproductions of signatures will not be accepted.

5. Original signatures for the applicant and all co-applicants applying for the Special Permit. If the applicant or co-applicant will be represented by an agent, an original signature authorizing the agent to represent the applicant and/or co-applicant is required. Photoreproductions of signatures will not be accepted.

B. Location Filing Requirements

1. Identify the subject property by including the Town as well as the name of the locality, name of the nearest road or roads, nearest CL&P pole number, and street address, if any.
2. Tax map and parcel number of subject property.
3. Zoning district designation for the subject parcel (submit copy of Town Zoning Map with parcel identified).
4. A line map to scale showing the lot lines of the subject property and all properties within 300 feet and the location of all buildings, including accessory structures, on all properties shown.
5. A region-wide map showing the existing wireless service regulated facilities in the Town and outside the Town within four miles of its boundary, and any proposed regulated facilities by the applicant and/or co-applicant(s) within four miles of the Town boundary.
6. A topographic location map at a scale of 1"=2,000' showing the regulated facility location, and the boundaries of the viewshed if a regulated facility is proposed (i.e., the area within which the regulated facility can be seen based upon an assessment of the topography surrounding the site).

C. Additional Site Plan and Special Permit Requirements.

The following requirements shall be in addition to the requirements of Sections 14 and 15 of the Town of Haddam zoning regulations and Special Permit applications. Where the requirements of this Section are more restrictive than that of Sections 14 and 15, these requirements shall apply. A one-inch-equals-40 feet vicinity plan shall be submitted showing the following:

1. Property lines for the subject property.
2. Property lines of all properties adjacent to the subject property within 300 feet.

3. Outline of all existing buildings, including purpose (e.g., residential buildings, garages, accessory structures, etc.) on subject property and all adjacent properties within 300 feet.
4. Proposed location of the regulated facility including antenna, mount and equipment shelter(s).
5. Proposed security barrier, indicating type and extent as well as point of controlled entry.
6. Location of all roads, public and private, on the subject property and on all adjacent properties within 300 feet including driveways proposed to serve the regulated facility.
7. Distances, at grade, from the proposed regulated facility to each building on the vicinity plan.
8. Contours at each two feet AMSL (see definition section) for the subject property and adjacent properties within 300 feet.
9. All proposed changes to the existing property, including grading, vegetation removal and temporary or permanent roads and driveways.
10. Representations, dimensioned and to scale, of the proposed mount, antennas, equipment shelters, cable runs, parking areas and any other construction or development attendant to the regulated facility.

D. Design Filing Requirements

1. Equipment brochures for the proposed regulated facilities such as manufacturer's specifications or trade journal reprints shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
2. Materials of the proposed regulated facility specified by generic type and specific treatment (e.g., anodized aluminum, stained wood, painted fiberglass, etc.). These shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
3. Colors of the proposed regulated facility represented by a color board showing actual colors proposed. Colors shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.

4. Dimensions of the regulated facility specified for all three directions: height, width and breadth. These shall be provided for the antennas, mounts, equipment shelters and security barrier, if any.
 5. Viewshed Analysis. Where a regulated facility is proposed, sight line graphs shall be provided to the proposed prime and alternative sites from visually impacted areas, such as residential developments, public roadways, recreational sites, historic districts, and historic sites. In lieu of sight line graphs, the Commission may accept photographs showing the regulated facility imposed on the photograph with the regulated facility height established in reference to a balloon flown, or comparable testing, to the proposed regulated facility height at the site, as required herein. This visual assessment shall be based upon the existing landscape conditions without leaf cover.
 6. The applicant shall arrange with the Commission for a balloon test (with a balloon diameter of at least eight feet), crane test, or comparable testing within the Commission's discretion, at the proposed site to illustrate the height and position of a proposed ground mounted regulated facility structure. The date, time and location of such test shall be advertised in a newspaper of general circulation in the Town. The balloon, crane or other test shall be conducted or attempted for at least two days.
- E. Noise Requirements
No regulated facility shall emit or cause to be emitted any noise beyond the lease area in excess of 45 (dBA).
- F. Radiofrequency Radiation (RFR) Filing Requirements
The applicant shall provide a statement listing the existing and maximum future projected measurements of RFR from the proposed regulated facility, for the following situations:
1. Existing or ambient: the measurements of existing RFR.
 2. Existing plus proposed facilities: maximum estimate of RFR from the proposed regulated facility plus the existing RFR environment.
 3. Certification, signed by a RF engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in the Radiofrequency Radiation Standards sub-section of this regulation.

G. Federal Environmental Filing Requirements

1. The National Environmental Policy Act (NEPA) applies to all applications for wireless communication facilities. NEPA is administered by the FCC via procedures adopted as Subpart 1, Section 1.1301 et seq. (47 CRF Ch. 1). The FCC requires that an environmental assessment (EA) be filed with the FCC prior to beginning operations for any wireless communication regulated facility proposed in or involving any of the following: 1) wilderness areas, 2) wildlife preserves, 3) endangered species habitat, 4) historical site, 5) Indian religious site, 6) flood plain, 7) wetlands, 8) high intensity white lights in residential neighborhoods, 9) excessive radiofrequency exposure.
2. At the time of application filing, an Environmental Assessment that meets FCC requirements shall be submitted to the Commission for each regulated facility site that requires such an Environmental Assessment to be submitted to the FCC.
3. For all Special Permit uses the applicant shall identify and assess the impact of the proposed regulated facility on areas recommended for protection or conservation as presented in the Town of Haddam Community Plan of Conservation and Development, and State Plan of Conservation and Development.
4. The applicant shall list location, type and amount (including trace elements) of any materials proposed for use within the facility that are considered hazardous by the federal, state or local government.

25.6. Co-location

- A. Licensed carriers shall share regulated facilities and sites where feasible and appropriate, thereby reducing the number of facilities that are stand-alone. All applicants for a Special Permit for a regulated facility shall demonstrate a good faith effort to co-locate with other carriers. Such good faith effort includes:
 1. A survey of all existing structures that may be feasible sites for co-locating wireless service regulated facilities;
 2. Contact with all the other licensed telecommunication facility carriers operating in the service area of the proposed regulated facility; and

3. Sharing information necessary to determine if co-location is feasible under the design configuration most accommodating to co-location.
- B. In the event that co-location is found to be not feasible, a written statement of the reasons for the infeasibility shall be submitted to the Commission. The Commission may retain a technical expert at the expense of the applicant in the field of RF engineering to verify if co-location at the site is not feasible or is feasible given the design configuration most accommodating to co-location. The Town may deny a Special Permit to an applicant that has not demonstrated a good faith effort to provide co-location.
- C. The Commission reserves the right to limit regulated facility structure height and the number of users on a regulated facility structure in order to preserve the character and appearance of the Town of Haddam.

25.7 Fees and Costs

The applicant shall pay any costs that the Commission incurs for retaining one (1) or more qualified independent consultants to analyze and report on the application (including determining areas appropriate for regulated facilities, reviewing the structural integrity of the personal wireless service regulated facility design, and compliance with FCC Regulations), and the cost of the Town's monitoring of operation of the regulated facility. These consultants shall each be qualified professionals with degrees and/or special expertise in one of the following: 1) telecommunications engineering; 2) structural engineering; 3) monitoring of electromagnetic fields; and 4) other disciplines as determined necessary by the Commission

25.8 Modifications

A modification of a regulated facility shall require a Special Permit application and review as provided by Section 25 of these zoning regulations.

25.9 Monitoring and Maintenance

- A. The Commission may require that after the regulated facility is operational, the applicant submit, within 90 days of beginning operations, and at annual intervals from the date of issuance of the Special Permit, existing measurements of RFR from the facility. Such measurements shall be signed and certified by a RF engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in the Radiofrequency Standards section of this Regulation.

- B. The Commission may require that after the regulated facility is operational, the applicant submit, within 90 days of the issuance of the Special Permit, and at annual intervals from the date of issuance of the Special Permit, existing measurements of noise from the regulated facility. Such measurements shall be signed by an acoustical engineer, stating that noise measurements are accurate and meet the noise standards as provided by Section 25 of this regulation.
- C. The applicant and co-applicant shall maintain the regulated facility in good condition. Such maintenance shall include, but shall not be limited to, painting, structural integrity of the mount and security barrier, and maintenance of the buffer areas and landscaping.

25.10 Abandonment or Discontinuance of Use

- A. At such time that a licensed carrier plans to abandon or discontinue operation of a regulated facility, such carrier will notify the Commission by certified U.S. mail of the proposed date of abandonment or discontinuation of operations. Such notice shall be given no less than 30 days prior to abandonment or discontinuation of operations. In the event that a licensed carrier fails to give such notice, the regulated facility shall be considered abandoned upon such discontinuation of operations.
- B. Upon abandonment or discontinuation of all use of the facility for six months, the facility owner shall physically remove the facility within 90 days of the end of such six month period. "Physically removed" shall include, but not be limited to:
 - 1. removal of antennas, mount, equipment, shelters and security barriers from the subject property.
 - 2. Proper disposal of the waste materials from the site in accordance with local and state solid waste disposal regulations.
 - 3. Restoring the location of the facility to its natural condition, except that any landscaping and grading shall remain in the after-condition.
- C. If a facility owner fails to remove a regulated facility in accordance with this section of this regulation, the Town shall have the authority to enter the subject property and physically remove the facility. The Commission shall require the applicant to post a cash bond, in accordance with Section 28 of these regulations, at the time of construction to cover costs for the removal of the regulated facility in the event the Town must remove the regulated facility. Town access to this bond shall remain until such time as the regulated facility is removed. If the bond is insufficient to cover the cost of removal the Town may lien the property owner for the difference between the bond amount and the actual cost including administrative expenses.

25.11 Reconstruction or Replacement of Existing Regulated Facilities

Guyed towers, lattice towers, utility towers and monopoles in existence at the time of adoption of this regulation may be reconstructed, altered, extended or replaced on the same site by Special Permit, provided that the Commission finds that such reconstruction, alteration, extension or replacement will not be substantially more detrimental to the neighborhood and/or the Town than the existing structure. In making such a determination, the Commission shall consider whether the proposed reconstruction, alteration, extension, or replacement will create public benefits such as opportunities for co-location, improvements in public safety, and/or reduction in visual and environmental impacts. In addition, such Special Permit shall comply with all the provisions of Sections 14, 15 and 25, inclusive, of these zoning regulations.