

# DEVELOPMENT SERVICES Current Planning

500 East Third Street, Suite 310 • Loveland, CO 80537 (970) 962-2523 • Fax (970) 962-2945 • TDD (970) 962-2620 www.cityofloveland.org

## Planning Commission Staff Report August 8, 2011

Agenda #: Regular Agenda - 2

*Title:* Amendments to Title 18 to

allow small wind energy systems (wind turbines) on residential

properties

Applicant: City of Loveland

**Current Planning Division** 

Request: Amendments to Title 18

**Staff Planner:** Brian Burson

#### Staff Recommendation

Subject to additional evidence presented at the public hearing, City staff recommends the following motion:

#### Recommended Motion:

"Move to recommend the City Council approve the amendments to Title 18 of the Loveland Municipal Code, as set forth in Attachment #3 of the attached Planning Commission staff memorandum, dated August 8, 2011, as amended on the record; and to authorize the City Attorney's Office to correct spelling, punctuation, and clerical and typographical errors, and make other such other modifications in form, but not substance, as necessary to effectuate the purposes of the recommended amendments."

#### Summary of Analysis:

This is a public hearing to consider amendments to Title 18 of the City of Loveland Municipal Code to allow small wind energy systems, (small wind turbines) on all residential properties in the City, subject to specific standards and process. Small wind energy systems could be either building-mounted or freestanding. Small wind turbines that fully comply with all of the specific standards would be a use-by-right as an accessory use. Small wind turbines that do not fully comply with all of the specific standards would be a use-by-special review. If approved as a use-by-special review, the small wind energy system would still be deemed as an accessory use.

In early 2009, City staff received an inquiry from a Loveland resident expressing interest in installing a small wind-energy generator on his property, as well as marketing the devices in the region. Currently, there are no provisions in the City code to allow these devices. City staff has been working with the Title 18 Committee to propose code amendments that would allow such devices on residential properties, subject to specific standards and process and in a manner that balances private, neighborhood, and public interests. Staff has also consulted with the Loveland Utilities Commission and the Construction Advisory Board. Study sessions have been held with the Planning Commission and City Council which resulted in positive response and general support. When allowed as a use-by-right, written notice to all adjacent property owners and residents will be required before City approval. When proposed as a use-by-special review, the normal written and posted notice to the neighborhood will be required as part of the normal process.

#### I. ATTACHMENTS:

- 1. Red-line draft of proposed Title 18 amendments
- 2. Clean draft of proposed Title 18 amendments

#### II. SUMMARY OF PROPOSED AMENDMENTS:

The proposed amendments would allow small wind energy systems, (small wind turbines) as an accessory use on all residential properties in the City, subject to specific standards and process. Small wind energy systems could be either building-mounted (including roof-mounted or gable-mounted) or freestanding (pole-mounted). As set forth in Chapter 18.48 of the Municipal Code, all accessory uses are required to be a subordinate use on the property which is:

- Clearly incidental to the principal use of the property;
- Customary in connection with the principal building or use;
- Ordinarily located on the same property as the principal use

The proposed standards are written to assure that small wind energy systems would truly be an accessory use, not likely to prompt significant concern or objection by the adjacent property owners or neighborhood. However, since small wind energy systems will be a new allowed use, it is impossible to say they are "customary" in connection to residential uses in the City. This is always a problem for allowing the first examples of anything. In order to address this issue, the proposed code expressly stipulates that a small wind energy system will be deemed as an accessory use.

Small wind turbines that fully comply with all of the specific standards would be an accessory use that could be approved by the City through staff review and issuance of the appropriate permits. Small wind turbines that do not fully comply with all of the specific standards could prompt some measure of concern or objection by the adjacent property owners or neighborhood, and therefore would be a use-by-special review. If approved as a use-by-special review, the small wind energy system would still be deemed as an accessory use.

The basic elements of the amendments are as follows:

- Limited to one per property, with a maximum rating of 10 kilowatts;
- Limit the height to 10 feet above the ridge line of the roof or 35 feet from grade for freestanding;
- Require appropriate distances from all property lines and all overhead utility lines to limit the impacts and prevent damage to other property and improvements;
- Minimize visual impacts by requiring neutral or muted colors, minimizing guy wires, and prohibiting signs and lights on the devices or towers;
- Assure compliance with the existing noise ordinance for residential properties.

#### III. BACKGROUND

In early 2009, City staff received an inquiry from a Loveland resident expressing interest in installing small wind-energy generators on his property, as well as marketing the devices in the region. Based on the current zoning code, staff determined that the current zoning code would not allow installation of the desired device, because it cannot be considered as "customary" under the current code provisions. This prompted staff to initiate research to determine what would be necessary and appropriate in order to allow small wind turbines in residential areas of the City.

Growing concerns about rising costs, interrupted or diminishing supplies and available energy resources are prompting citizen interest in alternative sources of energy for both the immediate and long-term future. As the public and private interest increases for alternative and renewable forms of energy, cities and counties around the nation are adopting local codes to appropriately accommodate such devices. The federal government is encouraging and supporting development and use of various forms of alternative energy. The state government has also adopted incentives, and has passed legislation to limit the powers of private home owners associations to inappropriately interfere with installation of certain alternative energy devices on residential properties. The policies, incentives and support forthcoming thus far emphasize the need for a variety of measures on multiple levels to meet the rising future demand on energy resources, including smaller applications which can be implemented by individual citizens. This array of factors has prompted staff to initially focus on allowances for small wind-energy generators (traditional wind turbines) which could be used for augmentation to normal electrical energy resources for residential users.

Staff has endeavored to strike an appropriate balance between respecting the overall purposes of the zoning code and the long term public and private interest in this form of alternative energy. These amendments would be the first step in a larger overall effort to allow other forms of alternative energy to be pursued by residents of the City, as appropriate. Additional amendments are anticipated in the future to allow alternative energy in non-residential zones. This would take a much larger effort on the part of the City.

## IV. RESEARCH

Staff has researched information from various sources such as U.S. Energy Department, the State of Colorado, Rocky Mountain Land Use Institute, American Planning Association, American Wind Energy Association and other local governments around the nation, to determine if small wind-energy systems could become a viable source of renewable alternative energy in Loveland. Staff research has discovered that, since potential for wind energy is governed by basic principles of physics and the current state of technology, there is a remarkable consensus within the public and private sectors regarding design, installation and use of small wind-energy generators, as well as the viable potential of such devices.

These available sources of expertise clearly indicate that the potential for viable electric power by small wind energy generators on individual residential properties in Loveland is very limited. Under the current technology, prevailing wind speeds and patterns are not likely to generate a substantial amount of electrical power from a small generator with a height that is appropriate for residential zones. Expert sources indicate that, in order for a wind turbine to operate with reasonable capacity, it must be at least 80 feet above the ground, and 30 feet above all other objects within 300 feet of the generator. To function at full capacity, a wind turbine must be 120 feet above the ground. This is not viable for most home owners and most neighborhoods. The information available to staff indicates that, with current technology, the available wind energy in the Loveland area is only sufficient for basic emergency lighting or such limited uses as charging the batteries of motor-cycles, boats or cell phones. However, as viewed from a larger perspective, the potential for shrinking or unavailable resources at the national and international level, the forward impetus in technology, and the growing demand for alternative energy sources, accommodating alternative sources may be in the best long-term interest of the City.

Another issue that has clearly surfaced in the research is that use of currently available forms of alternative energy sources can often be inadvertently hindered by traditional local regulations, especially for traditional residential areas. Much of the current City of Loveland zoning code was adopted in 1973-1993, when the need for alternative renewable energy was not keenly felt, and certain elements of technology were not available. Therefore the current zoning code does not adequately accommodate some of the typical devices now available, especially on private residential properties. The main body of the current zoning code was written in the early 1970sand it was never amended to accommodate any type of alternative energy devices such as solar hot-water systems, solar panels, wind generators, etc. Solar panels are now considered acceptable under the parameters of "customary and incidental" under the Accessory Uses section of the code. However, the currently available forms of small wind-energy devices would not be considered "customary and incidental" and cannot currently be allowed unless the code is amended.

Primary sources consulted by staff further recommend that regulation of small wind turbines be held to a strict minimum, to hold down costs and other discouraging factors. Although staff can easily understand the desire to keep the use of alternative energy a relatively simple matter for a property owner to achieve, the visual and noise impact issues sometimes linked to wind turbines also prompts concern from some participants. Therefore this updated draft includes provisions to assure written notice to adjacent owners and residents and appeal rights, under the procedures of the recently adopted Chapter 18.80.

## V. PROCESS FOLLOWED

The proposed amendments have been thoroughly discussed with the Title 18 Committee, as well as various City departments to assure that any proposed code amendments will be consistent and compatible with the other City codes, standards and procedures. Consultations, presentations and discussions of the proposal have occurred as follows:

Title 18 Committee: September 14, 2009

October 22, 2009 November 19, 2009 May 27, 2011 **Planning Commission** 

study session: October 26, 2009

Loveland Utilities

Commission: April 21, 2010

Construction Advisory

Board: April 21, 2010

City Council

study session: April 27, 2010

## VI. MAJOR COMPONENTS

The basic elements of the amendments are as follows:

- 1. Use the term "Small wind-energy system" (SWES) for these devices. This is becoming the common term in the industry and would accommodate developing and future forms other than the traditional wind turbine which is currently popular on the market.
- 2. Allow building-mounted and free-standing SWES upon all residential properties in the City, including grandfathered residential uses in the DR zone, as an accessory use. This would require compliance with all normal limitations and requirements for any other accessory use, along with other specific standards for the SWES to balance the need for alternative forms of energy with the overall purposes of the zoning code. The proposed standards include:
- a. Limit the rated capacity of the SWES to 10 kW;
- b. Allow only one per property;
- c. Limit the height to 35 feet from grade, or 10 feet above the ridge line of the roofline;
- d. Require minimum distance from property lines and easements to assure that any collapse of the device or a support tower will not result in danger to adjacent properties or public utilities. No freestanding SWES would be allowed in the front yard of a property.
- e. Require SWES to be equipped with manual override system, automatic braking system, and governing or feathering system to allow shut down and prevent over-rotation;
- f. Require a minimum of 15 feet between the bottom arc of the blades to the ground below (freestanding SWES only).
- g. Allow no permanent access mechanisms such as foot pegs, steps, rungs or ladders within 12 feet of the ground below;

- h. Require compliance with all pertinent Building and Electric Codes and requirements of the City of Loveland Power Department or any other public provider of electric power for the property;
- i. Require uniform neutral or muted colors approved by the City to blend into the surroundings;
- j. Allow no illumination allowed unless required by FAA or the Airport Manager for purposes of safety;
- k. Allow no signs to be installed on, or be part of, the SWES or its support members;
- 1. Require towers for freestanding SWES to be monopoles. Other types of support structures, such as the traditional "triangular web-joist" or "lattice towers", could be approved through the special review process, or on a case-by-case basis, by the Current Planning Manager;
- m. Restate that the maximum noise levels set forth in the City noise ordinance applies to the SWES. This limits noise in residential areas to 55 db(A) during the day and 50 db(A) at night, measured 25 feet beyond the property line. This is compared to the noise produced by the average household refrigerator, and would be less noise than produced from an external residential AC unit. There is no need to include noise provisions in the Title 18 amendments other than to reference them for awareness and consistency. The City noise ordinance is not part of the zoning code, and cannot be varied by any provisions of the zoning code or related standards.
- 3. Allow building-mounted and freestanding SWES which do not fully comply with these standards as a use-by-special review in all residential zones. If the non-conforming element(s) of the Applicant's proposal is related to building code, electric code, etc., it could also require approval through other advisory bodies, such as Construction Advisory Board.
- 4. The proposed code does not require the design or plans for each individual turbine device to be stamped and signed by a Colorado PE. All professional and technical sources of information urge that this should not be done because it escalates the costs prohibitively, and adds nothing to the safety issues. The continuing absence of any overarching review and approval/certification entity, such as URL, is a problem that cannot be resolved by the City. If other pertinent codes, such as building code or electric code require this, it will be determined as part of the permit review by the Building Division.
- 5. The U.S. Energy Department recommends that SWES not be mounted on the roof of a building, due to potential of increased noise and vibrations, possibly resulting in structural damage over time. However, after considerable discussion on this matter by the Title 18 Committee and other participants, the proposed code does not include provisions for prevention or dampening of noise or vibrations to the structure at the mounting points upon which it is mounted. This will be treated as a "buyer-beware" issue for the owner to consider. If dependable model codes are offered in the future, the City can consider adding it in the future.

Attachments # 1 and #2 to this staff memorandum describe the staff proposal, in the form of actual code amendments that will be needed to implement the allowance for Small wind-energy systems (SWES) for residential properties in Loveland. We believe this will be an important first step in a longer and more valuable effort of the City to be better prepared for the energy needs of the future.

## PROPOSED TITLE 18 AMENDMENTS SMALL WIND ENERGY SYSTEMS - Red-lines

## PLANNING COMMISSION PUBLIC HEARING August 8, 2011

## A. Add definitions:

1. Add sub-section 18.04.355.5 to read as follows:

18.04.355.5 Small wind energy system defined.

"Small wind energy system" means any device or mechanism such as a wind charger, windmill, wind turbine, wind generator, or wind alternator which converts wind energy to a form of original useable electrical energy, and which has a maximum output rating of 10 kilowatts (kW), including associated external components, elements or features such as base, tower, wiring, connections, batteries, and associated control equipment.

2. Add sub-section 18.04.113.3 to read as follows:

18.04. 113.3 Building-mounted small wind energy system defined.

"Building-mounted small wind energy system" means a small wind energy system which is permanently attached to the roof, walls, or gable of a building, but not attached or anchored into the ground.

3. Add sub-section 18.04.164.5 to read as follows:

18.04.164.5 Freestanding small wind energy system defined

"Freestanding small wind energy system" means a small wind energy system which is permanently attached to and supported by a tower which is anchored into the ground.

B. Allow both building-mounted and freestanding small wind energy systems which comply with the specific standards in chapter 18.48 on all residential properties in the City as a use-by-right accessory use. This would include residential properties in the Be, B, MAC and E zones, and on properties in the DR zone which have a grandfathered residential use. Also allow building-mounted and freestanding SWES which does not comply with the normal standards as a use-by-special review on all such properties:

#### 1. ER District:

a. Add sub-sections 18.07.040. H. and I. as follows:

- H. Building–mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- I. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.07.050. K. and L. as follows:
  - K. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - L. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 2. R1e District:

- a. Add subsections 18.08.010. G. and H. as follows:
  - G. Building–mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.
  - H. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.08.020. O. and P. as follows:
  - O. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.
  - P. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.

#### 3. R1 District:

- a. Add sub-sections 18.12.010. G. and H. as follows:
  - G. Building–mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.
  - H. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.

- b. Add sub-sections 18.12.020. O. and P. as follows:
  - O. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - P. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 4. R2 District:

- a. Add sub-sections 18.13.020. I. and J. as follows:
  - I. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.
  - J. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.13.030. M. and N. as follows:
  - M. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - N. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18.48.110.

#### 5. R3e District:

- a. Add sub-sections 18.16.010. M. and N. as follows:
  - M. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with standards set forth in section 18. 48.110.
  - N. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.16.020. BB. and CC. as follows:
  - BB. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

CC. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

## 6. <u>R3 District:</u>

- a. Add sub-sections 18.20.010. K. and L. as follows:
  - K. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.
  - L. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.20.020. W. and X. as follows:
  - W. Building-mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - X. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

## 7. Be District:

- a. Add sub-sections 18.24.020. YY. and ZZ. as follows:
  - YY. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
  - ZZ. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.24.030. X. and Y. as follows:
  - X. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.
  - Y. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 8. B District:

- a. Add sub-sections 18.28.010. RR. and SS. as follows:
  - RR. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
  - SS. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.28.020. OO. and PP. as follows:
  - OO. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - PP. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 9. MAC District:

- a. Add sub-sections 18.29.020. SS. and TT. as follows:
  - SS. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
  - TT. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.29.030. Q. and R. as follows:
  - Q. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - R. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.

#### 10. E District:

- a. Add sub-sections 18.30.020. MM. and NN. as follows:
  - MM. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.

- NN. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.30.030. X. and Y. as follows:
  - X. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - Y. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 11. DR District:

a. Amend sub-section 18.38.010. to read as follows:

## 18.38.010 Uses permitted by right.

There are no uses permitted by right in a DR district.

- A. Building–mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- B. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.38.020. J. and K. as follows:
  - J. Building–mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - K. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.
- C. Establish a new sub-section in Chapter 18.48 to allow small wind energy systems, as follows:
- 18.48.110 Small wind energy systems
- A. Purpose.

- 1. To allow opportunities for certain alternative forms of electrical energy generation in appropriate areas of the City by installation and operation of small wind energy systems;
- 2. To assure that small wind energy systems comply with the provisions for accessory uses, as set forth in this chapter;
- 3. To assure that potential negative impacts on public and private safety, aesthetics, economy and convenience that may result from a small wind energy system are adequately mitigated; and,
- 4. To assure that small wind energy systems are reasonably compatible with the character of the neighborhood in which they are to be located.

#### B. General Provisions

- 1. A small wind energy system shall be deemed, and is hereby declared to be, an accessory use in designated zone districts, provided it complies with the standards set forth in this chapter, or is otherwise approved by the City pursuant to the provisions of chapter 18.40 of this title.
- 2. The City hereby declares that the provisions of this section shall not be deemed to establish, grant, require, assure, reserve, preserve, or imply, any easement or right of access to wind for the function of any small wind energy system approved by the City; and the City hereby expressly declares that it shall not be party to any effort, negotiation or acquisition of any such access or right to wind.
- 3. The allowance of small wind energy systems is not intended, nor shall it be construed, to abrogate or otherwise modify other zoning restrictions, subdivision restrictions, covenants, or other restrictions that may apply to a premise.
- C. Definitions. As used in this section, the following words and phrases shall have the following meanings:
- 1. "Abutting property" means all real property which is contiguous to the property upon which a small wind energy system is proposed, including those properties which have contiguity at only a single point of contact.
- 2. "Tower" means a self-supporting monopole, or other similar structure approved by the City, that is designed and constructed primarily for the purpose of supporting a small wind energy system or portion thereof.
- D. General standards. The following standards shall apply to all small wind energy systems except as otherwise approved by a special review pursuant to the provisions of chapter 18.40 of this title:
- 1. There shall be no more than one (1) small wind energy system per property and it shall be located on the same property as the principal dwelling for which it is an accessory use.

- 2. The small wind energy system shall have a maximum rated capacity not to exceed 10 kilowatts (kW).
- 3. Irrespective of the zoning district in which the small wind energy system is located, the small wind energy system shall be located a minimum distance of twenty (20) feet from all property lines of the property upon which the small wind energy system is located. A small wind energy system may not be located in a dedicated easement or right-of-way.
- 4. Notwithstanding sub-section 18.48.110.D.3, no small wind energy system shall be located in the front yard of any property, as defined in subsection 18.04.420.1 of this title.
- 5. The small wind energy system shall comply, at all times, with the maximum allowable noise levels set forth in chapter 7.32 of the municipal code.
- 6. The small wind energy system shall be designed and installed in compliance with all applicable provisions of chapter 15 of this title as determined by the chief building official.
- 7. For properties which receive electrical power from the City of Loveland, the small wind energy system shall be in compliance with "The Standard for Interconnecting Distributed Resources with the City of Loveland Power Department", including a site inspection by a representative of the water and power department prior to approval of a building permit. For properties which receive electrical power from another public provider of electric power, no building permit shall be approved until the applicant has submitted written verification from said provider that they have reviewed the permit application and have determined that the small wind energy system will meet all requirements of said provider. Off-grid systems shall be exempt from these requirements.
- 8. No advertising or signs may be placed on the small wind energy system other than those incorporated by the manufacturer.
- 9. Colors of all external surfaces of the small wind energy system must uniformly be matte grey or other neutral or muted colors approved by the City which best blends the small wind energy system into its surroundings.
- 10. No illumination of the small wind energy system shall be allowed unless required by the regulations of the Federal Aviation Administration, by the manager for the Loveland-Fort Collins Airport, or if said illumination is not directly visible beyond the property upon which the small wind energy system is located.
- 11. The small wind energy system shall be equipped with a manual override system to allow shut-down in case of an emergency.
- 12. The small wind energy system shall be equipped with an automatic braking, governing, or feathering system to assure that over-rotation cannot occur.

- 13. Any small wind energy system that is out of service for a continuous period of twelve (12) months may be deemed by the City to be abandoned and the permit for the small wind energy system may be revoked, whereupon the small wind energy system shall be deemed a violation of this title and subject to removal by the property owners pursuant to the provisions of chapter 18.68 of this title.
- 14. The electrical energy produced by a small wind energy system shall be stored, used or consumed only on the same property upon which the small wind energy system is located, except when connected to a public provider system in compliance with "The Standards for Interconnecting Distributed Resources with the City of Loveland Power Department" or other applicable standards adopted by said other public provider of electrical power to the property.
- 15. Electrical lines or ground wires connecting a small wind energy system to other functional components, elements, or features, including service cabinets, battery cabinets, and accessory components, or to a building on the property shall be located internal to, or attached immediately upon, the external surfaces of the small wind energy system or the building upon which the small wind energy system is attached.
- E. Additional standards for building-mounted small wind energy systems.

In addition to the general standards set forth in sub-section D. above, all building-mounted small wind energy systems shall comply with the following standards except as otherwise approved pursuant to the provisions of chapter 18.40 of this title:

- 1. A building-mounted small wind energy system shall be permanently attached to a permitted principal or accessory building on the property.
- 2. The maximum total height of a building-mounted small wind energy system which is attached directly to the roof of a building shall be ten (10) feet above the highest point of the roof upon which the small wind energy systems is attached. The maximum total height of a small wind energy system which is attached to a building in some manner other than directly to the roof shall be ten (10) feet above the highest point of the roof to which it is most closely located.
- 3. Any guy wires, tether wires, or stabilizing wires needed to affix the small wind energy system to a building shall be attached only to the building upon which the small wind energy system is attached.
- 4. When a building-mounted small wind energy system is attached in the manner described in sub-section 18.04.113.3.b, the support structure shall be positioned and attached to the building so that its relative position is as close to the building as can be practically and reasonably accomplished by standard construction techniques, as determined by the Current Planning Manager.

F. Additional standards for freestanding small wind energy systems.

In addition to the general standards set forth in section D. above, all freestanding small wind energy system shall comply with the following standards except as otherwise approved pursuant to the provisions of chapter 18.40 of this title:

- 1. The tower upon which the small wind energy system is attached shall be a self-supporting mono-pole with no other means of support or stabilization such as guy wires, tether wires, or stability wires. However, on a case-by-case basis, the Current Planning Manager may approve other types of towers, based upon a determination that the proposed tower will not have a negative visual impact on the neighborhood or adjacent properties, and provided the tower is designed by a professional engineer currently licensed in the State of Colorado. When submitted to the City, the plans for all towers shall be stamped by the designing professional engineer.
- 2. The maximum total height of any freestanding small wind energy system shall be thirty-five (35) feet above grade directly below, as defined in sub-section 18.04.113.2 of this title.
- 3. The distance between the bottom of rotor blades, at their lowest point of arc, to grade, as defined in sub-section 18.04.113.2 of this title, shall be a minimum of fifteen (15) feet.
- 4. No permanently attached mechanism for access to or onto the tower, which mechanism is incorporated or attached to the tower such as foot pegs, steps, rungs or ladders, shall be within twelve (12) feet of the grade directly below.
- 5. Appropriate warning signage shall be placed on both the small wind energy system and tower in accordance with the manufacturer's recommendations.
- 6. The minimum horizontal distance between the small wind energy system, and all property lines shall be ten percent (10%) greater than the total height of the small wind energy system.
- 7. The horizontal distance between the tower and all overhead public utility lines shall be twenty-five percent (25%) greater than the total height of the small wind energy system.
- G. Application and review procedure.
- 1. No person shall install a small wind energy system within the City without first obtaining the appropriate permits from the City, as determined by the Current Planning Manager and the Chief Building Official at the time of application. The applicant shall submit the required applications to the City on forms required by the City, including the application fee, as determined by City Council resolution, and all other items set forth on the submittal checklist determined by the Current Planning Manager.
- 2. Upon completion of review by the City, the City shall notify the applicant whether a final decision can be made, or if the application must be revised and further reviewed. Upon City

determination that a final decision can be made, the City shall issue its final decision in the form of a written notice.

- 3. Upon issuance of the final decision, a copy of the written notice shall be mailed by the City to the applicant and to all owners and tenants of abutting properties, as indicated on the mailing list. All notified persons shall have ten (10) days from the date of mailing to submit an appeal of the final decision, pursuant to the provisions of chapter 18.80 of this title.
- 4. No permit shall be issued by the City until the City determines that the small wind energy system will be installed and operated in compliance with all requirements determined by the City, and that all appeal processes have concluded in a manner which allows issuance of the permit.
- H. Issuance of permits.
- 1. Upon completion of any appeal process regarding the proposed small wind energy system, and if the application is approved, the City shall issue all permits necessary to allow installation and operation of the small wind energy system as described in the application and in accordance with any conditions placed on the permits by the City.
- 2. Prior to the issuance of said permits, the applicant shall certify that he or she will install and operate the small wind energy system in conformity with the provisions of this title and any conditions determined by the City as part of the review and approval process.
- I. It is unlawful for any person to operate a small wind energy system that does not conform to the provisions of this section, or the conditions of approval as stated on the small wind energy system permits.
- J. Revocation of permits and appeal provisions.

Any permits issued by the City for a small wind energy system may be revoked by the City if the City finds any of the following:

- 1. The small wind energy system no longer conforms to the provisions of this section or the conditions of approval accompanying the approval of the permits.
- 2. The mailing list provided by the applicant was faulty.
- 3. The applicant failed to follow the application, review and appeal process.

Written notification of said revocation shall be mailed to the last known address of the permit holder and shall include findings in support of the revocation and the applicant's rights of appeal. The date of the mailing shall be the date of notification. The permit holder and/or the current owner of the property may file a written appeal of the City's decision as provided for in chapter 18.80 of this title.

# PROPOSED TITLE 18 AMENDMENTS SMALL WIND ENERGY SYSTEMS - Clean copy

## PLANNING COMMISSION PUBLIC HEARING August 8, 2011

## A. Definitions:

1. Add sub-section 18.04.355.5 to read as follows:

18.04.355.5 Small wind energy system defined.

"Small wind energy system" means any device or mechanism such as a wind charger, windmill, wind turbine, wind generator, or wind alternator which converts wind energy to a form of original useable electrical energy, and which has a maximum output rating of 10 kilowatts (kW), including associated external components, elements or features such as base, tower, wiring, connections, batteries, and associated control equipment.

2. Add sub-section 18.04.113.3 to read as follows:

18.04. 113.3 Building-mounted small wind energy system defined.

"Building-mounted small wind energy system" means a small wind energy system which is permanently attached to the roof, walls, or gable of a building, but not attached or anchored into the ground.

3. Add sub-section 18.04.164.5 to read as follows:

18.04.164.5 Freestanding small wind energy system defined

"Freestanding small wind energy system" means a small wind energy system which is permanently attached to and supported by a tower which is anchored into the ground.

B. Allow both building-mounted and freestanding small wind energy systems which comply with the specific standards in chapter 18.48 on all residential properties in the City as a use-by-right accessory use. This would include residential properties in the Be, B, MAC and E zones, and on properties in the DR zone which have a grandfathered residential use. Also allow building-mounted and freestanding SWES which does not comply with the normal standards as a use-by-special review on all such properties:

#### 1. ER District:

a. Add sub-sections 18.07.040. H. and I. as follows:

- H. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- I. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.07.050. K. and L. as follows:
  - K. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - L. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.

#### 2. R1e District:

- a. Add subsections 18.08.010. G. and H. as follows:
  - G. Building–mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.
  - H. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.08.020. O. and P. as follows:
  - O. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.
  - P. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.

#### 3. R1 District:

- a. Add sub-sections 18.12.010. G. and H. as follows:
  - G. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.
  - H. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.

- b. Add sub-sections 18.12.020. O. and P. as follows:
  - O. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - P. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 4. R2 District:

- a. Add sub-sections 18.13.020. I. and J. as follows:
  - I. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.
  - J. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.13.030. M. and N. as follows:
  - M. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - N. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18.48.110.

#### 5. R3e District:

- a. Add sub-sections 18.16.010. M. and N. as follows:
  - M. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with standards set forth in section 18. 48.110.
  - N. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.16.020. BB. and CC. as follows:
  - BB. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

CC. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.

## 6. <u>R3 District:</u>

- a. Add sub-sections 18.20.010. K. and L. as follows:
  - K. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.
  - L. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.20.020. W. and X. as follows:
  - W. Building—mounted small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - X. Freestanding small wind energy system, as an accessory use to the permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.

## 7. Be District:

- a. Add sub-sections 18.24.020. YY. and ZZ. as follows:
  - YY. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
  - ZZ. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.24.030. X. and Y. as follows:
  - X. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.
  - Y. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 8. B District:

- a. Add sub-sections 18.28.010. RR. and SS. as follows:
  - RR. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
  - SS. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.28.020. OO. and PP. as follows:
  - OO. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - PP. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 9. MAC District:

- a. Add sub-sections 18.29.020, SS, and TT, as follows:
  - SS. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
  - TT. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.29.030. Q. and R. as follows:
  - Q. Building–mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - R. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.

#### 10. E District:

- a. Add sub-sections 18.30.020. MM. and NN. as follows:
  - MM. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18. 48.110.

- NN. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.30.030. X. and Y. as follows:
  - X. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
  - Y. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.

#### 11. DR District:

a. Amend sub-section 18.38.010. to read as follows:

## 18.38.010 Uses permitted by right.

- A. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- B. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is in compliance with the standards set forth in section 18.48.110.
- b. Add sub-sections 18.38.020. J. and K. as follows:
  - J. Building—mounted small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18. 48.110.
  - K. Freestanding small wind energy system, as an accessory use to a permitted residential use, which is not in compliance with one or more of the standards set forth in section 18, 48,110.
- C. Establish a new sub-section in Chapter 18.48 to allow small wind energy systems, as follows:
- 18.48.110 Small wind energy systems
- A. Purpose.
- 1. To allow opportunities for certain alternative forms of electrical energy generation in appropriate areas of the City by installation and operation of small wind energy systems;

- 2. To assure that small wind energy systems comply with the provisions for accessory uses, as set forth in this chapter;
- 3. To assure that potential negative impacts on public and private safety, aesthetics, economy and convenience that may result from a small wind energy system are adequately mitigated; and,
- 4. To assure that small wind energy systems are reasonably compatible with the character of the neighborhood in which they are to be located.

#### B. General Provisions

- 1. A small wind energy system shall be deemed, and is hereby declared to be, an accessory use in designated zone districts, provided it complies with the standards set forth in this chapter, or is otherwise approved by the City pursuant to the provisions of chapter 18.40 of this title.
- 2. The City hereby declares that the provisions of this section shall not be deemed to establish, grant, require, assure, reserve, preserve, or imply, any easement or right of access to wind for the function of any small wind energy system approved by the City; and the City hereby expressly declares that it shall not be party to any effort, negotiation or acquisition of any such access or right to wind.
- 3. The allowance of small wind energy systems is not intended, nor shall it be construed, to abrogate or otherwise modify other zoning restrictions, subdivision restrictions, covenants, or other restrictions that may apply to a premise.
- C. Definitions. As used in this section, the following words and phrases shall have the following meanings:
- 1. "Abutting property" means all real property which is contiguous to the property upon which a small wind energy system is proposed, including those properties which have contiguity at only a single point of contact.
- 2. "Tower" means a self-supporting monopole, or other similar structure approved by the City, that is designed and constructed primarily for the purpose of supporting a small wind energy system or portion thereof.
- D. General standards. The following standards shall apply to all small wind energy systems except as otherwise approved by a special review pursuant to the provisions of chapter 18.40 of this title:
- 1. There shall be no more than one (1) small wind energy system per property and it shall be located on the same property as the principal dwelling for which it is an accessory use.

- 2. The small wind energy system shall have a maximum rated capacity not to exceed 10 kilowatts (kW).
- 3. Irrespective of the zoning district in which the small wind energy system is located, the small wind energy system shall be located a minimum distance of twenty (20) feet from all property lines of the property upon which the small wind energy system is located. A small wind energy system may not be located in a dedicated easement or right-of-way.
- 4. Notwithstanding sub-section 18.48.110.D.3, no small wind energy system shall be located in the front yard of any property, as defined in subsection 18.04.420.1 of this title.
- 5. The small wind energy system shall comply, at all times, with the maximum allowable noise levels set forth in chapter 7.32 of the municipal code.
- 6. The small wind energy system shall be designed and installed in compliance with all applicable provisions of chapter 15 of this title as determined by the chief building official.
- 7. For properties which receive electrical power from the City of Loveland, the small wind energy system shall be in compliance with "The Standard for Interconnecting Distributed Resources with the City of Loveland Power Department", including a site inspection by a representative of the water and power department prior to approval of a building permit. For properties which receive electrical power from another public provider of electric power, no building permit shall be approved until the applicant has submitted written verification from said provider that they have reviewed the permit application and have determined that the small wind energy system will meet all requirements of said provider. Off-grid systems shall be exempt from these requirements.
- 8. No advertising or signs may be placed on the small wind energy system other than those incorporated by the manufacturer.
- 9. Colors of all external surfaces of the small wind energy system must uniformly be matte grey or other neutral or muted colors approved by the City which best blends the small wind energy system into its surroundings.
- 10. No illumination of the small wind energy system shall be allowed unless required by the regulations of the Federal Aviation Administration, by the manager for the Loveland-Fort Collins Airport, or if said illumination is not directly visible beyond the property upon which the small wind energy system is located.
- 11. The small wind energy system shall be equipped with a manual override system to allow shut-down in case of an emergency.
- 12. The small wind energy system shall be equipped with an automatic braking, governing, or feathering system to assure that over-rotation cannot occur.

- 13. Any small wind energy system that is out of service for a continuous period of twelve (12) months may be deemed by the City to be abandoned and the permit for the small wind energy system may be revoked, whereupon the small wind energy system shall be deemed a violation of this title and subject to removal by the property owners pursuant to the provisions of chapter 18.68 of this title.
- 14. The electrical energy produced by a small wind energy system shall be stored, used or consumed only on the same property upon which the small wind energy system is located, except when connected to a public provider system in compliance with "The Standards for Interconnecting Distributed Resources with the City of Loveland Power Department" or other applicable standards adopted by said other public provider of electrical power to the property.
- 15. Electrical lines or ground wires connecting a small wind energy system to other functional components, elements, or features, including service cabinets, battery cabinets, and accessory components, or to a building on the property shall be located internal to, or attached immediately upon, the external surfaces of the small wind energy system or the building upon which the small wind energy system is attached.
- E. Additional standards for building-mounted small wind energy systems.

In addition to the general standards set forth in sub-section D. above, all building-mounted small wind energy systems shall comply with the following standards except as otherwise approved pursuant to the provisions of chapter 18.40 of this title:

- 1. A building-mounted small wind energy system shall be permanently attached to a permitted principal or accessory building on the property.
- 2. The maximum total height of a building-mounted small wind energy system which is attached directly to the roof of a building shall be ten (10) feet above the highest point of the roof upon which the small wind energy systems is attached. The maximum total height of a small wind energy system which is attached to a building in some manner other than directly to the roof shall be ten (10) feet above the highest point of the roof to which it is most closely located.
- 3. Any guy wires, tether wires, or stabilizing wires needed to affix the small wind energy system to a building shall be attached only to the building upon which the small wind energy system is attached.
- 4. When a building-mounted small wind energy system is attached in the manner described in sub-section 18.04.113.3.b, the support structure shall be positioned and attached to the building so that its relative position is as close to the building as can be practically and reasonably accomplished by standard construction techniques, as determined by the Current Planning Manager.

F. Additional standards for freestanding small wind energy systems.

In addition to the general standards set forth in section D. above, all freestanding small wind energy system shall comply with the following standards except as otherwise approved pursuant to the provisions of chapter 18.40 of this title:

- 1. The tower upon which the small wind energy system is attached shall be a self-supporting mono-pole with no other means of support or stabilization such as guy wires, tether wires, or stability wires. However, on a case-by-case basis, the Current Planning Manager may approve other types of towers, based upon a determination that the proposed tower will not have a negative visual impact on the neighborhood or adjacent properties, and provided the tower is designed by a professional engineer currently licensed in the State of Colorado. When submitted to the City, the plans for all towers shall be stamped by the designing professional engineer.
- 2. The maximum total height of any freestanding small wind energy system shall be thirty-five (35) feet above grade directly below, as defined in sub-section 18.04.113.2 of this title.
- 3. The distance between the bottom of rotor blades, at their lowest point of arc, to grade, as defined in sub-section 18.04.113.2 of this title, shall be a minimum of fifteen (15) feet.
- 4. No permanently attached mechanism for access to or onto the tower, which mechanism is incorporated or attached to the tower such as foot pegs, steps, rungs or ladders, shall be within twelve (12) feet of the grade directly below.
- 5. Appropriate warning signage shall be placed on both the small wind energy system and tower in accordance with the manufacturer's recommendations.
- 6. The minimum horizontal distance between the small wind energy system, and all property lines shall be ten percent (10%) greater than the total height of the small wind energy system.
- 7. The horizontal distance between the tower and all overhead public utility lines shall be twenty-five percent (25%) greater than the total height of the small wind energy system.
- G. Application and review procedure.
- 1. No person shall install a small wind energy system within the City without first obtaining the appropriate permits from the City, as determined by the Current Planning Manager and the Chief Building Official at the time of application. The applicant shall submit the required applications to the City on forms required by the City, including the application fee, as determined by City Council resolution, and all other items set forth on the submittal checklist determined by the Current Planning Manager.
- 2. Upon completion of review by the City, the City shall notify the applicant whether a final decision can be made, or if the application must be revised and further reviewed. Upon City

determination that a final decision can be made, the City shall issue its final decision in the form of a written notice.

- 3. Upon issuance of the final decision, a copy of the written notice shall be mailed by the City to the applicant and to all owners and tenants of abutting properties, as indicated on the mailing list. All notified persons shall have ten (10) days from the date of mailing to submit an appeal of the final decision, pursuant to the provisions of chapter 18.80 of this title.
- 4. No permit shall be issued by the City until the City determines that the small wind energy system will be installed and operated in compliance with all requirements determined by the City, and that all appeal processes have concluded in a manner which allows issuance of the permit.
- H. Issuance of permits.
- 1. Upon completion of any appeal process regarding the proposed small wind energy system, and if the application is approved, the City shall issue all permits necessary to allow installation and operation of the small wind energy system as described in the application and in accordance with any conditions placed on the permits by the City.
- 2. Prior to the issuance of said permits, the applicant shall certify that he or she will install and operate the small wind energy system in conformity with the provisions of this title and any conditions determined by the City as part of the review and approval process.
- I. It is unlawful for any person to operate a small wind energy system that does not conform to the provisions of this section, or the conditions of approval as stated on the small wind energy system permits.
- J. Revocation of permits and appeal provisions.

Any permits issued by the City for a small wind energy system may be revoked by the City if the City finds any of the following:

- 1. The small wind energy system no longer conforms to the provisions of this section or the conditions of approval accompanying the approval of the permits.
- 2. The mailing list provided by the applicant was faulty.
- 3. The applicant failed to follow the application, review and appeal process.

Written notification of said revocation shall be mailed to the last known address of the permit holder and shall include findings in support of the revocation and the applicant's rights of appeal. The date of the mailing shall be the date of notification. The permit holder and/or the current owner of the property may file a written appeal of the City's decision as provided for in chapter 18.80 of this title.