

EFFECTIVE DATE: 5-21-11

ORDINANCE NO. 2011-05

A BILL

FOR AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF AURORA, COLORADO, AMENDING ARTICLE 12 OF CHAPTER 146 OF THE CITY CODE OF THE CITY OF AURORA, COLORADO, ADDING SECTIONS 146-1280 THROUGH 146-1287, RELATING TO SOLAR AND WIND ENERGY AND AMENDING SECTION 146-2001 OF THE CITY CODE OF THE CITY OF AURORA TO DEFINE SOLAR COLLECTORS AND WIND SYSTEMS

WHEREAS, the City Council of the City of Aurora, Colorado wishes to reduce Aurora's dependence on non-renewable energy sources and acknowledge the city's potential for solar and wind energy production; and

WHEREAS, the Council supports the objectives of the comprehensive plan which calls for the city to include solar and wind terminology in the zoning code; and

WHEREAS, the Council seeks to ensure solar and wind energy systems are designed appropriately, are safely installed, and are compatible with nearby uses; and

WHEREAS, the Council wants to outline a simple permitting process to facilitate the installation of wind and solar devices.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AURORA, COLORADO:

Section 1. That the City Code of the City of Aurora, Colorado, is hereby amended by adding sections, to be numbered 146-1280 through and including 146-1287, which sections read as follows:

SEC. 146-1280. TABLE FOR SOLAR COLLECTORS USES, ACCESSORY AND PRINCIPAL.

SOLAR COLLECTORS ARE PERMITTED AS PROVIDED IN TABLE 12.4 BELOW, SUBJECT TO THE BUILDING PERMIT REQUIREMENTS OF CHAPTER 22 OF THE CITY CODE OF THE CITY OF AURORA, COLORADO.

TABLE 12.4 PERMITTED SOLAR COLLECTOR USES				
	ZONE DISTRICT P=PERMITTED USE	ACCESSORY SOLAR	ACCESSORY SOLAR	PRINCIPAL SOLAR COLLECTOR

	C=CONDITIONAL USE WITH PLANNING COMMISSION APPROVAL NP=NOT PERMITTED	COLLECTOR – ROOF-MOUNTED	COLLECTOR – GROUND- MOUNTED	
1.	R-A, R-E	P	P	C
2.	R-0, R-1, R-1A, R-2, PCZD SFD, PCZD SFA	P	P	NP
3.	MULTI-FAMILY: R-2M-R-5, PCZD-MF AND PD-MF	P	P	NP
4.	AGRICULTURAL	P	P	P
5.	OPEN, NATURAL AREA DISTRICTS	P	P	NP
6.	CITY CENTER ZONE DISTRICT; TRANSIT ORIENTED DEVELOPMENT DISTRICT, FITZSIMONS BOUNDARY AREA DISTRICT	P	P	NP
7.	OFFICE DISTRICTS: AO, CO AND MO, PCZD OFFICE AND PD OFFICE	P	P	C
8.	BUSINESS DISTRICTS: B-1 THROUGH B-4, PCZD COMMERCIAL AND PD COMMERCIAL	P	P	C
9.	M-1, M-2, M-3, PCZD INDUSTRIAL AND PD INDUSTRIAL, MPIP	P	P	C
10	E-470 LOW DENSITY RESIDENTIAL, E-470 RESERVOIR DENSITY, E-470 RESIDENTIAL, MEDIUM DENSITY; N.E. PLAINS MEDIUM DENSITY RESIDENTIAL	P	P	NP
11	E-470 REGIONAL ACTIVITY CENTER	P	P	NP
12	REGIONAL RETAIL/COMMERCIAL, AIRPORT CORPORATE	P	P	C
13	E-470 AIRPORT DISTRIBUTION, E-470 LIGHT INDUSTRIAL FLEX OFFICE, E-470 BUCKLEY R&D, N.E. PLAINS I-70 CORRIDOR, NE PLAINS GENERAL, N.E. PLAINS FRONT RANGE	P	P	P

SEC. 146-1281. SOLAR COLLECTOR DESIGN STANDARDS.

THE FOLLOWING IS APPLICABLE FOR ALL SOLAR COLLECTORS:

- A. ALL SOLAR COLLECTOR SYSTEMS SHALL BE IN COMPLIANCE WITH ALL CURRENTLY ADOPTED CITY OF AURORA BUILDING CODES;
- B. SOLAR COLLECTOR SYSTEMS THAT UTILIZE CONCENTRATOR TECHNOLOGIES AND HAVE NOT INCORPORATED ANTI-GLARE MEASURES INTO THE SYSTEM OR INSTALLATION SHALL BE PLACED IN AREAS SO THAT THE CONCENTRATED SOLAR GLARE SHALL NOT BE DIRECTED ONTO INHABITED ADJACENT PROPERTIES OR ROADWAYS;
- C. THE DESIGN OF THE SOLAR COLLECTOR SYSTEM SHALL USE MATERIALS, COLORS, TEXTURES, SCREENING AND LANDSCAPING THAT WILL BLEND THE COLLECTOR INTO THEIR EXISTING ENVIRONMENT. THIS SHALL BE DONE TO THE MOST REASONABLE EXTENT POSSIBLE WITHOUT PROHIBITING THE INSTALLATION;
- D. SOLAR COLLECTORS SHALL BE CONSTRUCTED TO MEET THE HEIGHT REQUIREMENTS OF THE ZONE DISTRICT.

SEC. 146-1282. ACCESSORY SOLAR COLLECTOR.

- A. IF THE SOLAR COLLECTOR IS NOT FLUSH WITH THE ROOF THE APPLICANT SHALL MINIMIZE THE VISIBILITY OF THE COLLECTOR FROM A PUBLIC STREET, PARK, OPEN SPACE, OR GOLF COURSE TO THE MOST REASONABLE EXTENT POSSIBLE WITHOUT PROHIBITING THE INSTALLATION;
- B. GROUND-MOUNTED COLLECTORS ARE ALLOWED AS AN ACCESSORY STRUCTURE OUTSIDE THE SETBACKS;
- C. GROUND-MOUNTED ACCESSORY SOLAR COLLECTORS SHALL NOT EXCEED THE HEIGHT OF THE PRINCIPAL STRUCTURE ON THE LOT OR PARCEL.

SEC. 146-1283. PRINCIPAL SOLAR COLLECTOR DESIGN STANDARDS.

PRINCIPAL SOLAR COLLECTORS SHALL CONFORM TO ALL HEIGHT, SETBACK, AND LANDSCAPING REQUIREMENTS WITHIN THEIR RESPECTIVE ZONE.

SEC. 146-1284. WIND SYSTEMS, LARGE AND SMALL.

WIND SYSTEMS ARE PERMITTED AS PROVIDED IN TABLE 12.5 BELOW, SUBJECT TO THE BUILDING PERMIT REQUIREMENTS OF CHAPTER 22 OF THE CITY CODE OF THE CITY OF AURORA, COLORADO.

TABLE 12.5 ZONING FOR WIND ENERGY SYSTEMS				
	ZONE DISTRICT P=PERMITTED USE C=CONDITIONAL USE WITH PLANNING COMMISSION APPROVAL NP=NOT PERMITTED	SMALL WIND – GROUND- MOUNTED	SMALL WIND – ROOFTOP MOUNTED	LARGE WIND – PRINCIPAL
1	R-A, R-E	P	P	NP
2	R-0, R-1, R-1A, R-2, PCZD SFD, PCZD SFA	P	P	NP
3	MULTI-FAMILY: R-2M-R-5, PCZD-MF AND PD-MF	P	P	NP
4	AGRICULTURAL	P	P	C
5	OPEN, NATURAL AREA DISTRICTS	NP	P	NP
6	CITY CENTER ZONE DISTRICT, TRANSIT ORIENTED DEVELOPMENT DISTRICT, FITZSIMONS BOUNDARY AREA DISTRICT	P	P	NP
7	OFFICE DISTRICTS: AO, CO AND MO, PCZD OFFICE AND PD OFFICE	P	P	NP
8	BUSINESS DISTRICTS: B-1 THROUGH B-4, PCZD COMMERCIAL AND PD COMMERCIAL	P	P	NP
9	M-1, M-2, M-3, PCZD INDUSTRIAL AND PD INDUSTRIAL, MPIP	P	P	C
10	E-470 LOW DENSITY RESIDENTIAL, E-470 RESERVOIR DENSITY, E-470 RESIDENTIAL, MEDIUM DENSITY; N.E. PLAINS MEDIUM DENSITY RESIDENTIAL	P	P	NP
11	E-470 REGIONAL ACTIVITY CENTER	P	P	C
12	REGIONAL RETAIL/COMMERCIAL,	P	P	C

	AIRPORT CORPORATE			
13	E-470 AIRPORT DISTRIBUTION, E-470 LIGHT INDUSTRIAL FLEX OFFICE, E-470 BUCKLEY R&D, N.E. PLAINS I-70 CORRIDOR, NE PLAINS GENERAL, N.E. PLAINS FRONT RANGE,	C	P	C

SEC. 146-1285. WIND SYSTEMS DESIGN CRITERIA. ALL WIND SYSTEMS SHALL COMPLY WITH THE FOLLOWING CRITERIA:

- A. NO TOWER SHALL BE LIT, EXCEPT TO COMPLY WITH FEDERAL AVIATION AUTHORITY (FAA) STANDARDS.
- B. ALL WIRING BETWEEN THE WIND SYSTEM AND THE SUBSTATION SHALL BE BURIED UNDERGROUND.
- C. ALL PROPOSED WIND SYSTEMS SHALL CONFORM TO THE STANDARDS ESTABLISHED IN ARTICLE 18, CHAPTER 146 OF THE CITY CODE, REGULATING NOISE WITHIN THE CITY OF AURORA.

SEC. 146-1286. SMALL WIND SYSTEM, ACCESSORY USES.

- A. FREE-STANDING SMALL WIND SYSTEM.
 - 1. AN INDIVIDUAL SMALL WIND SYSTEM SHALL BE SETBACK FROM THE PROPERTY LINE AND THE PRINCIPAL STRUCTURE AT LEAST 1.5 TIMES THE HEIGHT OF THE TURBINE;
 - 2. THE ACCESSORY SMALL WIND SYSTEM SHALL BE PERMITTED UP TO 60-FEET IN HEIGHT IN RESIDENTIAL ZONE DISTRICTS AS LONG AS THE SYSTEM MEETS THE SMALL WIND SYSTEM SETBACK. THE HEIGHT LIMIT FOR AN ACCESSORY SMALL WIND SYSTEM IN ALL OTHER ZONE DISTRICTS WHERE THEY ARE ALLOWED SHALL BE THE HEIGHT LIMIT IN THAT ZONE DISTRICT;
 - 3. FOR A GROUND-MOUNTED SMALL WIND SYSTEM, THE DISTANCE BETWEEN THE GROUND AND THE ROTOR BLADE (WHEN THE ROTOR BLADE IN ITS LOWEST POSITION) SHALL BE A MINIMUM OF 20-FEET.
- B. ROOFTOP SMALL WIND SYSTEM. ROOFTOP SMALL WIND ENERGY SYSTEMS SHALL BE CONSIDERED AN ACCESSORY USE IF BOTH THE FOLLOWING CONDITIONS ARE MET:

1. THE MAXIMUM HEIGHT OF THE ROOFTOP SMALL WIND SYSTEM DOES NOT EXCEED A HEIGHT OF 15-FEET ABOVE THE ROOF OR THE TOP OF A PARAPET, WHICHEVER IS HIGHER;
2. THE SMALL WIND SYSTEM IS SECURELY ATTACHED TO THE STRUCTURE IN COMPLIANCE WITH ALL CURRENTLY ADOPTED CITY OF AURORA BUILDING CODES AND ENGINEERING LOADS. THE BLADE ROTOR PLANE SHALL BE AT LEAST FOUR FEET AWAY FROM ANY WINDOW AND AT LEAST TWELVE FEET ABOVE ANY PATIO WITH HUMAN ACCESS.

SEC. 146-1287. LARGE WIND SYSTEMS, SETBACKS AND DESIGN STANDARDS.

- A. THE MINIMUM ACREAGE FOR A LARGE WIND SYSTEM SHALL BE ESTABLISHED BASED ON THE SETBACKS OF THE TURBINE(S) AND THE HEIGHT OF THE TURBINE(S);
- B. ALL TURBINES LOCATED WITHIN THE SAME LARGE WIND SYSTEM PROPERTY SHALL BE OF A SIMILAR TOWER DESIGN, INCLUDING THE TYPE, NUMBER OF BLADES, AND DIRECTION OF BLADE ROTATION;
- C. LARGE WIND SYSTEMS SHALL BE SETBACK AT LEAST 1.5 TIMES THE HEIGHT OF THE TURBINE AND ROTOR DIAMETER FROM THE PROPERTY LINE. LARGE WIND SYSTEMS SHALL ALSO BE SETBACK AT LEAST 1.5 TIMES THE HEIGHT OF THE TURBINE FROM ABOVE GROUND TELEPHONE, ELECTRICAL LINES, AND OTHER UNINHABITABLE STRUCTURES;
- D. A MINIMUM SPACE DISTANCE SHALL FOLLOW A 3 BY 10 SPACING DISTANCE, I.E., THE TURBINE SHALL BE SPACED THREE ROTOR DIAMETERS APART WITHIN ROWS AND THE ROWS SHALL BE SPACED 10 ROTOR DIAMETERS APART;
- E. TOWERS SHALL NOT BE CLIMBABLE UP TO FIFTEEN FEET ABOVE GROUND LEVEL.

Section 2. That Section 146-2001 of the City Code of the City of Aurora, Colorado, Definitions, be amended by adding the following definitions:

SOLAR COLLECTOR: A DEVICE OR COMBINATION OF DEVICES, STRUCTURE, OR PART OF A DEVICE OR STRUCTURE THAT TRANSFORMS DIRECT SOLAR ENERGY INTO THERMAL, CHEMICAL, OR ELECTRICAL ENERGY.

SOLAR COLLECTOR, ACCESSORY: A SOLAR COLLECTOR THAT IS AN ACCESSORY USE TO A PRINCIPAL USE IN THE RESPECTIVE LOT OR PARCEL.

SOLAR COLLECTOR, PRINCIPAL: A SOLAR COLLECTOR THAT IS A PRINCIPAL USE ON A LOT OR PARCEL.

WIND SYSTEMS: A WIND-DRIVEN MACHINE THAT CONVERTS WIND ENERGY INTO ELECTRICAL POWER. WIND SYSTEMS INCLUDE SMALL WIND SYSTEMS AND LARGE WIND SYSTEMS.

SMALL WIND SYSTEM: A WIND ENERGY CONVERSION SYSTEM WHICH HAS A RATED CAPACITY OF 100 KW OR LESS AND IS AN ACCESSORY USE WITHIN A ZONING DISTRICT. THE SMALL WIND SYSTEM SHALL SUPPORT THE ENERGY NEEDS OF THE PRINCIPAL USE ON THE SITE.

LARGE WIND SYSTEM: A WIND ENERGY CONVERSION SYSTEM WHICH HAS AN OUTPUT RATING GREATER THAN 100 KW THAT CONVERTS WIND ENERGY INTO ELECTRICAL POWER FOR THE PRIMARY PURPOSE OF SALE, RESALE, OR OFF-SITE USE.

Section 3. That pursuant to Section 5-5 of the Charter of the City of Aurora, Colorado, the second publication of this ordinance shall be by reference, utilizing the ordinance title. Copies of this ordinance are available at the Office of the City Clerk.

INTRODUCED, READ AND ORDERED PUBLISHED this 28th day of February, 2011.

PASSED AND ORDERED PUBLISHED this 11th day of April, 2011.


EDWARD J. TAUER, Mayor

ATTEST:


DEBRA JOHNSON, City Clerk

APPROVED AS TO FORM 

Dana Spade, Asst. City Atty.

