

COUNTY COUNCIL
OF
TALBOT COUNTY, MARYLAND

2010 Legislative Session, Legislative Day No.: September 21, 2010

Bill No.: 1199

Expiration Date: November 25, 2010

Introduced by: Mr. Bartlett, Mr. Harrison, Mr. Pack

A BILL TO AMEND THE TALBOT COUNTY CODE, CHAPTER 190, ZONING, SUBDIVISION AND LAND DEVELOPMENT TO PERMIT SMALL WIND TURBINE SYSTEMS WITH WIND TURBINE TOWERS NOT TO EXCEED 160 FEET IN TOTAL HEIGHT AND TO AMEND STANDARDS FOR SMALL WIND TURBINE PRODUCTION FACILITIES

By the Council: September 21, 2010

Introduced, read first time, ordered posted, and public hearing scheduled on Tuesday, October 12, 2010 at 2:00 p.m. in the Bradley Meeting Room, South Wing, Talbot County Courthouse, 11 N. Washington St., Easton, Maryland 21601.

By Order Susan W. Moran
Secretary

A BILL TO AMEND THE TALBOT COUNTY CODE, CHAPTER 190, ZONING, SUBDIVISION AND LAND DEVELOPMENT TO PERMIT SMALL WIND TURBINE SYSTEMS WITH WIND TURBINE TOWERS NOT TO EXCEED 160 FEET IN TOTAL HEIGHT AND TO AMEND STANDARDS FOR SMALL WIND TURBINE PRODUCTION FACILITIES

SECTION ONE: BE IT ENACTED BY THE COUNTY COUNCIL OF TALBOT COUNTY, MARYLAND, that § 190 of the Talbot County Code entitled "Zoning, Subdivision and Land Development" is amended as set forth herein.

KEY	
<u>Underlining</u>	Added to existing law by amendment.
Strikethrough	Deleted from existing law by amendment.
* * *	Existing law or bill unaffected.

Article III Land Uses

Table III-1. General Table of Land Uses

* * *

	AC	CP	WRC	RC	RR	TC	TR	VC	LC	GC	LI
<u>Wind Turbine System, Small</u> <u>See regulations for specific land uses in this Article</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>
Wind Turbine Production Facility, Small <u>See regulations for specific land uses in this Article</u>	S	<u>S</u>							<u>P</u>	<u>P</u>	<u>P</u>

* * *

1 § 190.104.1. Wind Turbine Tower

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3 ~~In the AC zoning district only Talbot County, Maryland, shall be and is hereby authorized to~~
4 ~~construct and operate an experimental wind turbine production facility on property owned by~~
5 ~~Talbot County, Maryland located adjacent to an existing septage receiving and treatment facility,~~
6 ~~subject to the following conditions and requirements.~~
7

8 A. Small Wind Turbine Uses

9 The following are specific requirements for Small Wind Turbine Systems and Small
10 Wind Turbine Production Facilities.

11
12 (1) Small Wind Turbine Systems:

- 13 (a) Must comply with all general requirements listed in B below.
- 14 (b) Are limited to a minimum lot size of 5 acres. Not applicable to small wind
- 15 turbine towers and windmills with a total height of 40 feet or less.
- 16 (c) Are limited to a maximum of one small wind turbine tower on parcels 20
- 17 acres or less.
- 18 (d) Are limited to a maximum of two small wind turbine towers on parcels
- 19 greater than 20 acres.
- 20 (e) Shall be limited to single-site consumption.
- 21 (f) Sound levels shall not exceed dBa levels specified in the Noise Standards
- 22 Talbot County Code Chapter 190, Article V, §190-125.
- 23 (g) Shall not exceed a cumulative metering rate of 100 kilowatts on a single-
- 24 site.
- 25 (h) Include windmills limited to a total height of less than 75 feet.

26
27 (2) Small Wind Turbine Production Facilities:

- 28 (a) Must comply with all general requirements listed in B below.
- 29 (b) Are limited to a minimum lot size of 10 acres.
- 30 (c) Shall provide an engineering report stating the proposed small wind
- 31 turbine tower does not exceed the minimum height necessary to
- 32 accomplish the purpose for which it is constructed.
- 33 (d) Shall be limited to off-site or a combination of both off-site and single-site
- 34 consumption.
- 35 (e) Sound levels shall not exceed dBa levels specified in the Noise Standards
- 36 Talbot County Code Chapter 190, Article V, §190-125.
- 37 (f) May have cumulative metering rates that exceed 100 kilowatts. May
- 38 result in metering rates with a cumulative total greater than 100 kilowatt
- 39 hours.

40
41 B. General requirements

42
43 All Small Wind Turbine Systems and Small Wind Turbine Production Facilities shall be

44 subject to the following general requirements:

- 45 (1) All small wind turbine systems with a total height of 75 feet or higher shall be
- 46 subject to a Major Site Plan review.
- 47
- 48 (2) All small wind turbine production facilities shall be subject to a Major Site Plan
- 49 review.
- 50
- 51 (3) Prior to the Planning Commission meeting for a small wind turbine production
- 52 facility, the applicant shall perform a highly visible balloon test lasting a
- 53 minimum of 30 minutes. The date, location, and beginning and ending time of
- 54 the test shall be published in a local newspaper at least one week prior to the test.
- 55 The Planning Director shall approve the newspaper notice. The results of the
- 56 balloon test shall be incorporated into a computerized simulation submitted to the
- 57 Planning Office 10 days prior to the Planning Commission meeting. The
- 58

- 59 computerized simulation shall illustrate the small wind turbine tower at the
60 proposed height and color scheme.
- 61
- 62 (4) All small wind turbine towers shall comply with all guidelines and procedures
63 provided by the Talbot County Department of Permits and Inspections.
- 64
- 65 (5) The ground base of any small wind turbine tower shall be setback from any
66 property lines, road rights-of-way and overhead utility lines, a distance that is the
67 total height of the small wind turbine tower plus 10 feet. Notwithstanding any
68 other section of this chapter, this limitation shall not be subject to modification by
69 either a special exception or variance.
- 70
- 71 (6) The blade tip of a small wind turbine tower, at its lowest point, shall be a
72 minimum 30 ft. above any obstruction within 300 ft. Not applicable to vertical-
73 axis wind turbines (VAWT) and windmills.
- 74
- 75 (7) Small wind turbine towers shall be located a minimum distance of 30 feet from
76 any other structure on the same lot or parcel. Not applicable to vertical-axis wind
77 turbines (VAWT) and windmills.
- 78
- 79 (8) The distance between small wind turbine towers shall be a minimum of 10 times
80 the length of blade or foil.
- 81
- 82 (9) The total height of a small wind turbine tower shall be no higher than necessary to
83 access adequate winds, but in no case shall exceed ~~150~~ 160 feet. The total height
84 is measured from the lowest finished grade elevation at the base to the upper most
85 tip of blade. The lowest finish grade elevation may not be changed from the pre-
86 existing natural topography without an approval from the County.
87 Notwithstanding any other section of this chapter, this limitation shall not be
88 subject to modification by either a special exception or variance.
- 89
- 90 (10) The blade tip of any small wind turbine tower shall, at its lowest point, have
91 ground clearance of no less than 25 feet, as measured at the lowest point of the arc
92 of the blades from the lowest finished grade elevation at the base. The lowest
93 finish grade elevation may not be changed from the pre-existing natural
94 topography without an approval from the County. Not applicable to vertical-axis
95 wind turbines (VAWT).
- 96
- 97 (11) The blade tip or foil of any vertical-axis wind turbine (VAWT) shall, at its lowest
98 point, have ground clearance of no less than 12 feet, as measured at the lowest
99 point of the arc of the blades from the lowest finished grade elevation at the base.
100 The lowest finish grade elevation may not be changed from the pre-existing
101 natural topography without an approval from the County.
- 102
- 103 (12) The Building Permit or Major Site Plan application shall be accompanied by a
104 letter from a local utility company acknowledging the applicants intend to install a
105 small wind turbine tower. Not applicable to windmills.

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- (13) All electrical wires associated with a small wind turbine tower, other than wires necessary to connect the wind generator to the wind tower wiring, the wind tower wiring to the disconnect junction box, and the grounding wires, shall be located underground.
 - (14) The small wind turbine tower shall be designed to minimize ~~adverse visual and~~ environmental impact.
 - (15) The small wind turbine tower shall not be used for the displaying of any advertisements or ~~unauthorized signage~~.
 - (16) ~~Appropriate~~ Warning signs and signs identifying the manufacturer, installer, or owner of the small wind turbine tower ~~may~~ shall be attached to the tower not to exceed one square foot in size. No other signage shall be permitted without approval from the County.
 - (17) The small wind turbine tower shall be a self-supporting monopole or lattice structure.
 - (18) The small wind turbine tower shall not be sited on piers or other water-dependent facilities in accordance with the Annotated Code of Maryland §16-104.
 - (19) The small wind turbine tower shall not be lit unless required by federal or State regulations. If lighting is required, the least intensive approved lighting shall be used.
 - (20) The small wind turbine rated capacity shall be calculated using the current Maryland Energy Administration (MEA) standard.
 - (21) The small wind turbine tower shall be designed so as to prohibit step bolts or a ladder readily accessible to the public for a minimum height of 12 feet above the lowest finished grade elevation at the base. The lowest finish grade elevation may not be changed from the pre-existing natural topography without an approval from the County. Not applicable to vertical-axis wind turbines (VAWT).
 - ~~(22) The applicant must include a copy of the maintenance contract with the Major Site Plan application for small wind turbine towers 75 feet or higher.~~
 - (22) Pursuant to any request for code compliance regarding an abandoned or inoperable wind turbine tower, the burden of proof indicating current wind energy production shall be upon the owner of the land. A determination made by the County regarding wind turbine inoperability or abandonment may be appealed to the Talbot County Board of Appeals.
 - (23) Any small wind turbine tower found to be abandoned or unsafe by the County Engineer shall be repaired or removed by the landowner. A small wind turbine

153 tower that fails to operate, or is out of service for a continuous 12-month period,
154 shall be deemed to be abandoned.
155

156 (24) A wind turbine tower shall be removed within ninety (90) days of abandonment.
157 Failure to comply within the period of time specified above will result in the
158 complete removal of the abandoned wind turbine tower by Talbot County. As
159 provided by Code, all costs associated with this action incurred by Talbot County
160 will be forwarded to the property owner for payment. Should the property owner
161 fail to make payment to Talbot County within thirty (30) days of turbine tower
162 removal, the costs shall be charged to the owner of such property on the next
163 regular real estate tax bill forwarded to such owner by the County, and said
164 charges shall become a lien on the property and be due and payable by said owner
165 at the time of payment of such bill.
166

167 (25) The small wind turbine tower must comply with all regulations of the Federal
168 Aviation Administration (FAA), if applicable, including any necessary approvals
169 for installations within the airport overlay zone.
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173 **Article V Development Standards**

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175 190-113. Structure height
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177 Structures shall comply with the following height limits.
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179 **Table V-1. Structure height**

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Type of structure	Maximum height	Additional requirements
I. <u>Wind Turbine Towers (see Article III).</u>	150 160 feet	<u>Minimum required setback shall be 10 feet greater than the total height of the tower.</u>

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184 **Article IX Administration**
185 §190-180. Special Exception
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187 * * *

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189 D. Special exceptions for Wireless Communication Towers and Small Wind Turbine
190 Production Facilities.

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 192 (1) A special exception or special exception amendment may be granted for a
 193 wireless communication tower or small wind turbine production facility
 194 only when the Board of Appeals finds from a preponderance of the
 195 evidence that the proposed use will satisfy the standards of §190-180C(1),
 196 (2), and (5) through (10).
 197
 198 ~~(2) The applicant must obtain major site plan approval prior to applying for a~~
 199 ~~special exception from the Board of Appeals.~~
 200
 201 (2) The Board of Appeals shall define as a condition of approval the type(s) of
 202 service to be provided and a time schedule for commencement of services
 203 upon construction. Amendments to this condition shall require review and
 204 approval by the Board. Not applicable to small wind turbine production
 205 facilities.
 206
 207 (3) The Board of Appeals must find and conclude that consistent with the
 208 Telecommunications Act of 1996, any decision to deny an application to
 209 place, construct or modify a wireless telecommunication tower is
 210 supported by substantial evidence contained in the written record. Not
 211 applicable to small wind turbine production facilities.
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213 * * *

214 **Article XI Definitions**

215 §190-208. Definitions

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 218 TOTAL HEIGHT – The distance of a wind turbine tower measured from ground level (natural
 219 grade) to the tip of blade extended at its highest point.
 220

221 RATED CAPACITY, SMALL WIND TURBINE – The expected performance of a wind turbine
 222 at a specified wind speed (meters per second or miles per hour).
 223

224 WINDMILL – A type of small wind turbine tower incapable of electrical energy production that
 225 harnesses wind power to rotational motion by means of vanes. The typical use is to pump water
 226 or grind, crush, and press grain.
 227

228 WIND TURBINE PRODUCTION FACILITY, SMALL – A commercial facility producing
 229 primarily off-site electricity or a total rated capacity greater than 100 kilowatts.
 230

231 WIND TURBINE SYSTEM, SMALL – A wind energy conversion system that is used to
 232 generate electricity; has a total rated capacity of 100 kilowatts (kW) or less; consisting of a wind
 233 turbine, a single-tower, and base and associated control or conversion electronics.
 234

235 WIND TURBINE TOWER, SMALL - Consists of a turbine associated with a small wind turbine
236 system, a turbine associated with a small wind turbine production facility or a windmill;
237 supported by a monopole or lattice, that supports the turbine for a small wind turbine production
238 facility The turbine includes the blade or foil, generator, and tail.

239
240 WIND TURBINE, VERTICAL-AXIS (VAWT) – A type of small wind turbine tower where the
241 axis of rotation is perpendicular or vertical to the wind stream and the ground.

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243 * * *

SECTION TWO: BE IT FURTHER ENACTED, that this amendment shall take effect sixty
(60) days from the date of its passage.

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PUBLIC HEARING

Having been posted and Notice of time and place of hearing and Title of Bill No. 1199 having been published, a public hearing was held on Tuesday, October 12, 2010 at 2:00 p.m. in the Bradley Meeting Room, South Wing, Talbot County Courthouse, 11 North Washington Street, Easton, Maryland 21601.

BY THE COUNCIL

Read the third time.

ENACTED: **October 12, 2010**

By Order Susan W. Moran
Secretary

Harrison -	Aye
Pack -	Aye
Duncan -	Aye
Foster -	Aye
Bartlett -	Aye