

COUNTY COUNCIL OF BALTIMORE COUNTY, MARYLAND
Legislative Session 2010, Legislative Day No. 12

Bill No. 62-10

Mr. Vincent J. Gardina, Councilman

By the County Council, July 6, 2010

A BILL
ENTITLED

AN ACT concerning

Small Wind Energy System PILOT Program

FOR the purpose of establishing a PILOT Program to provide appropriate regulations for small wind energy systems as accessory to commercial agricultural and institutional uses and to uses in manufacturing zones within Baltimore County.

BY adding

Section 309
Baltimore County Zoning Regulations

By repealing and re-enacting, with amendments

Section 32-4-106(a)
Article 32 – Planning, Zoning, and Subdivision Control
Title 4 - Development
Baltimore County Code 2003

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter stricken from existing law.

~~Strike-out~~ indicates matter stricken from bill.

Underlining indicates amendments to bill.

1 SECTION 1. BE IT ENACTED BY THE COUNTY COUNCIL OF BALTIMORE
2 COUNTY, MARYLAND, that Section 309 be and it is hereby added to the Baltimore County
3 Zoning Regulations to read as follows:

4 § 309 SMALL WIND ENERGY SYSTEM PILOT PROGRAM

5 A. LEGISLATIVE INTENT.

6 1. IT IS IN THE BEST INTERESTS OF THE CITIZENS OF THE COUNTY TO
7 ENCOURAGE AND FACILITATE THE DEVELOPMENT OF ALTERNATIVE SOURCES
8 OF ENERGY FOR INSTITUTIONAL AND COMMERCIAL AGRICULTURAL USES AND
9 USES IN MANUFACTURING ZONES WITHIN BALTIMORE COUNTY.

10 2. IT IS INTENDED THAT THE SMALL WIND ENERGY SYSTEM PILOT
11 PROGRAM SHALL GOVERN SMALL WIND ENERGY SYSTEMS AS ACCESSORY TO
12 COMMERCIAL AGRICULTURAL AND INSTITUTIONAL USES AND TO USES IN
13 MANUFACTURING ZONES.

14 3. IT IS INTENDED THAT THE SMALL WIND ENERGY SYSTEM PILOT
15 PROGRAM SHALL APPLY TO INSTITUTIONAL AND COMMERCIAL AGRICULTURAL
16 USES IN THE RC ZONES AND MANUFACTURING ZONED PARCELS THAT ARE NOT
17 ADJACENT TO RESIDENTIALLY ZONED LAND AND THAT THIS LIMITED SCOPE
18 SHALL IN NO WAY BE CONSTRUED AS REGULATING SMALL WIND ENERGY
19 SYSTEMS AS ACCESSORY TO OTHER TYPES OF USES IN ALL ZONES THROUGHOUT
20 BALTIMORE COUNTY, WHICH SMALL WIND ENERGY SYSTEMS SHALL CONFORM
21 TO ALL OTHER APPLICABLE LAWS AND ZONING REGULATIONS.

22 4. THE SMALL WIND ENERGY SYSTEM PILOT PROGRAM SHALL REMAIN IN
23 EFFECT FOR A PERIOD OF NOT MORE THAN FIVE (5) YEARS FROM THE DATE OF

1 THE BALTIMORE COUNTY COUNCIL’S ENACTMENT OF THIS BILL AND, WITHOUT
2 FURTHER ACTION BY THE COUNTY COUNCIL, THEN BE OF NO FURTHER FORCE
3 AND EFFECT; PROVIDED, THAT: (I) SMALL WIND ENERGY SYSTEMS ERECTED
4 PURSUANT TO APPROVED PERMITS UNDER THE PILOT PROGRAM AND FOR
5 WHICH BUILDING PERMITS WERE OBTAINED AND SUBSTANTIAL CONSTRUCTION
6 WAS BEGUN WITHIN TWO (2) YEARS AFTER SUCH ABROGATION MAY CONTINUE
7 TO OPERATE; AND (II) ANEMOMETER STUDIES MAY CONTINUE TO BE CARRIED
8 OUT AS PROVIDED IN SUBSECTION C OF THIS SECTION.

9 5. THE ADMINISTRATION OF THE BUILDING PERMITS UNDER THE SMALL
10 WIND ENERGY SYSTEM PILOT PROGRAM SHALL BE THE RESPONSIBILITY OF THE
11 DIRECTOR OF PERMITS AND DEVELOPMENT MANAGEMENT, WITH REVIEW BY
12 THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND
13 RESOURCE MANAGEMENT.

14 B. DEFINITIONS:

15 1. METEOROLOGICAL TOWER (MET TOWER) – A TEMPORARY ACCESSORY
16 STRUCTURE DESIGNED TO SUPPORT THE GATHERING OF WIND ENERGY
17 RESOURCE DATA, AND INCLUDES THE TOWER, BASE PLATE, ANCHORS, GUY
18 CABLES AND HARDWARE, ANEMOMETERS (WIND SPEED INDICATORS), WIND
19 DIRECTION VANES, BOOMS TO HOLD EQUIPMENT ANEMOMETERS AND VANES,
20 DATA LOGGER, INSTRUMENT WIRING, AND ANY TELEMETRY DEVICES THAT ARE
21 USED TO MONITOR OR TRANSMIT WIND SPEED AND WIND FLOW
22 CHARACTERISTICS OVER A PERIOD OF TIME FOR EITHER INSTANTANEOUS WIND

1 INFORMATION OR TO CHARACTERIZE THE WIND RESOURCE AT A GIVEN
2 LOCATION.

3 2. SMALL WIND ENERGY SYSTEM – A WIND TURBINE MOUNTED ON A
4 FREESTANDING WIND TOWER OR BUILDING FOR THE PURPOSE OF GENERATING
5 ENERGY FOR USE ON SITE. EXCESS ENERGY OUTPUT MAY BE SOLD BACK TO A
6 POWER GRID TO OFFSET THE COST OF ENERGY ON THE SITE.

7 3. TOTAL HEIGHT, FOR A WIND TURBINE MOUNTED ON A WIND TOWER –
8 THE VERTICAL DISTANCE FROM GROUND LEVEL TO THE TIP OF A WIND
9 GENERATOR BLADE WHEN THE TIP IS AT ITS HIGHEST POINT. FOR A SMALL
10 WIND ENERGY SYSTEM MOUNTED ON A BUILDING, TOTAL HEIGHT IS THE
11 VERTICAL DISTANCE FROM THE BASE OF THE TURBINE TO THE TIP OF A WIND
12 GENERATOR BLADE WHEN THE TIP IS AT ITS HIGHEST POINT.

13 4. WIND TOWER – THE FREESTANDING MONOPOLE, LATTICE, OR GUYED
14 STRUCTURE THAT SUPPORTS A WIND TURBINE.

15 C. ANEMOMETER STUDIES. IN AN EFFORT TO ADEQUATELY QUANTIFY AND
16 CHARACTERIZE WIND RESOURCES AVAILABLE AT A GIVEN PROPERTY, THE USE
17 OF ANEMOMETERS ON THEIR OWN OR ATOP A MET TOWER SHALL BE
18 PERMITTED BY RIGHT IN ANY ZONE IN PERPETUITY, AND SHALL NOT
19 TERMINATE UPON ABROGATION OF THE PILOT PROGRAM. THE ANEMOMETER
20 SHALL BE PERMITTED TO REMAIN ON THE PROPERTY FOR UP TO ONE (1) YEAR
21 FROM THE DATE ON WHICH IT BEGINS COLLECTING DATA. THE TOTAL HEIGHT
22 OF THE MET TOWER AND THE ANEMOMETER SHALL NOT EXCEED 60 METERS.

1 PERFORMING AN ANEMOMETER STUDY ON A PROPERTY IS NOT A PREREQUISITE
2 FOR ISSUANCE OF A PERMIT FOR A SMALL WIND ENERGY SYSTEM.

3 D. PERFORMANCE STANDARDS.

4 1. A SMALL WIND ENERGY SYSTEM SHALL BE PERMITTED AS AN
5 ACCESSORY TO INSTITUTIONAL AND COMMERCIAL AGRICULTURAL USES IN THE
6 RC ZONE AND TO USES ON MANUFACTURING ZONED PARCELS THAT ARE NOT
7 ADJACENT TO RESIDENTIALLY ZONED LAND, AS LIMITED BY THE
8 PERFORMANCE STANDARDS OF THE PILOT PROGRAM.

9 2. MULTIPLE SMALL WIND ENERGY SYSTEMS SHALL BE PERMITTED ON A
10 SINGLE LOT PROVIDED THAT EACH MEETS THE PERFORMANCE STANDARDS OF
11 THIS SECTION.

12 3. TOTAL MAXIMUM HEIGHT. A SMALL WIND ENERGY SYSTEM LOCATED
13 ON A LOT LESS THAN ONE ACRE IN SIZE MAY NOT EXCEED 80 FEET IN TOTAL
14 HEIGHT. A SMALL WIND ENERGY SYSTEM LOCATED ON A LOT GREATER THAN
15 ONE ACRE IN SIZE HAS NO LIMITATION ON TOTAL HEIGHT EXCEPT AS IMPOSED
16 BY FEDERAL AVIATION ADMINISTRATION (FAA) REGULATIONS AND BY THE
17 SETBACK REQUIREMENTS IN § 309.D.5. OF THE BALTIMORE COUNTY ZONING
18 REGULATIONS. BUILDING MOUNTED SMALL WIND ENERGY SYSTEMS ARE
19 SUBJECT TO THE HEIGHT REGULATIONS OF THE ZONE IN WHICH THE BUILDING
20 IS LOCATED.

21 4. SETBACK.

22 I. PROPERTY LINE: A SMALL WIND ENERGY SYSTEM SHALL BE SET
23 BACK FROM THE NEAREST PROPERTY LINE A DISTANCE EQUAL TO 1.1 TIMES ITS

1 TOTAL HEIGHT. AN INSTITUTIONAL OR COMMERCIAL AGRICULTURAL
2 BUILDING, OR A BUILDING LOCATED IN A MANUFACTURING ZONE, WHICH USES
3 A ROOF-MOUNTED SMALL WIND ENERGY SYSTEM SHALL ADHERE TO THE
4 SETBACK REQUIREMENTS OF THE ZONE IN WHICH THE PROPERTY IS LOCATED.

5 II. A SMALL WIND ENERGY SYSTEM SHALL BE SET BACK A
6 DISTANCE EQUAL TO 1.5 TIMES ITS TOTAL HEIGHT FROM ANY INHABITABLE
7 BUILDING ON AN ADJACENT LOT.

8 5. SOUND LEVELS AND MEASUREMENT. AUDIBLE SOUND DUE TO SMALL
9 WIND ENERGY SYSTEM OPERATIONS MAY NOT EXCEED 55 DB(A) PER TURBINE
10 FOR ANY PERIOD OF TIME. THE LEVEL, HOWEVER, MAY BE EXCEEDED DURING
11 SHORT-TERM EVENTS SUCH AS UTILITY OUTAGES OR SEVERE WINDSTORMS.
12 THE SOUND LEVEL SHALL BE MEASURED AT GROUND LEVEL AT THE PROPERTY
13 LINE OF ANY PROPERTY CONTAINING AN OCCUPIED BUILDING ON THE DATE OF
14 APPROVAL OF THE SMALL WIND ENERGY SYSTEM BUILDING PERMIT.

15 E. SUBMITTALS REQUIRED FOR APPROVAL.

16 1. THE DEPARTMENT OF PERMITS AND DEVELOPMENT MANAGEMENT
17 SHALL OVERSEE AND ISSUE ALL PERMITS AND APPROVALS FOR SMALL WIND
18 ENERGY SYSTEMS UNDER THE PILOT PROGRAM.

19 2. APPLICANTS SHALL SUBMIT WITH THE BUILDING PERMIT APPLICATION
20 THE FOLLOWING:

21 I. A SITE PLAN WHICH SHALL ADEQUATELY SHOW:

22 1. PROPERTY LINES AND DIMENSIONS OF SUBJECT PROPERTY;

1 2. PROPERTY LINES AND OWNER INFORMATION FOR ALL
2 ADJACENT PROPERTIES;

3 3. LOCATION OF ALL EXISTING BUILDINGS AND STRUCTURES
4 ON THE SUBJECT PROPERTY;

5 4. LOCATION OF ALL EXISTING BUILDINGS ON ABUTTING
6 PROPERTIES;

7 5. LOCATION OF THE PROPOSED SMALL WIND ENERGY
8 SYSTEM WITH DISTANCES TO SHOW REQUIRED SETBACKS; AND

9 6. CERTIFICATION BY A LICENSED PROFESSIONAL ENGINEER
10 OR PROPERTY OWNER THAT THE INFORMATION SHOWN ON THE PLAN IS
11 ACCURATE.

12 II. THE TURBINE MANUFACTURER'S SPECIFICATIONS SHEET,
13 INCLUDING PHOTOGRAPH, SOUND ANALYSIS, AND MOUNTING
14 RECOMMENDATIONS.

15 III. ANY ADDITIONAL INFORMATION AS MAY BE REQUIRED BY THE
16 DIRECTOR OF PERMITS AND DEVELOPMENT MANAGEMENT, OR THE ZONING
17 COMMISSIONER AS APPROPRIATE, TO DEMONSTRATE COMPLIANCE WITH THE
18 REGULATIONS.

19 G. SAFETY.

20 A. ACCESS.

21 I. ALL GROUND MOUNTED ELECTRICAL AND CONTROL EQUIPMENT
22 SHALL BE LABELED AND SECURED TO PREVENT UNAUTHORIZED ACCESS.

1 II. THE WIND TOWER SHALL BE DESIGNED AND INSTALLED SO AS
2 NOT TO PROVIDE STEP BOLTS OR A LADDER READILY ACCESSIBLE TO THE
3 PUBLIC FOR A MINIMUM HEIGHT OF 12 FEET ABOVE THE GROUND.

4 III. ALL ACCESS DOORS TO WIND TURBINE TOWERS AND
5 ELECTRICAL EQUIPMENT SHALL BE LOCKABLE.

6 B. ELECTRICAL WIRES. ALL ELECTRICAL WIRES ASSOCIATED WITH A
7 WIND TURBINE SHALL BE LOCATED WITHIN ITS TOWER OR MOUNTING
8 STRUCTURE, OR WITHIN AN EXISTING STRUCTURE, OR UNDERGROUND. THERE
9 SHALL BE NO ADDITIONAL TOWERS OR STRUCTURES ERECTED TO SUPPORT
10 ELECTRICAL WIRING OR CONNECTIONS TO ANY POWER GRID OR USE ON THE
11 SUBJECT PROPERTY.

12 C. MINIMUM GROUND DISTANCE. THE BLADE OF ANY WIND TURBINE
13 SHALL, AT ITS LOWEST POINT, HAVE A GROUND CLEARANCE OF NO LESS THAN
14 15 FEET, AS MEASURED AT THE LOWEST POINT OF THE ARC OF THE BLADES.

15 D. WIND TOWER DESIGN. THE MATERIAL AND STRUCTURAL DESIGN OF A
16 WIND TOWER SHALL BE IN CONFORMANCE WITH THE RECOMMENDATIONS OF
17 THE WIND TURBINE MANUFACTURER.

18 E. OTHER EQUIPMENT. NO EQUIPMENT UNRELATED TO THE OPERATION
19 OF THE SMALL WIND ENERGY SYSTEM SHALL BE ATTACHED TO THE WIND
20 TOWER OR MOUNTING STRUCTURES.

1 H. VISUAL IMPACTS.

2 A. LIGHTING. A WIND TOWER AND WIND TURBINE SHALL NOT BE
3 ARTIFICIALLY LIT UNLESS SUCH LIGHTING IS REQUIRED BY THE FEDERAL
4 AVIATION ADMINISTRATION.

5 B. APPEARANCE, COLOR, AND FINISH. SMALL WIND ENERGY SYSTEMS
6 SHALL BE PAINTED OR FINISHED IN A NON-REFLECTIVE , NON-OBTRUSIVE
7 COLOR OR FINISH THAT CONFORMS TO THE ENVIRONMENT AND ARCHITECTURE
8 OF THE COMMUNITY AS DETERMINED BY THE DIRECTOR OF PLANNING, UNLESS
9 FEDERAL AVIATION ADMINISTRATION REGULATIONS REQUIRE OTHERWISE.

10 C. SIGNS. ALL SIGNS, INCLUDING FLAGS, STREAMERS AND DECORATIVE
11 ITEMS, BOTH TEMPORARY AND PERMANENT, ARE PROHIBITED ON A WIND
12 TURBINE, WIND TOWER OR OTHER STRUCTURE ASSOCIATED WITH A WIND
13 TURBINE, EXCEPT THE MANUFACTURER OR INSTALLER’S IDENTIFICATION OR
14 APPROPRIATE WARNING SIGNS OR PLACARDS.

15 D. SHADOW FLICKER. SMALL WIND ENERGY SYSTEMS SHALL BE SITED
16 IN A MANNER THAT DOES NOT RESULT IN SIGNIFICANT SHADOW FLICKER
17 IMPACTS. SIGNIFICANT SHADOW FLICKER IMPACT IS DEFINED AS A FLICKERING
18 SHADOW THAT IS CAST BY A WIND TURBINE ON A PRINCIPAL BUILDING AND
19 THE AREA WITHIN 100’ OF THE PRINCIPAL BUILDING ON A NEIGHBORING OR
20 ADJACENT PROPERTY FOR MORE THAN 30 HOURS PER YEAR.

1 I. ADDITIONAL CONDITIONS FOR SMALL WIND ENERGY SYSTEMS.

2 A. CODE COMPLIANCE. A SMALL WIND ENERGY SYSTEM INCLUDING
3 WIND TURBINE AND TOWER SHALL COMPLY WITH ALL APPLICABLE
4 CONSTRUCTION AND ELECTRICAL CODES.

5 B. MET TOWERS SHALL BE PERMITTED UNDER THE SAME STANDARDS,
6 PERMIT REQUIREMENTS, AND PERMIT PROCEDURES AS A WIND TURBINE,
7 EXCEPT THAT A TEMPORARY MET TOWER MAY BE ERECTED FOR THE PURPOSES
8 OF PERFORMING A WIND STUDY TO DETERMINE THE OPTIMAL LOCATION FOR A
9 SMALL WIND ENERGY SYSTEM. A TEMPORARY MET TOWER OF A HEIGHT NOT
10 TO EXCEED 60 METERS IS PERMITTED BY RIGHT IF IT IS ERECTED FOR NO MORE
11 THAN 1 YEAR, AND ALL OTHER STANDARDS ARE MET.

12 C. A SMALL WIND ENERGY SYSTEM MAY NOT HAVE MORE THAN ONE
13 TURBINE.

14 D. THE ENERGY PRODUCED BY THE SMALL WIND ENERGY SYSTEM
15 SHALL BE FOR THE USE OF THE PROPERTY OWNER ON SITE AND NOT FOR SALE.
16 HOWEVER, THE ENERGY OUTPUT OF A WIND TURBINE MAY BE DELIVERED TO A
17 POWER GRID TO OFFSET THE COST OF ENERGY ON SITE.

18 E. SMALL WIND ENERGY SYSTEMS CONSTRUCTED AND INSTALLED IN
19 ACCORDANCE WITH THESE REGULATIONS SHALL NOT BE DEEMED TO
20 CONSTITUTE AN EXPANSION OF A NONCONFORMING LOT, USE OR STRUCTURE.

21 J. REMOVAL OF DEFECTIVE OR ABANDONED SMALL WIND ENERGY SYSTEMS.

22 A. ANY SMALL WIND ENERGY SYSTEM FOUND TO BE UNSAFE SHALL BE
23 REPAIRED BY THE PROPERTY OWNER TO MEET THESE REGULATIONS AND ANY

1 APPLICABLE FEDERAL, STATE AND LOCAL SAFETY STANDARDS OR BE
2 PHYSICALLY REMOVED WITHIN 90 DAYS.

3 B. A SMALL WIND ENERGY SYSTEM THAT HAS BEEN INOPERABLE FOR A
4 PERIOD OF 12 CONSECUTIVE MONTHS SHALL BE PHYSICALLY REMOVED BY THE
5 PROPERTY OWNER WITHIN 90 DAYS.

6 SECTION 2. AND BE IT ENACTED that Section 32-4-106 (a) of Article 32 – Planning,
7 Zoning, and Subdivision Control, Title 4 – Development, of the Baltimore County Code be and
8 it is hereby amended to read as follows:

9 § 32-4-106. LIMITED EXEMPTIONS

10 (a) *Exemption from development review and approval process.*

11 (1) The following proposed development is exempt from compliance with Subtitle 2 of
12 this title:

13 (i) The building or preparation of land for building a dwelling for one or two families
14 on a single lot or tract that is not part of a recorded plat;

15 (ii) The building or preparation of land for building on a lot of record lawfully in
16 effect at the time of the building or preparation of the land for building, provided the lot of
17 record did not result from a subdivision of land exempt under § 32-4-105 of this subtitle;

18 (iii) The construction of one tenant house or the location of one trailer on a farm
19 tract;

1 (iv) The subdivision of property in accordance with a court order, a will, or the laws
2 of intestate succession;

3 (v) The resubdivision or lot line adjustment of industrially zoned or commercially
4 zoned parcels of land that have been the subject of a previously approved Development Plan and
5 recorded plat;

6 (vi) The construction of residential accessory structures or minor commercial
7 structures;

8 (VII) THE CONSTRUCTION OF A SMALL WIND ENERGY SYSTEM THROUGH
9 THE SMALL WIND ENERGY SYSTEM PILOT PROGRAM OR A METEOROLOGICAL
10 TOWER AS SET FORTH IN § 309 OF THE BALTIMORE COUNTY ZONING
11 REGULATIONS;

12 [(vii)] (VIII) The construction of a building owned and operated by a county
13 volunteer fire, ambulance, or rescue company that is used primarily for:

- 14 1. Storage or training purposes;
- 15 2. Fund-raising activities; or
- 16 3. Other purposes related to rescue or fire-suppression activities;

17 [(viii)] (IX) Lot line adjustments in residential zones for lots that are not part of an
18 approved Development Plan under this title or an approved Development Plan under Article 1B
19 of the Baltimore County Zoning Regulations. For purposes of this subsection, "lot line
20 adjustment" means one or more alterations of a divisional property line or lines between two or

1 more lots in common ownership or by agreement of the owners, provided that the alteration does
2 not result in an increase or decrease in the number of lots and there is no increase in total
3 residential density available to the lots considered as a whole;

4 [(ix)] (X) Subdivision of land that was recorded before January 26, 1990 into three or
5 fewer lots; and

6 [(x)] (XI) Except as provided in paragraph (2) of this subsection, subdivision of land
7 into three or fewer lots for residential single-family dwellings provided that the lots are not
8 served by a panhandle driveway.

9 (2) If a lot is served by a panhandle driveway, the subdivision of land into three or
10 fewer lots for residential single-family dwellings is only exempt from:

11 (i) The concept plan requirements under §§ 32-4-211 through 32-4-217 of this title;
12 and

13 (ii) The county review requirements under §§ 32-4-226 and 32-4-227 of this title.

14 (3) All development exempted under this subsection shall comply with Subtitles 3, 4,
15 and 5 of this title and all applicable Baltimore County Zoning Regulations.

16 SECTION 3. AND BE IT FURTHER ENACTED that this Act shall take effect 45 days
17 after its enactment.