

## **Carbonate Area District Ordinance**

**West Whiteland Township, Pennsylvania (1984)**

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Zoning Ordinance

Adopted: 1986

### **917.1 Intent**

To protect the water resources associated with carbonate geologic formations in West Whiteland Township, from land-use and development patterns that would threaten their quality and quantity as a result of pollution and the alteration of natural drainage patterns.

### **917.2 Carbonate Area District**

(a) Carbonate areas subject to the provisions of this section consist of limestone and related geologic formations depicted on the Carbonate Area District Map, which, together with all of the explanatory matter thereon, is attached to and declared to be a part of this ordinance. The Carbonate Area District boundary lines shall be as shown on the Carbonate Area District Map.

(b) In reviewing all applications for compliance with the provisions of this section, the township shall make its review on the basis of carbonate area boundaries as described in 917.2a.

(c) Where interpretation is needed as to the exact location of the boundaries of the district as shown on the Carbonate Area District Map, as, for example, where there appears to be a conflict between a mapped boundary and actual field conditions, an initial determination of the exact boundary of the carbonate area shall be made by the Township Engineer. Any party seeking such a determination may submit a geological study of the area in question, or other pertinent documentation for consideration. The Township Engineer shall make a written report of the results of his initial determination, a copy of which shall be provided to the Board of Supervisors.

Any party aggrieved by any such determination of the Township Engineer may appeal to the Zoning Hearing Board. The person contesting the location of the district boundary shall have the burden of proof in case of any such appeal.

### **917.3 Definitions**

(a) Carbonate. A sedimentary rock formed by the organic or inorganic precipitation of mineral compounds characterized by the fundamental chemical ion CO<sub>3</sub>, e.g., limestone and dolomite.

(b) Depressions. A low place of any size on a plane surface, with drainage underground or by evaporation. A hollow completely surrounded by high ground and having no natural outlet for surface drainage.

(c) Drainage. The movement of water from an area by stream or sheet flow and removal of excess water from soil by downward flow.

(d) Fault. A surface or zone of rock fracture along which there has been noticeable movement.

- (e) Fissure. An extensive crack, break, or fracture in the rock.
- (f) Ghost Lakes. Transient surface water bodies formed in sinks after heavy precipitation, due to poor internal drainage, due to residual clay remaining after solution of limestone minerals, or other causes.
- (g) Lineament. Any line, on an aerial photograph that is structurally controlled, including any alignment of separate photographic images such as stream beds, trees, or bushes that are so controlled. The term is widely applied to lines representing beds, mineral bandings, veins, faults, joints, disconformities, and rock boundaries.
- (h) Outcrop. The exposure of bedrock or strata projecting through the overlying cover of detritus and soil.
- (I) Sinkhole. A funnel-shaped depression in the land surface generally in a limestone region associated with a subterranean passage developed by solution.
- (j) Soil Mottling. A soil irregularly marked with spots or patches of different colors, usually indicating poor aeration or lack of good drainage.
- (k) Spring. A place where, without the agency of man, water flow from a rock or soil upon the land or into a body of surface water.
- (l) Surface Runoff. That part of the precipitation that passes over the surface of the soil to the nearest surface stream without first passing beneath the surface.
- (m) Water Table. The upper surface of a zone of saturation except where that surface is formed by an impermeable body.

#### **917.4 Applicability**

- (a) Regulations pertaining to carbonate areas as set forth in this section shall constitute an overlay on the otherwise applicable zoning districts as delineated on the Township Zoning Map. Should such regulations be declared inapplicable for any tract of land for any reason by the Board of Supervisors, the zoning applicable to such tract shall be the district in which it is located, as shown on the Township Zoning Map, without consideration of this section.
- (b) Except for those uses, structures, and land subdivisions cited in 917.4c, no structure, land, or water shall be used or developed, and no structure shall be located, extended, converted, or structurally altered without full compliance with the standards and procedures as set forth in

#### **Section 917.5.**

Exempted from the standards and procedures of Section 917 are:

- (1) The construction and alteration of a single-family detached dwelling, structures accessory thereto, and an on-site sewer system to serve such a dwelling;
- (2) Below-ground tanks for the storage of not more than one thousand (1,000) gallons of heating oil; and
- (3) Land subdivisions not exceeding two (2) lots where uses are limited to one single-family detached dwelling per lot.

(d) In carbonate areas, alteration and development of land may be hazardous with respect to foundation safety of structures, the creation of unstable land as a result of changes in drainage, and the contamination of ground and surface waters. Within the limitations of the information available at the time of review of individual applications, the township shall attempt to make reasonable judgments as to the applicant's compliance with the standards of Section 917.5.

Under no circumstances shall West Whiteland Township or any officer or employee of the township assume any liability for any damages that may result from an applicant's or any interested party's reliance upon the regulations of Section 917 or any decisions made by the township in the administration of such regulations.

### **917.5 Standards**

(a) No structure, land, or water shall be used or developed, and no structure shall be located, extended, converted, or structurally altered in the Carbonate District unless the applicant takes all reasonable measures to minimize the adverse impacts of his proposed action, as set forth in paragraphs (1) through (4) below. To minimize shall not mean to eliminate, but to make the most substantial effort possible under the circumstances to reduce the adverse effect of the action required to be minimized.

(1) The below-ground storage of heating oil, gasoline, chemical solutions, or other substances that, if released, would constitute pollutants to ground or surface waters. If warranted, as determined by the township, the applicant may be required to place tank(s) in a concrete vault, install other impervious liners, and/or install monitoring devices. The applicant shall also demonstrate compliance with all applicable regulations of the Pennsylvania State Police, Fire Marshall Division.

(2) The use of fill containing any material that would represent a potential contamination hazard to ground or surface waters. Materials shall include but not necessarily be limited to wastes identified as hazardous by the Pennsylvania Department of Environmental Resources.

(3) Storage, handling, processing, or disposal of toxic materials or any other substance with the potential to contaminate ground and surface waters. The applicant shall also demonstrate compliance with Chapter 75 of the Rules and Regulations of the Pennsylvania Department of Environmental Resources and with the Resource Conservation and Recovery Act of 1976 (P.L. 94-580, as amended.)

(4) Land grading or construction of buildings or other site improvements that would directly or indirectly diminish the flow of natural springs. If warranted, as determined by the township, water table data from observation wells shall be provided by the applicant.

(b) Should the township find that an applicant may create a significant risk to the public's health or safety, in spite of taking all reasonable actions to minimize such risks, or should the township determine that the applicant has not taken all reasonable actions to minimize such risks, the township may deny the application in accordance with Section 917.8 herein. In either case of denial, the applicant may submit an Environmental Assessment Report, in accordance with Section 917.7, for further consideration by the board.

### **917.6 Procedures for All Applicants in the Carbonate Area District**

(a) Except for applicants initially electing to submit an Environmental Assessment Report as set forth in Section 917.7, all other applicants whose properties are located entirely or partially within the Carbonate Area District, as defined in Section 917.2, shall submit the following information to the township.

(1) A map, at a scale no smaller than 1" = 100', indicating the location of the property and all proposed improvements thereon and their geographic relationship to the township's Carbonate District. The applicant shall utilize the carbonate area boundaries depicted on the township's Carbonate District Map.

(2) For areas proposed for grading, construction of buildings, and other improvements, the applicant shall submit information for such areas, indicating the presence of any of the following carbonate features:

- (I) Depressions;
- (ii) Fissures, lineaments, faults, or air photo fracture traces;
- (iii) "Ghost lakes" occurring after rainfall events;
- (iv) Outcrops of bedrock;
- (v) Seasonal high water tables;
- (vi) Sinkholes;
- (vii) Soil mottling, as defined by a soil scientist;
- (viii) Springs;
- (ix) Surface drainage entering the ground.

Such information may be based upon field surveys and/or published data, but in either case shall be supported by an explanation of its source including the qualifications of the individuals directly responsible for preparing such information.

(3) The applicant shall furnish a map indicating existing and proposed drainage conditions, the locations of existing private and public wells on adjoining properties, and the locations and extent of all proposed uses and improvements cited in Section 917.5.

(b) The Township Engineer shall review the information provided by the applicant as required in Section 917.6a and may make a site inspection of the property, having notified the applicant at least five days in advance. The Township Engineer shall submit a memorandum report to the board, presenting his findings with respect to the applicant's compliance with each and every standard in Section 917.5, for which one of the following opinions shall be rendered:

- (1) "Compliance." The application complies with the standard.
- (2) "Compliance with Additional Conditions." The application would comply with the standard provided that certain additional conditions were met by the applicant.
- (3) "Non-Compliance" The application does not comply with the standard.
- (4) "Non-Determination" A determination of compliance cannot be made on the basis of information provided by the applicant.

A copy of the Township Engineer's report shall also be forwarded to the applicant.

Should that report contain findings of "non-compliance" or "non-determination," the applicant shall be permitted to submit an Environmental Assessment Report to the township in accordance with procedures set forth in Section 917.7. Should the applicant fail to notify the township, in writing, within the applicable time period (including a written request for extension thereof if necessary), of his intent to submit an Environmental Assessment Report, all findings of "non-determination" shall be acted upon by the board in the same manner as findings of "non-compliance."

### **917.7 Environmental Assessment Report**

(a) All applicants filing an Environmental Assessment Report shall prepare such a report in accordance with the provisions of this section. In such instances, the report shall provide additional information to the township, demonstrating that the applicant can comply with all standards in Section 917.5, or that one or more of such standards would not be applicable, given the conditions of the applicant's property or existing uses thereon, or that his proposed action poses no threat to public health or safety.

(b) The format and contents of the Environmental Assessment Report shall be as follows:

(1) Statement of Purpose. This section shall indicate those standards in Section 917.5 being addressed in the report and whether the applicant is attempting to demonstrate compliance or justify non-compliance with those standards.

(2) Description of Existing Conditions. This section shall present a description of existing characteristics of the property with respect to geology, topography, ground and surface-water hydrology, soils, vegetation, and existing improvements and uses.

(3) Description of the Proposed Action. This section shall describe the proposed action including: types, locations, and phasing of proposed site disturbances and construction, as well as proposed future ownership and maintenance of the property and the proposed improvements. Plans describing the proposed action may either be included within or accompany the Environmental Assessment Report.

(4) Proposed Measures to Control Potential Adverse Environmental Impacts. This section shall describe all measures proposed by the applicant to control all adverse impacts that may occur as a result of the proposed action. It shall address all impacts cited by the Township Engineer in his report on the application, prepared in accordance with procedures described in Section 917.6.

(5) List and Qualifications of Preparer. The names, addresses, telephone numbers, and qualifications of persons directly responsible for preparing the Environmental Assessment Report shall be provided.

(6) Appendixes. Any additional information the applicant wishes to provide may be included in one or more appendixes to the report.

The Environmental Assessment Report must be received by the township no later than 20 days prior to the final date by which the township must formally act upon the application. The report shall be submitted in six copies to the township. The Township Engineer shall review the report and submit his findings in a memorandum to the board. A copy of that memorandum shall be forwarded to the applicant.

**917.8 Board Approval Required**

(a) Following the report of the Township Engineer on any submission under Section 917.6 or any Environmental Assessment Report under Section 917.7, the board shall either approve the application, approve with conditions, or reject it, and shall do so within any applicable time period unless a request to extend the time period is mutually agreed upon in writing.

(b) Where compliance with this section is required as part of an application for subdivision or land development approval, the board's decision on whether compliance has been achieved shall be made as part of its decision on the subdivision or land development application. Where the application is part of a request for a zoning permit, the zoning officer shall issue no such permit until the terms of this section and any conditions imposed upon the use of the property at the time of subdivision or land development approval, are satisfied.