

An Ordinance to amend the Honey Brook Township Subdivision Ordinance of April 7, 1966, and all amendments and supplements thereto.

9-4 of 1966 185

adopted by resolution 1-1966

WHEREAS, all matters and things required by the Municipalities Planning Code, Act 247 of 1968, as amended, in that the Board of Supervisors of Honey Brook Township, Berks County, Pennsylvania, may avail itself of the powers and authority conferred thereby have been complied with;

NOW, THEREFORE, by virtue of the powers and authority conferred as aforesaid, the Board of Supervisors of Honey Brook Township, DOES ORDAIN:

Section 1. That the Honey Brook Township Subdivision Ordinance of April 7, 1966, including all amendments and supplements thereto, is hereby amended as follows:

I. Section 200 is hereby amended by the addition of the following subsections:

1. Section 3a. Community Sewage Treatment

Any sewage treatment system for the collection, treatment and disposal of sewage or industrial wastes of a liquid nature, or any sewage system which serves one or two residential dwelling units shall be considered an individual sewage treatment system and not a community sewage treatment system.

2. Section 6a. Drainage Area: The upstream

drained area of a drainage basin measured from a point of discharge to the watercourse.

3. Section 17a. Seven-day Ten-year Low Flow:

lowest mean discharge of a watercourse for seven consecutive days in a ten-year period of record. Where the period of record is of sufficient length other methods, such as correlation, have

been used. All methods and references are described in Water Resources Bulletin No. 1, "Pennsylvania Streamflow Characteristics Low Flow Frequency and Flow Duration," (1966) by United States Dept. of Interior, Geological Survey, Harrisburg, Pa.

4. Section 24. Watercourse: Any natural or artificial ditch, swale, channel, rivulet, creek, stream, river, impoundment, storm sewer, pond, lake, or spring in which waters flow continuously or intermittently.

II. The following section is added:

Section 413. Sewage Treatment.

A. In any subdivision or land development in which the developer proposes a community sewage treatment system, regardless of the land use or activity served, the following standards shall be applicable, provided, however, that should any such standards be less stringent than any law, ordinance or regulation of the State of Pennsylvania or Chester County, the more stringent shall be applicable:

1. No effluent shall be discharged into any point of a watercourse having a drainage area at such point of one square mile or less, or having a seven-day ten-year low flow of 0.1 cubic feet per second, or less. For purposes of this section, areas so restricted against effluent discharge are delineated on the accompanying map (or - on a map which is available from the Township Zoning Officer).

2. The maximum volume of effluent discharged into a watercourse from all sewage treatment facilities, including municipal treatment facilities, shall at no time exceed 50% of the volume of the watercourse, as measured by the seven-day ten-year low flow of the watercourse at each point of effluent discharge.

3.1. All discharges of effluent into a watercourse shall be treated to the highest degree of organic

reduction as practicable, and in no case shall any effluent be so discharged which fails to meet the following standards: /87

- (a) The five-day biological oxygen demand (BOD) shall not exceed 5 mg. per liter of discharge;
- (b) Ammonia shall not exceed 3 mg. per liter of discharge as N;
- (c) Total suspended solids shall not exceed 20 mg. per liter of discharge; and
- (d) Total phosphorus shall not exceed 1.5 mg. per liter as P.

3.1.1. All tests shall be conducted in accordance with procedures cited in "Standard Methods for the Examination of Water and Waste Water," 13th Edition (1971), American Public Health Assn., American Water Works Assn., Water Pollution Control Federation.

3.2 All treatment facilities shall be designed to meet the above standards and must be operated at all times at that level of efficiency.

3.3 The supervisors may, upon application by the developer, permit reasonable deviation from the standards set forth in 3.1., provided that the developer proves to the satisfaction of the supervisors and/or a qualified authority acceptable to the supervisors by means of data based on scientifically valid study of the ambient water quality of the watercourse that the requested deviation will not result in a lessening of the ambient water quality of the watercourse or otherwise harm the watercourse. The burden of proving that such deviation shall not result in a lessening of the ambient water quality of the watercourse or otherwise harm the watercourse shall be on the developer.

4.1. The volume of effluent discharge from a community sewage treatment system into any watercourse,

whether direct or indirect, shall not exceed that portion of the total permissible volume of effluent discharge, based on the standards set forth in subsection 2 hereof, which the total land area of the development to be served bears to the total drainage area of the watercourse at the proposed point of discharge.

4.2. The supervisors may, upon application by the developer, permit reasonable deviation from the standards set forth in section 4.1., provided that the developer proves to the satisfaction of the supervisors and/or a qualified authority acceptable to the supervisors by means of data based on scientifically valid study of the ambient water quality of the watercourse that the requested deviation will not result in a lessening of the ambient water quality of the watercourse. The burden of proving that such deviation will not result in a lessening of the ambient water quality of the watercourse shall be on the developer.

B. Developers are encouraged to utilize, in sewage treatment systems, all available technology for treatment of sewage and/or industrial waste, and wherever possible, methods of effluent disposal alternative to that of discharge into watercourses, which leave the natural environment unharmed.

C. In any case where the developer proposes to utilize a community sewage treatment system, he shall submit as part of his preliminary and final subdivision applications the design, working drawings, specifications, operating procedures and such additional information as may be necessary, which shall demonstrate to the supervisors and/or qualified authority acceptable to the supervisors that the proposed system, if approved and built, will comply with the standards set forth in subsection II A. In addition, the developer shall, prior to approval of a final

Application for subdivision or land development, post a bond in form acceptable to the Township Solicitor, in an amount sufficient to cover for a period of five (5) years the cost of maintenance, repair and hiring of personnel qualified to operate the system in the event that the owner of the system fails properly to maintain and operate the system within the design standards. The bond shall remain in effect for the length of time that the system shall remain in operation. Operation of the system shall at all times be under the supervision of an operator who has been duly licensed as such by the State of Pennsylvania.

BRANDYWINE RIVER BASIN
 REPRESENTATIVE STREAM FLOW DATA

From Water Resources Bulletin No. 1

"Pennsylvania Stream Flow Characteristics
 Low-Flow Frequency and Flow Duration" (1966)
 U.S. Dept. of the Interior
 Geological Survey, Harrisburg, Pa.

Station U.S.G.S. 1-4810 Chadds Ford, Pa.

Drainage Area 287 Square Miles
 Average Discharge 386 cubic feet per second (42 yr. rcd.
 1911-1953)
 7-Day, 10 year low flow 60 cubic feet per second (1912-1957)
 Average Run-off per Square Mile $\frac{386}{287} = 1.344$ cfs/sq. mi.

$$\text{Ratio } \frac{7 \text{ day, } 10 \text{ yr. Flow}}{\text{Average Discharge}} = \frac{60 \text{ cfs}}{386 \text{ cfs}} = 15.5\%$$

Estimated 7-day, 10 yr. low flow per unit area

$$\left(\frac{1.344 \text{ cfs}}{\text{sq.mi.}} \right) (0.155) = 0.203 \frac{\text{cfs}}{\text{sq.mi.}}$$

Upper basin watersheds, with crystalline rock structure for major aquifers, will have significantly lower stream flows during drought periods. In addition, the variability of low flow increases greatly with very small drainage areas.

Station U.S.G.S. 1-4806.7 Marsh Creek near Lyndell, Pa.

(1.8 miles upstream from mouth)
 Drainage area 18.1 square miles
 Estimated 7 day, 10 year low flow 1.0 C.F.S.
 Estimated 7 day, 10 year low flow per unit area $0.055 \frac{\text{cfs}}{\text{sq.mi.}}$

Station U.S.G.S. 1-4807 East Branch Brandywine @ Dowlin, Pa.

Drainage area 60.6 square miles
 Estimated 7 day, 10 year low flow 9.0 cfs
 Estimated 7 day, 10 year low flow per unit area $0.148 \frac{\text{cfs}}{\text{sq.mi.}}$

Drainage area 81.6 square miles
Estimated 7 day, 10 year low flow 12 cfs
Estimated 7 day, 10 year low flow per unit area 0.147 $\frac{\text{cfs}}{\text{sq. mi}}$

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From the "Brandywine Plan" (1968)
East Branch @ Dorlan
Drainage Area 33.4 square miles
Average Annual Discharge 35 cfs
Average Runoff per square mile $\frac{35 \text{ cfs}}{33.4 \text{ sq.mi.}} = 1.04 \frac{\text{cfs}}{\text{sq.mi.}}$

Feb 11, 1974

W. Bachman, Sr.