

ORDINANCE NO. 2010 - 06

**EAST HANOVER TOWNSHIP
DAUPHIN COUNTY, PENNSYLVANIA**

**AN ORDINANCE AMENDING VARIOUS SECTIONS OF
THE EAST HANOVER TOWNSHIP STORMWATER
MANAGEMENT AND FLOOD REDUCTION ORDINANCE
AS AMENDED BY: ADDING VARIOUS DEFINITIONS
AND DESIGN REQUIREMENTS INCLUDING THOSE FOR
TOTAL MAXIMUM DAILY LOAD.**

WHEREAS, East Hanover Township is a Township of the Second Class organized and existing under the laws of the Commonwealth of Pennsylvania; and

WHEREAS, East Hanover Township adopted the East Hanover Township Stormwater Management and Flood Reduction Ordinance on March 18, 2008; and

WHEREAS, the East Hanover Township Board of Supervisors has deemed it to be in the best interests of East Hanover Township and for the general protection of the health, safety and welfare of its residents to amend the East Hanover Township Stormwater Management and Flood Reduction Ordinance of March 18, 2008 as amended;

NOW, THEREFORE BE IT ENACTED AND ORDAINED by the authority of the said East Hanover Township Board of Supervisors as follows:

SECTION 1. ADDITIONS TO ARTICLE 2

Specific definitions are added to Article 2 as follows:

APPLICANT - A landowner, developer, or other person who has filed an application for approval to engage in any Regulated Activities at a project site within East Hanover Township.

BMP MANUAL - Shall mean the Pennsylvania Stormwater Best Management Practices Manual as published by the Department of Environmental Protection, Bureau of Watershed Management, document number: 363-0300-002, effective date: December 30, 2006, and as revised.

DETENTION VOLUME - The volume of runoff that is captured and released during or after a storm event into Waters of the Commonwealth at a controlled rate.

DEVELOPER - A person, partnership, association, corporation, or other entity, or any responsible person therein or agent thereof, that undertakes any Regulated Activity of this Ordinance.

DRAINAGEWAY - Any natural or artificial watercourse, trench, ditch, pipe, swale, channel, or similar depression into which surface water flows.

FLOOD - A general but temporary condition of partial or complete inundation of normally dry land areas from the overflow of streams, rivers and other Waters of the Commonwealth.

FLOOD FRINGE - The remaining portions of the one hundred (100) year floodplain outside of the floodway boundary.

LAND DEVELOPMENT (DEVELOPMENT) - (i) The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving (a) a group of two or more buildings, or (b) the division or allocation of land or space between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features; (ii) Any subdivision of land; (iii) Development in accordance with Section 503(1.1) of the PA Municipalities Planning Code.

LIMIT OF DISTURBANCE - A line provided on the SWM Site Plan that indicates the total area to be disturbed during a proposed earth disturbance activity.

NOAA ATLAS 14 - Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, US Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland (2004). NOAA's Atlas 14 can be accessed at Internet address: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.

OPEN CHANNEL - A drainage element in which stormwater flows with an open surface. Open channels include, but shall not be limited to, natural and man-made drainageways, swales, streams, ditches, canals, and pipes not under pressure.

PROBABLE MAXIMUM FLOOD (PMF) - The flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that is reasonably possible in any area. The PMF is derived from the probable maximum precipitation (PMP) as determined on the basis of data obtained from the National Oceanographic and Atmospheric Administration (NOAA).

QUALIFIED PROFESSIONAL - Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by the Ordinance.

RETENTION VOLUME/REMOVED RUNOFF - The volume of runoff that is captured and not released directly into the surface Waters of this Commonwealth during or after a storm event.

RUNOFF CAPTURE VOLUME - The volume of runoff that is captured (retained) and not released into surface Waters of the Commonwealth during or after a storm event.

STATE WATER QUALITY REQUIREMENTS - The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of that Pennsylvania Code and the Clean Streams Law – including, but not limited to:

- A. Each stream segment in Pennsylvania has a “designated use,” such as “cold water fishery” or “potable water supply,” which is listed in Chapter 93. These uses must be protected and maintained, under state regulations.
- B. “Existing uses” are those attained as of November 1975, regardless whether they have been designated in Chapter 93. Earth Disturbance activities must be designed to protect and maintain existing uses and maintain the level of water quality necessary to protect those uses in all streams, and to protect and maintain water quality in special protection streams.
- C. Water quality involves the chemical, biological, and physical characteristics of surface water bodies. After Earth Disturbance activities are complete, these characteristics can be impacted by addition of pollutants such as sediment, and changes in habitat through increased flow volumes and/or rates as a result of changes in land surface area from those activities. Therefore, permanent discharges to surface waters must be managed to protect the stream bank, streambed, and structural integrity of the waterway, to prevent these impacts.
- D. Protection and maintenance of water quality in special protection streams pursuant to 25 PA Code Chapter 93.

STORMWATER MANAGEMENT PLAN - The Dauphin County Stormwater Management Plan for managing stormwater runoff in Dauphin County as required by the Act of October 4, 1978, P.L. 864, (Act 167) and known as the “Storm Water Management Act”.

SWALE - A low-lying stretch of land that gathers or carries surface water runoff.

SECTION 2. ADDITION OF SECTION 304.A.1.e

Section 304.A.1.e is added as follows:

- e. There shall be no more than three (3) feet of water depth within an infiltration facility.

SECTION 3. AMENDMENT OF SECTION 307.P.1

The second paragraph of Section 307.P.1 is repealed in its entirety and replaced with the following text:

All manholes and inlets shall provide a minimum of two-tenths (0.2) of one (1) foot drop between the inflow and outlet pipe inverts. Where there is a change in pipe size in the structure, the crown elevation of the pipes shall be matched. A low-flow channel shall be installed after all pipes are installed in the structure and shaped to provide a smooth, uniform channel that minimizes resistance to the flow and is self flushing. The channel shall be formed out of concrete and extend a minimum of twelve (12) inches above the lowest invert.

The first paragraph of Section 307.P.1 shall remain unchanged.

SECTION 4. AMENDMENT OF SECTION 307.P.2

The second paragraph of Section 307.P.2 is repealed in its entirety. The remaining paragraphs of Section 307.P.2 shall remain unchanged.

SECTION 5. AMENDMENT OF SECTION 307.P.3

Section 307.P.3 is repealed in its entirety and replaced with the following text:

3. Inlets. – At street intersections, inlets shall be placed to minimize the flow across the intersection for the design storm.

SECTION 6. AMENDMENT OF SECTION 308.D

Section 308.D is repealed in its entirety and replaced with the following text:

- D. Emergency Spillway. Whenever possible, the emergency spillway for detention basins shall be constructed on undisturbed ground. Emergency spillways shall be constructed of reinforced concrete checker blocks, rip-rap, synthetic liners or other permanent material, as approved by the Township Engineer. All emergency spillways shall be constructed so that the detention basin berm is protected against erosion. Emergency spillway erosion protection shall extend along the full width of upstream and downstream berm embankment slopes. The protection for the upstream edge of the emergency spillway shall be installed a minimum of two (2) feet below the spillway crest elevation. The protection for the downstream edge of the spillway shall extend a minimum of ten (10) feet past the toe of the berm embankment slope. The emergency spillway shall not discharge over earthen fill and/or easily erodable material. The design depth of flow across the emergency spillway

shall not exceed six (6) inches. The minimum capacity of the emergency spillway shall be designed to equal the peak flow rate from the one hundred (100) year basin captured design storm. The capacity of the emergency spillway must consider the outlet structure to be blocked as well as no volume being available below the emergency spillway crest elevation.

SECTION 7. AMENDMENT OF SECTION 308.J.5

Section 308.J.5 is repealed in its entirety and replaced with the following text:

5. Fence or Screening. A fence or suitable vegetation screen shall be provided around all detention basins as required by the Township. Fencing and gates shall be a type approved by the Township, a minimum of four (4) feet in height with locking gates. Each basin shall be provided with a minimum of two gates, one wide enough for maintenance vehicles and a second gate for pedestrian access. All vegetative screening shall be at least three and one-half (3 ½) feet in height and shall not be considered an invasive plant species as identified by the Township. All vegetative screening shall provide a barrier to prevent entrance to the detention basin area and planted in such a way as to gain the approval of the Township. The fencing or vegetative screening requirement shall be waived only upon Township approval.

SECTION 8. ADDITION OF SECTION 308.R

Section 308.R is added as follows:

- R. Basin Depth. The depth of water within an above ground stormwater management facility shall be no greater than eight (8) feet from the maximum water surface elevation to the basin bottom, when an infiltration facility is not provided, or the infiltration facility pool elevation, when an infiltration facility is provided. The stormwater facility shall dewater within 72 hours after the end of the storm.

SECTION 9. ADDITION OF SECTION 310.I

Section 310.I is added as follows:

- I. Total Maximum Daily Load (TMDL) Requirements
 1. Agricultural activities contributory to a watershed within Dauphin County containing an established non-point source (agricultural) TMDL, shall be conducted in compliance with Chapter 102 (Erosion and Sediment Pollution Control), Chapter 91 – Section 91.36 (General Provisions related to Manure Management) and Act 38 (Nutrient Management).

2. As of the date of the establishment of this Ordinance, non-point source (agricultural) TMDLs are established in the following watersheds (refer to the Dauphin County Act 167 Plan for stream reaches with established TMDLs):
 - a. Conewago Creek Watershed
 - b. Unnamed Tributary to Bow Creek Watershed
 - c. Wiconisco Creek Watershed
 - d. Little Wiconisco Creek
3. This section shall apply also to agricultural activities conducted in watersheds where TMDLs are established in the future.

SECTION 10. ADDITION OF SECTION 402.C

Section 402.C is added as follows:

- C. Any Regulated Activities with stormwater management facilities located within 1000 feet of a downstream Township shall submit a stormwater analysis to the downstream Township for review and comment. Copies of the review from the downstream Township shall be provided for consideration.

SECTION 11. REPEALER

All other ordinances or parts of ordinances conflicting or inconsistent with the provisions of the Ordinance are hereby repealed to the extent of said inconsistencies or conflicts.

SECTION 12. SEVERABILITY

The provisions of this Ordinance are severable and if any section, sentence, clause, part or provision hereof shall be held illegal, invalid or unconstitutional by any court of competent jurisdiction, such decision of the court shall not affect or impair the remaining sections, sentences, clauses, parts or provisions of this Ordinance. It is hereby declared to be the intent of the Board of Supervisors of East Hanover Township that this Ordinance would still have been adopted if such illegal, invalid or unconstitutional section, sentence, clause, part or provision had not been included herein.

SECTION 13. EFFECTIVE DATE

This amendatory Ordinance shall take effect and be in force from and after its approval as provided by law.

ORDAINED and **ENACTED** this _____ day of _____, A.D., 2010 by the Board of Supervisors of East Hanover Township, Dauphin County, Pennsylvania.

EAST HANOVER TOWNSHIP
BOARD OF SUPERVISORS

Keith Espenshade, Chairman

John Nelligan, Vice Chairman

Thomas Shutt, Member

David Marshall, Member

George Rish, Member

ATTEST:

Deborah Casey
Township Secretary