

## ARTICLE VIII

### ENVIRONMENTAL PERFORMANCE REQUIREMENTS

#### § 14-801. General

Land susceptible to high water table, unstable subsurface conditions, steep or unstable slopes, high voltage electric or high pressure gas or oil transmission lines shall not be approved for subdivision or land development unless the hazards have been minimized or the developer proposes adequate safeguards, in the opinion of the Township Engineer, to protect the proposed use of the land. Land subject to flooding shall adhere to the regulations established in the Chapter 2, Article V.

- A. No change shall be made in the contour of the land, no grading, excavating, removal or destruction of the topsoil, trees or other vegetative cover of the land which results in a disturbed area in excess of five (5) acres, shall be commenced on any parcel, and no subdivision or land development plan shall be given final approval until:
  1. There has been a plan approved by the Pennsylvania Department of Environmental Protection or the Butler County Conservation District or both where required, that provides for temporary control of erosion and sedimentation consistent with this Section and acceptable financial security, as specified in Section 14-501 of this Chapter, is deposited with the Township which will ensure installation and completion of the required improvements; or
  2. There has been a determination by the Board of Supervisors upon recommendation of the Township Engineer that a plan for minimizing erosion and sedimentation is not necessary.
  3. Where an Erosion and Sediment Control Plan has been filed and approved, the developer is solely responsible for on-site pollution control measures.
- B. For disturbed areas of any size, measures used to control erosion and reduce sedimentation shall, as a minimum, be in accordance with the Rules and Regulations of the Pennsylvania Department of Environmental Protection and/or the standards and specifications set forth in the Butler County Erosion and Sediment Control Handbook, as well as those set forth in this Article.
- C. Stream channel construction on watersheds with drainage areas in excess of one hundred (100) acres, or in those cases where downstream hazards exist, shall conform to criteria administered by the Division of Dams and Encroachments, Pennsylvania Department of Environmental Protection.

- D. The Township Engineer, or other official as designated, shall ensure compliance with the appropriate erosion and sedimentation control plans and specifications.

#### **§ 14-802. Performance Requirements**

The following activities shall be conducted as outlined, except that earth disturbance activities related to agricultural use shall be regulated by the Butler County Conservation District:

- A. Stripping of vegetation, grading or regrading, or other earth disturbance shall be done only after review and approval of an erosion and sedimentation plan by the Township Engineer and all agencies with jurisdiction.
- B. Development plans shall preserve salient natural features, keep cut-fill operations to a minimum, and ensure conformity with existing topography.
- C. Whenever feasible, natural vegetation shall be retained, protected, and supplemented. Further, all trees greater than six inches (6") dbh (diameter at breast height) within required yards shall remain undisturbed.
- D. The maximum disturbed area and the duration of exposure shall be in compliance with Pennsylvania Department of Environmental Protection regulations.
- E. Disturbed soils shall be stabilized in compliance with Pennsylvania Department of Environmental Protection regulations.
- F. The permanent (final) vegetation and structural erosion control and drainage measures shall be installed as soon as practical in the development, as determined by the Township Engineer.
- G. Provisions shall be made to effectively accommodate the increased runoff caused by changed soil and surface conditions during and after development. Where necessary, the volume of surface water runoff generated after development shall be detained as per an approved stormwater management plan.

#### **§ 14-803. Grading and Drainage Requirements**

In order to provide more suitable sites for building and other uses, improve surface drainage, and control erosion and sediment pollution, the following requirements shall be met:

- A. All lots, tracts, or parcels shall be graded to provide proper drainage away from buildings and dispose of the runoff without ponding, and all land within a development shall be graded to drain and dispose of surface water without ponding, except where other arrangements are approved by the Township Engineer.
- B. All stormwater management facilities shall be of such design to adequately handle the surface runoff and carry it to the nearest suitable outlet such as a curbed street, storm drain, or natural watercourse. Where drainage swales are used to divert surface waters away from buildings, they shall be sodded or planted or where applicable, rock-lined to reduce accelerated run off, and shall be of such slope, shape and size as to conform with the requirements of this section and/or the standards of the Pennsylvania Department of Environmental Protection Erosion and Sediment Control Handbook.
- C. Concentration of surface water runoff shall be permitted only in swales or detention ponds.
- D. Excavations and fills:
  - 1. Cut and fill slopes shall not be steeper than 2:1 and 3:1, respectively, unless stabilized by a retaining wall or cribbing, except as approved by the Township Engineer.
  - 2. Adequate provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surface of fills.
  - 3. Cuts and fills shall be engineered so as to prevent damage to adjoining property.
  - 4. Fill shall be placed and compacted so as to minimize sliding or erosion of the soil.
  - 5. Fill shall not encroach on natural watercourses or constructed diversion channels.
  - 6. Fills placed adjacent to natural watercourses or constructed channels shall have suitable protection against erosion during periods of flooding.
- E. Grading shall not be done in such a way so as to divert stormwater or fill onto the property of another landowner unless the stormwater is being channeled into an existing natural drainage swale

- F. During grading operations, necessary dust control shall be exercised.
- G. Topsoil shall be stockpiled only temporarily and be preserved and redistributed as ground cover. Said topsoil shall be expeditiously planted with perennial grasses or ground planting.
- H. Tree guards during construction and grading, and limitations as to cuts and fills, both temporary and permanent, near trees, shall be provided as necessary to give reasonable assurance of their continued healthy growth.
- I. Grading equipment shall not cross live streams. Provision shall be made for the installation of culverts or bridges.

**§ 14-804. Subsidence Risk**

- A. In connection with any subsurface mined areas, a subsidence risk assessment shall be provided by a geotechnical engineer with experience and qualifications in mined land reclamation and licensed by the Commonwealth of Pennsylvania. Should the geotechnical engineer determine in his assessment that a geotechnical report is required for the mined areas, the report shall include:
  - 1. A minimum of three (3) core borings for the first five (5) acres and one (1) additional boring for each additional five (5) acres, with borings uniformly spaced across the building site(s) unless otherwise recommended by the geotechnical engineer.
  - 2. An evaluation of the integrity, stability and nature of the overburden.
  - 3. An evaluation of the integrity, stability and nature of the material used to fill the mine excavation.
  - 4. An evaluation, based upon the above evaluations, of the risk of subsidence associated with the area in its undeveloped condition, and the increase in such risk that would be caused by the proposed construction.
  - 5. An identification of unsafe construction locations, suitable construction sites, and any measures and practices necessary to minimize the risk of subsidence.
- B. In connection with any subsurface mined areas, a subsidence risk assessment shall be provided by a geotechnical engineer with experience and qualifications in mined land reclamation and licensed by

the Commonwealth of Pennsylvania. Should the geotechnical engineer determine in his assessment that a geotechnical report is required for the mined areas, the report shall include:

1. A minimum of three (3) core borings for the first acre and one (1) additional boring for each additional acre of land proposed for development unless otherwise recommended by the geotechnical engineer. All borings shall be taken from proposed or potential construction sites.
2. A map locating all known mine features within three hundred feet (300') of any proposed construction, whether such are located on or off the development site. Such map shall identify the known limits of the mine and any surface features caused by past mining activity, such as mine waste dump areas, seepage areas and wetlands.
3. An identification of all environmental problems caused by past mining activities, including without limitation, subsidence, acid runoff, residual ponding, disturbed drainage patterns, unstable spoils piles or degraded water quality, that may affect the construction, occupation or environmental integrity of the site.

In addition to the subsidence risk assessment and/or geotechnical investigation reports, the applicant shall submit with his preliminary plan, a description of the measures proposed for eliminating or mitigating any risks or hazards associated with past mining activities.