

## ZONING

### *200 Attachment 3*

#### **APPENDIX A Requirements for Environmental Impact Assessment Report**

- A. The impact on the environment requires a comprehensive analysis of the probable results and the actions that can be taken to minimize these results. In order to evaluate the environmental consequences or effects of such projects proposed in the Township, an Environmental Impact Assessment (EIA) Report shall be submitted with applications for conditional use approval requesting establishment of a facility and an updated environmental impact assessment report shall be submitted with any application for preliminary and/or final plan approval for land development or subdivision requesting authority to establish a facility.
- B. Definitions. For the purpose of an EIA the following definitions shall apply:

**ADVERSE ENVIRONMENTAL IMPACTS** — An impact which contributes to a harmful or degraded condition and/or produces an environmental harm or degradation. Adverse environmental impacts may include: a negative impact on surrounding land uses; negative impacts which are contrary to the Comprehensive Plan for the Township and the intent of this chapter; negative impacts which may create a threat to the public health, safety and general welfare; and negative impacts on physical and biological resources.

**ALTERNATIVES** — Choices between or among two or more plans, layouts, approaches, solutions or results.

**BENEFICIAL EFFECTS** — Results contributing to an improvement in condition and/or producing a favorable result such as making a use more compatible with the intent of this chapter and the goals of the Comprehensive Plan and promoting the public health, safety and general welfare.

**BIOLOGICAL RESOURCES** — Characteristics of the natural environment manifest in its flora and fauna. The disposition of these characteristics is typically expressed in vegetation and/or wildlife units such as: field and meadow, tree, woodland or forest stands and related understory and groundcover growth and aquatic and terrestrial wildlife and/or their habitats.

**COMMUNITY FACILITIES** — The services which provide for various community health, education, safety, leisure and like needs and the locations at which these services are provided. Typical community facilities include: schools, parks and recreation areas, libraries, hospitals and other health-care facilities, fire protection, police, ambulance and rescue services and postal services.

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**CULTURAL ENVIRONMENT** — A representation of man's influence on land and/or water through the use, organization, adornment and maintenance of property and structures.

**DEMOGRAPHIC CHARACTERISTICS** — Characteristics related to the distribution, density and vital statistics of populations.

**ECONOMIC AND FISCAL CHARACTERISTICS** — Characteristics related to the expenditure and revenues in conjunction with the management of income of a household, private business, community, association and/or government.

**ENVIRONMENT** — The conditions, resources and/or characteristics which exist within and surround the area to be affected by a proposed project, including but not limited to: natural elements such as land, water, air, minerals, natural flora and natural fauna and man-made components such as objects of historic or aesthetic significance, infrastructure and man-related attributes of a social and economic nature.

**ENVIRONMENTAL IMPACT ASSESSMENT REPORT** — An assessment which objectively describes, analyzes, and documents both the beneficial and adverse environmental and cultural effects of a proposed project and the measures to be undertaken to mitigate adverse effects in accordance with the provisions set forth in this chapter.

**HISTORIC RESOURCES** — Sites, areas, structures, trails and/or routes which are valued due to their significance as examples and/or locations of events, customs, skills and/or arts of the past.

**IMPACT** — The power of an event or condition to produce changes in other conditions. In the context of impact exerted on the environment, changes which affect existing conditions and/or quality are of greatest concern.

**INFRASTRUCTURE** — The basic installations and facilities on which the continuance and growth of a community depend such as roads, schools, electrical transmission facilities, transportation and communication systems and sewer and water systems.

**LONG-TERM EFFECTS** — Results which are manifest for or extending over a period of greater than two years.

**MITIGATION** — The act of precluding a potentially adverse effect and/or making a potentially adverse effect less severe through measures which will improve a condition and/or lessen the impact.

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NATURAL ENVIRONMENT — A composition of land, water and/or air represented by its inherent physical and biological resources.

PHYSICAL RESOURCES — Characteristics of the natural environment manifest in its: land forms, soils, geological structure of surface and/or subsurface rock, minerals, natural bodies of water and/or man-made impoundments, watercourses, groundwater and the like. The disposition of these characteristics is typically expressed in physiographic, topographic and/or hydrologic units such as rock formations, slope elevations, soil types, watersheds, surface water types, wetlands, floodplains, aquifers or aquifer recharge areas and the like.

PRIMARY EFFECTS — Results of a direct nature which have a principal influence on a particular condition.

PROJECT — A subdivision, land development or other development involving the construction or alteration of buildings or other structures, or the grading of land to accommodate use of property for the facility being assessed.

SECONDARY EFFECTS — Results of an indirect nature which have an influence on a particular condition or state derived from a primary effect.

SHORT-TERM EFFECTS — Results which are manifest for or extending over a period of two years or less.

VISUAL RESOURCES — Characteristics of the natural and/or cultural environment which are visible. The visual resources of a particular area are typically expressed in terms of their visibility, character and/or attractiveness relative to their amenity value and/or quality.

- C. The EIA report shall include text, tables, maps and analyses for the purpose of describing the project site, proposed use(s), environmental characteristics and the environmental effects of the proposal as follows:
- (1) Overview. Indicate the purpose and scope of the proposed project. Enumerate the benefits to the public which will result from the proposed project and describe the suitability of the site for the intended use. A description of the proposed project shall be presented to indicate the extent to which the site must be altered, the kinds of facilities to be constructed, how they are to be constructed and the uses intended. The resident population, working population and visitor population shall be projected. The basis of the projections shall be clearly stated in the report.

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- (2) Compatibility. The compatibility or incompatibility of the proposed project shall be described in relation to the following:
  - (a) Township Comprehensive Plan, especially the land use and open space elements.
  - (b) Comprehensive Plan of adjacent municipalities whenever a project is located along or within 2,000 feet of the municipal boundaries.
  - (c) Bucks County Comprehensive Plan and Solid Waste Management Plan (for solid waste facilities only.)
- (3) Location. An identification of the site location and area through the use of a location map drawn at a scale of not more than 2,000 feet to the inch. The location map shall depict all streets, adjoining properties, zoning district boundaries and municipal boundaries within 2,500 feet of any part of the tract. In the case of development of only a portion of the entire tract, the location map shall also show the relationship of the section to the entire tract.
- (4) Photographs. An identification of the character and appearance of the site through the presentation of photographs or copies thereof. Such photographs shall provide a representation of what the site looks like from ground level. Photographs should be properly identified or captioned and shall be keyed to a map of the site.
- (5) Description of the project. An identification of the nature of the proposal through the presentation of the following:
  - (a) A site development plan.
  - (b) A statement indicating the existing and proposed ownership of the tract.
  - (c) A statement indicating the proposed staging or phasing of the project and a map depicting the boundaries of each stage or phase of the project. Such boundaries shall be superimposed on a version of the site development plan.
- (6) Physical resources inventory. An identification of physical resources associated with the natural environment of the tract including such features as geology, topography, soils, hydrology and the like. The identification of physical resources shall include a narrative description of the qualitative aspects of each of the resources mentioned above. In addition, these

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resources shall be mapped at a scale of not smaller than 100 feet to the inch as specified below and may be either incorporated into the EIA report or submitted as attachments to the report.

- (a) A map depicting the geological characteristics of the tract. Such map shall define the location and boundaries of the rock formations at or influencing the tract and features such as faults and/or fractures.
  - (b) A map depicting the topographical characteristics of the tract. Such map shall contain contours with at least two-foot intervals and shall depict slopes ranging from zero to fifteen percent (0 to 15%), fifteen to twenty-five percent (15 to 25%) and greater than 25%.
  - (c) A map depicting the soil characteristics of the tract. Such map shall depict all soil types and shall include a table identifying soil characteristics pertinent to the proposed project such as prime agricultural soils, depth to bedrock, depth of water table, flood hazard potential, and limitations for septic tank filter fields. List and describe each soil type located on the site. If applicable, percolation data shall be provided. Where the proposed area of land disturbance will involve soils with moderate or severe limitations (as per the Soil Survey of Bucks and Philadelphia Counties, United States Soil Conservation Service) relative to the type of project proposed, a complete mapping of all soil types on the site shall be required indicating where those moderate and severe limitations exist.
  - (d) A map depicting the hydrological characteristics of the tract. Such map shall depict: surface water resources, their drainage characteristics, watershed and floodplains and groundwater resources. Surface water resources include features such as creeks, runs and other streams, ponds, lakes and other natural bodies of water, springs, wetlands and any man-made impoundments. Groundwater resources include features such as aquifers and aquifer recharge areas.
- (7) Biological resources inventory. An identification of biological resources associated with the natural environment of the tract including such features as vegetation and wildlife. The identification of biological resources shall include a narrative description of each of the resources mentioned above. In addition, these resources shall be mapped at a scale of not smaller than 100 feet to the inch as specified below and may be either incorporated into the EIA report or submitted as attachments to the report.
- (a) A map depicting the vegetation characteristics of the tract. Such map shall define the locations and boundaries of the woodland and forest

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areas of the tract and shall note the types of vegetation associations which exist in terms of their species and sizes. In addition, all trees 12 inches in caliper or greater shall be accurately located and identified on the map whether they are freestanding trees or tree masses.

- (b) A map depicting characteristics associated with wildlife habitats. Such map may draw upon vegetation, hydrology and soil maps in order to express habitat characteristics associated with terrestrial and aquatic wildlife on the tract and the relationship of the overall habitat(s).
- (8) Land use inventory. An identification of the land use conditions and characteristics associated with the tract such as: current and past use, land cover and the relationship of these to adjacent tracts. The identification of land use conditions and characteristics shall include a narrative description of the above. In addition, the following maps drawn at a scale not smaller than 100 feet to the inch, shall be incorporated into the EIA report or submitted as attachments to it.
- (a) A map depicting the land cover characteristics of the tract. Such map shall define existing features including: paved or other impervious surfaces, woodland and forest areas, cultivated areas, pasture, old fields, lawns and landscaped areas and the like.
  - (b) A map depicting any encumbrances to the tract. Such map shall define easements and other areas where certain use privileges exist.
  - (c) A map depicting the land uses within 500 feet of the proposed tract. Such map may be at the same scale as the location map.
- (9) Surface water inventory. Describe existing watercourses and water bodies that are partially or totally on the site and their relationship to the area of land disturbance. Calculate existing surface runoff from the site and the associated watershed, including the potential development of the remainder of the watershed. When the natural drainage pattern will be significantly altered, an analysis shall be conducted which will investigate flow, depth, capacity and water quality of the receiving waters. When required, floodplain areas will be mapped in consultation with the Department of Environmental Protection. Existing drainage structures shall be mapped and the capacity of the drainage network shall be determined. Additionally, wetland areas as defined by the Department of Environmental Protection and the United States Army Corps of Engineers shall be delineated.
- (10) Subsurface water inventory. Describe the subsurface water conditions on the site both in terms of depth to groundwater and water supply capabilities of

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the site. Where existing conditions warrant, provide detailed information regarding existing wells within 1,000 feet of the site relative to depth, capacity and water quality.

- (11) Existing features inventory. Describe any existing features on the site that are not considered to be part of the natural environment. This may include, but not necessarily be limited to roads, housing units, accessory structures, utility lines, etc.
- (12) Historic resources inventory. An identification of the man-made resources associated with or within 500 feet of the tract which are older than 50 years. Areas, structures and/or routes and trails included on the National Register of Historic Places, the Pennsylvania Inventory of Historic Places, the Historic American Building Survey, the Bucks County Conservancy and any which may be identified by the Township Historic Commission shall be identified. The identification of historic resources shall include a narrative description of the above. In addition, a map drawn at a scale of not smaller than 100 feet to the inch depicting historic resources shall be incorporated into the EIA report or submitted as an attachment to the report.
- (13) Visual resources inventory. An identification of the visual resources associated with the tract such as areas which have a particular amenity value and areas which offer interest in viewing the tract. The identification of visual resources shall include a narrative description of the above. In addition, a map drawn at a scale of not smaller than 100 feet to the inch depicting visual resources shall be incorporated into the EIA report or submitted as an attachment to the report.
- (14) Community need inventory. An identification of the community facility needs associated with the users of the proposed project. The community facility needs assessment shall indicate in narrative form the type of services which will be in demand. Where applicable, community facilities (such as schools, parks and recreation areas, libraries, hospitals and other health care facilities, fire protection, police protection, ambulance, and rescue service) shall be discussed in terms of the ability of the existing facilities and services to accommodate the demands of future users and/or residents of the lots and/or tract and the need for additional or expanded community facilities.
- (15) Utility needs inventory. An identification of the utility needs associated with the users of the proposed project. The utility needs assessment shall indicate in narrative form the type of installations which will be in demand. Utilities shall be discussed in terms of: the ability of existing utility installations to accommodate the demands of the future users, the needs for additional or

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expanded utility installations, the ability to achieve an adequate potable quantity of water whenever individual wells are proposed, the ability to achieve an adequate system for on-site sewage disposal whenever such a system is proposed and the ability to achieve an adequate system for storm drainage and stormwater management. Certificates from the utilities confirming that adequate capacity exists to serve the proposed development shall be included.

- (16) Transportation system inventory. An identification of the relationship of the transportation and circulation system needs of the proposed project to the existing street or highway network. A discussion of this relationship shall be in narrative form and shall indicate factors such as methods to be used for traffic control within the tract and at points of ingress to and egress from it and expected traffic volumes generated from the project including their relationship to existing traffic volumes on existing streets for both peak hour and nonpeak hour traffic conditions. In addition, there shall be a discussion of the physical condition of existing streets which will service the proposed project and what improvements are proposed to remedy any physical deficiencies.
- (17) Fiscal impact. An identification of the economic and fiscal characteristics related to the proposed project. The characteristics which shall be presented in narrative form shall include a profile of the Township, county and school district revenues which the proposed use may generate and the Township, county and school district costs it will create. Such information shall be related to initial and completed project conditions.
- (18) Existing conditions. An identification of characteristics and conditions associated with existing, construction related and future air and water quality and noise levels, vibration, toxic materials, electrical interference, odor, glare and heat, fire and explosion, smoke, dust, fumes, vapors and gases and/or radioactive materials.
- (19) Licenses and permits. An identification of all licenses, permits or other approvals required by law for the development and the status of each.
- (20) Environmental controls. An identification of compliance with the floodplain regulations provided by this chapter.<sup>1</sup>
- (21) Impacts inventory. The implications of the proposed project in terms of: the type of beneficial or adverse effects which may result from it and the duration of these effects in terms of their short-term or long-term nature. To indicate such effects, there shall be a discussion of the implications of the

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<sup>1</sup>Editor's Note: See § 200-53.

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proposed project to the resources, conditions and characteristics described above. In addition to a narrative presentation of implications, the applicant shall display where the project adversely affects the tract's resources, conditions or characteristics through the use of a map drawn at a scale of not smaller than 100 feet to the inch, wherein the area adversely affected from proposed development are highlighted. Such map may be either incorporated into the EIA report or submitted as an attachment to the report. Further, the applicant must demonstrate and specify in the EIA report how and where the findings in the EIA report and its attachments are reflected in the project.

- (22) Alternative analysis. Alternatives within the project which would preclude, reduce or lessen potential adverse impact or produce beneficial effects. To indicate such alternatives the applicant shall submit exhibits or diagrams which will depict the type or alternatives described in narrative forms. The applicant shall comment on how alternatives such as: revised location, redesign, layout or siting of buildings, roads, and other structures and the reduction in the size of the proposed structures or number of structures would affect the impacts or effects of the project.
- (23) Adverse impacts. Probable adverse impacts which cannot be precluded, including:
  - (a) Water quality and quantity.
  - (b) Air quality.
  - (c) Noise.
  - (d) Incompatible land use patterns.
  - (e) Damage or destruction of significant plant or wildlife systems.
  - (f) Aesthetic values.
  - (g) Destruction of natural resources.
  - (h) Displacement of people and business.
  - (i) Displacement of viable farms.
  - (j) Destruction of man-made resources.

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- (24) Mitigation measures. Measures to mitigate adverse effects. To indicate such measures, the applicant shall submit exhibits or diagrams which will depict the type of remedial, protective and mitigative measures described in narrative form. These measures shall include those required through existing procedures and standards and those unique to a specific project, as follows:
- (a) Mitigation measures which pertain to existing procedures and standards are those related to current requirements of the state, county and/or Township for remedial or protective actions such as: sedimentation and erosion control, stormwater runoff control, water quality control and air quality control.
  - (b) Mitigation measures related to impacts which may be unique to a specific project are those related to efforts such as: revegetation, screening, fencing, emission control, traffic control, noise control, relocation of people and/or businesses and land acquisition.
- (25) Irreversible impacts. Any irreversible environmental changes which would occur due to the proposed project, should it be implemented. To indicate such changes, the use of nonrenewable resources during the initial and continued phases of the project shall be discussed. Further, the loss of environmental resources shall be indicated through a presentation of the quantity of loss and related qualitative effects.
- D. In making its evaluation, the Board of Supervisors and/or the Planning Commission may request any additional information it deems necessary to adequately assess potential environmental impacts. Whenever any information required in this section is assumed not directly applicable to the proposed project, the applicant shall indicate such assumed inapplicability in the narrative of the EIA report and state why such information is considered to be inapplicable in the case of the particular project in question.
- E. All persons who participate in preparing the report shall be identified and their qualifications stated. All sources of information shall be identified when presented and a bibliography shall be attached to the report. All work in the report shall be in conformity with recognized engineering, architectural and planning practices and principles.
- F. Indication of acceptability. All applications for conditional use approval requiring EIA reports shall be accompanied by plans, reports and other documents as herein required to indicate that the proposed use will be acceptable to the Township as follows:
- (1) Consistent with the Township Comprehensive Plan.

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- (2) Conform to all requirements of Chapter 178, Subdivision and Land, and all other ordinances, codes, permit conditions and regulations.
- (3) Will not adversely affect the health, safety and general welfare of the residents of the Township and of surrounding municipalities.
- (4) Promotes the harmonious and orderly development of the zoning district involved.
- (5) Compatible with the character and type of development existing in the area which surrounds the site in terms of size, scale, height and bulk of the proposed uses and the size, shape and placement of the buildings and other structures.
- (6) Will not detract from or cause harm to neighboring properties.
- (7) Compatible with the uses permitted in the surrounding area in terms of the density and/or intensity of land use.
- (8) Reflects effective site planning and design in terms of energy efficiency and environmental protection.
- (9) Reflects sound engineering and land development design and construction principles, practices and techniques.
- (10) Consistent with the logical, efficient and cost-effective extension of public services and utilities and will not adversely affect the public services and utilities of surrounding properties and of the Township as a whole, in terms of public water supply, wastewater treatment, police, fire protection and hospital and health services.
- (11) Includes proposals for the effective disposal of residues and unprocessable solid waste for solid waste facilities.
- (12) Provides safe and efficient access to roads and will not create traffic congestion, hazardous traffic conditions or excess traffic volumes.
- (13) Limits the number of access points along major public streets and generally provides development of the frontage of buildings on access roads which are parallel or perpendicular to major public streets.
- (14) Provides improvements needed to guarantee compatibility with adjoining roads and properties.

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- (15) Provides continuity of existing circulation systems including roads, sidewalks, trails and other walkways.
- (16) Provides adequate off-street parking and loading areas which will be minimally visible and audible from adjoining public streets and neighboring properties.
- (17) Utilizes effective stormwater management techniques and soil erosion and sedimentation control techniques which are in character with and complimentary to the proposed site grading and landscaping.
- (18) Preserves, to the maximum extent possible, woodlands and other trees existing on the site.
- (19) Will not be disruptive to existing topography, surface water resources and groundwater resources.
- (20) Includes landscaping, in addition to that around the buildings and structures, in areas which are highly visible to the public such as entrances, along roads, trails and walkways, where the use of trees, shrubs, flowers and ground cover would be both functional and decorative.